

## **Design Diagrams**

# **Annotation System Design Diagrams**

## **Structure of Design Diagrams by Use Case**

### **User as Actor:**

Main Use Case Diagram

Use Case : Create Annotation

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Use Case Description

Robustness Diagram

Sequence Diagram

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Contents:

Use Case Description

Robustness Diagram

Sequence Diagram

Use Case : Run Moderation

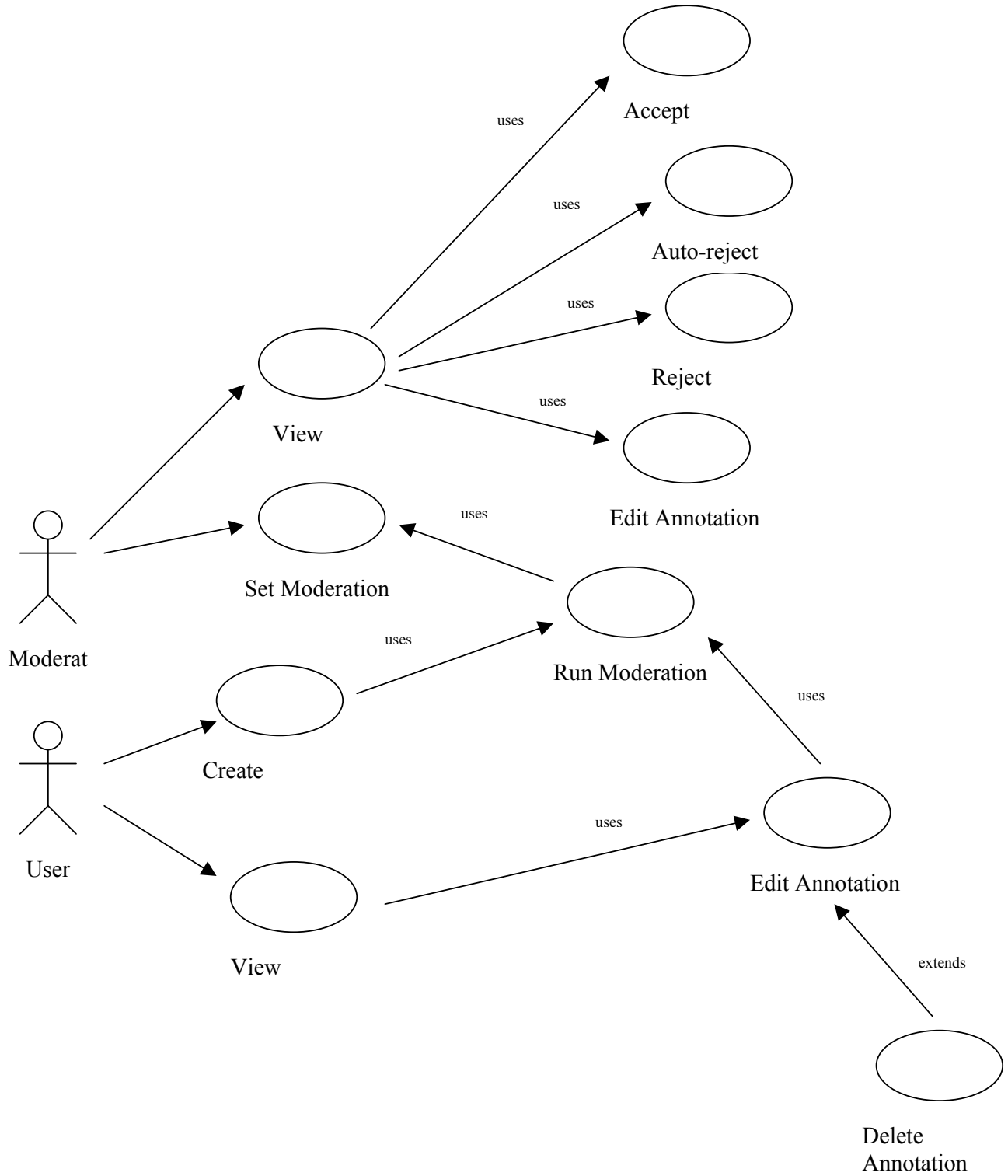
Contents:

Use Case Description

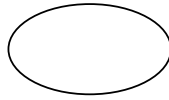
Robustness Diagram

Sequence Diagram

# RDN Annotation Service : Use Case Main Model



## Individual Use Case : Create Annotation



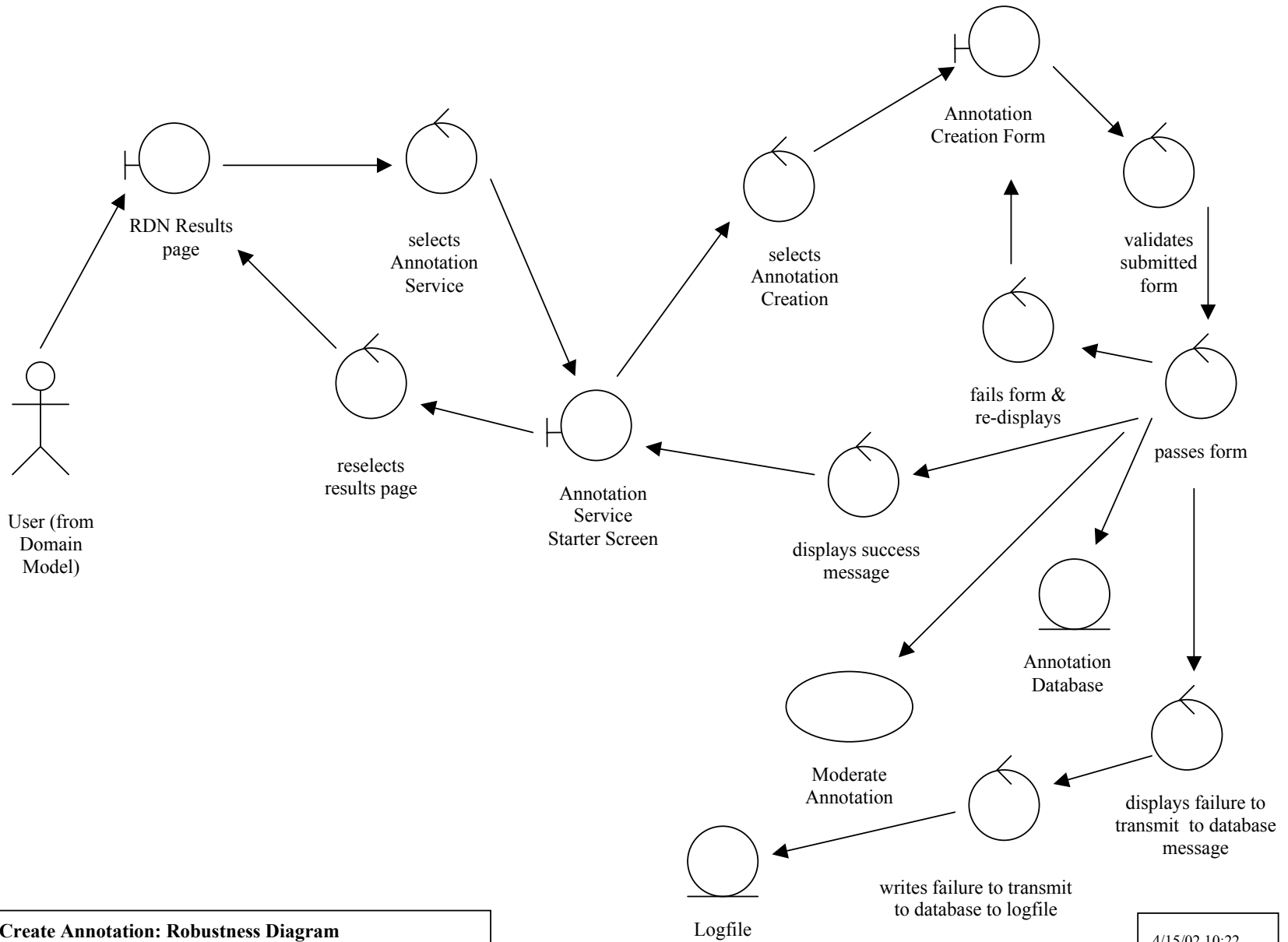
### Create Annotation

#### Basic Course

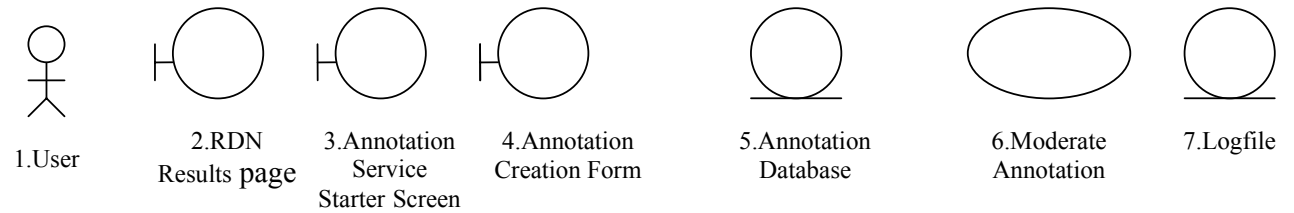
- 1 User selects Annotation Service link next to RDN record summary in results set page.
- 2 System offers links in starter screen to Annotation Creation or View Annotation.
- 3 User selects link to Annotation Creation.
- 4 System displays Annotation Creation form for user details, comments and 5-star rating.
- 5 User fills in textual comment field, selects star rating and submits completed form to system.
- 6 System validates user's submitted form.
- 7 System accepts form and transmits validated, accepted form for storage and moderation; system displays success message repeating details in HTML window.
- 8 User selects link to starter screen.
- 9 System represents starter screen.
- 10 User selects link to initial results page
- 11 System returns to initial results set.

#### Alternate Course

- 1.1 User selects annotation service link.
- 2.1 System fails to display starter screen and passes standard error message.
  - 3.1 User selects link to Annotation Creation.
  - 4.1 System fails to display Annotation Creation form and passes standard error message.
    - 7.1 System validates and fails submitted form for lack of completeness.
    - 7.2 User completes Annotation Creation form correctly and re-submits.
    - 7 System validates form as complete; displays success message.  
[ then as for 8 - 11 of Basic Course]
    - 7.3 System fails to transmit validated, accepted form for storage and moderation; gives warning message/ writes to logfile.



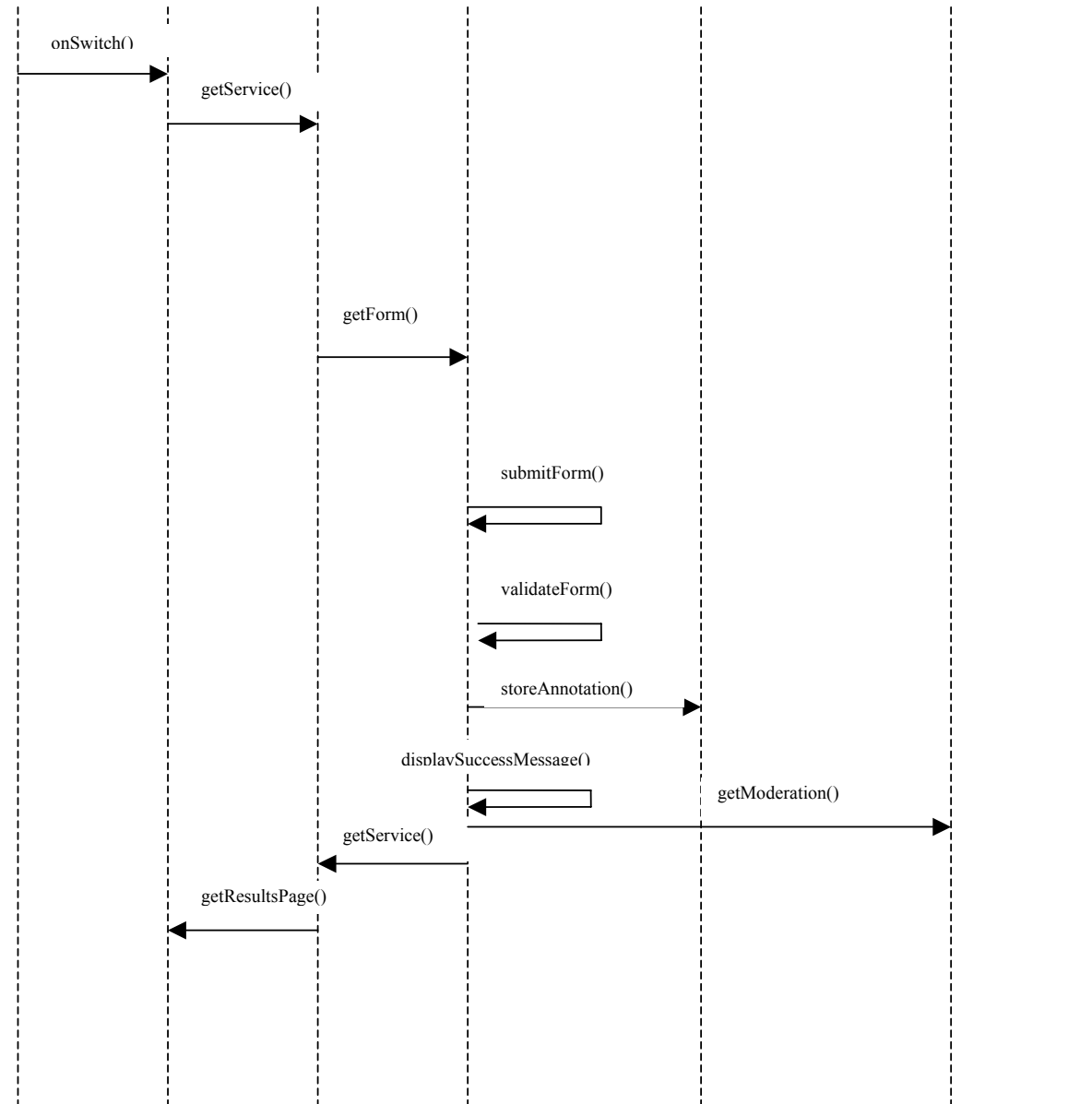
**Create Annotation: Robustness Diagram**



**Create Annotation : Sequence Diagram**

**Basic Course**

- 1 User selects Annotation Service link next to RDN record summary in results set page.
- 2 System offers links in starter screen to Annotation Creation or View Annotation.
- 3 User selects link to Annotation Creation.
- 4 System displays Annotation Creation form for user details, comments and 5-star rating.
- 5 User fills textual comment field, selects star rating and submits completed form to system .
- 6 System validates user's submitted form.
- 7 System accepts form and transmits validated, accepted form for storage and moderation; system displays success message repeating details in HTML window.
- 8 User selects link to starter screen.
- 9 System represents starter screen.
- 10 User selects link to initial results page
- 11 System returns to initial results set.



**Create Annotation : Sequence Diagram**

**Alternate Course**

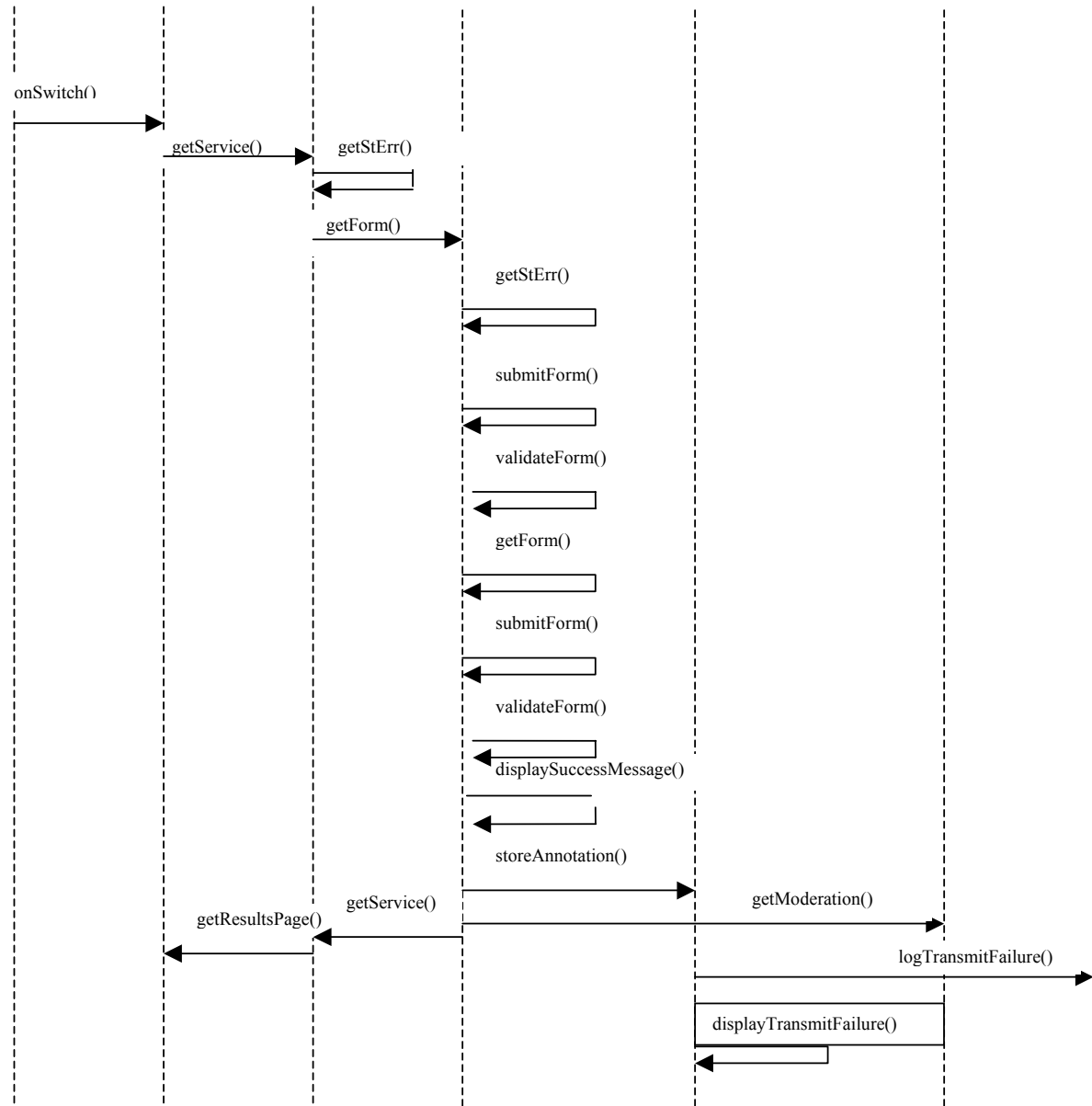
1.1 User selects annotation service link.  
 2.1 System fails to display starter screen and passes standard error message.

3.1 User selects link to Annotation Creation.  
 4.1 System fails to display Annotation Creation form and passes standard error message.

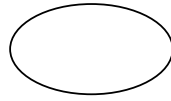
7.1 System validates and fails submitted form for lack of completeness.

7.2 User completes Annotation Creation form correctly and re-submits.  
 [7 System validates form as complete; displays success message.  
 [ then as for 8 - 11 of Basic Course]]

7.3 System fails to transmit form for storage; gives warning / writes to logfile.



## Individual Use Case : View Annotation



### **View Annotation**

#### **Basic Course**

- 1 User is in Resources Results display page containing summaries of the resources. User selects the annotation Service link.
- 2 System displays Annotation Service starter screen. [N.B. This link will not display to a non-registered User].
- 3 User clicks on link to view annotations relating to the resource.
- 4 System searches annotation database for all annotations possessing a url of that resource.
- 5 System identifies one or a set of relevant annotations. System identifies any annotation flagged by the Moderation service and excludes it from the subsequent display of results.
- 6 System ranks viewable annotations by time, date.
- 7 System displays url's of annotations in a results page, most recent uppermost and displaying date, time , author, star-rating and first words of annotation content.
- 8 User selects annotation for viewing and clicks on url link to view annotation.
- 9 System identifies link selected and loads all fields of particular annotation from database into an html form similar to creation form.
- 10 User views annotation data and closes form.
- 11 System returns user to set of annotation results [or closes form window, re-showing the results page]
- 12 User closes Annotation Results Page.
- 13 System returns to Annotation Starter Screen.
- 14 User closes Starter Screen.
- 15 System returns user to Resources Results Page

#### **Alternate Course**

- 3.1 System fails to connect to database; system issues network failure message.
- 4.1 System searches database but search url is not identified; system issues "No results" message and returns user to Annotation Starter Screen. \*

\*

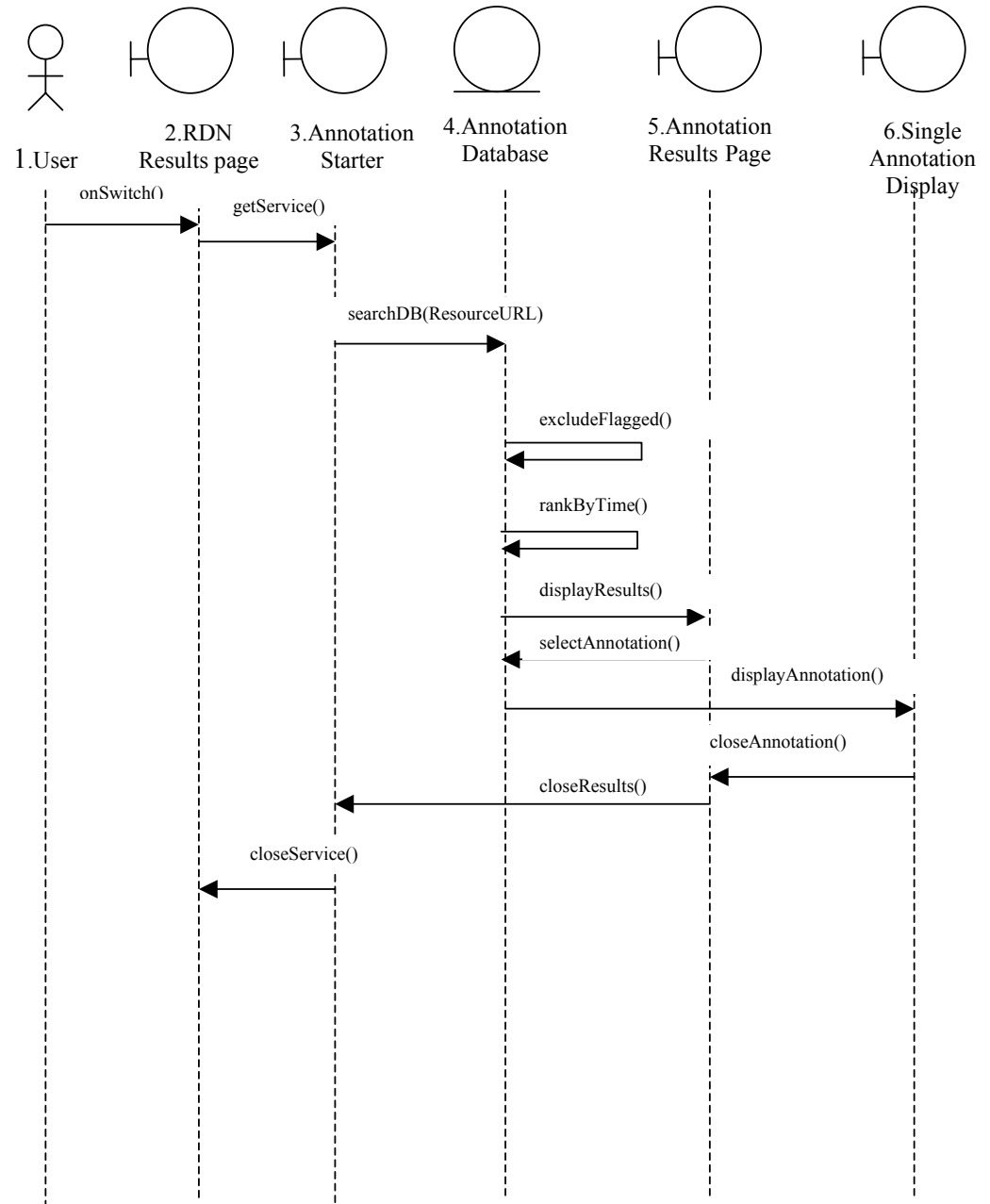
[ Indicating that no annotations had been made in the original summary resultslist would involve a lot more work]



## View Annotation Sequence Diagram

### Basic Course

- 1 User is in Resources Results display page containing summaries of the resources. User selects the Annotation Service link.
- 2 System displays Annotation Service starter screen.
- 3 User clicks on link to view annotations relating to the resource.
- 4 System searches annotation database for all annotations possessing a url of that resource.
- 5 System identifies one or a set of relevant annotations. System identifies any annotation flagged by the Moderation service and excludes it from the subsequent display of results.
- 6 System ranks viewable annotations by time, date.
- 7 System displays url's of annotations in a results page, most recent uppermost and displaying date, time, author, star-rating and first words of annotation content.
- 8 User selects annotation for viewing and clicks on url link to view annotation.
- 9 System identifies link selected and loads all fields of particular annotation from database into an html form similar to creation form.
- 10 User views annotation data and closes form.
- 11 System returns user to set of annotation results.
- 12 User closes Annotation Results Page.
- 13 System returns to Annotation Starter Screen.
- 14 User closes Starter Screen.
- 15 System returns user to Resources Results Page.

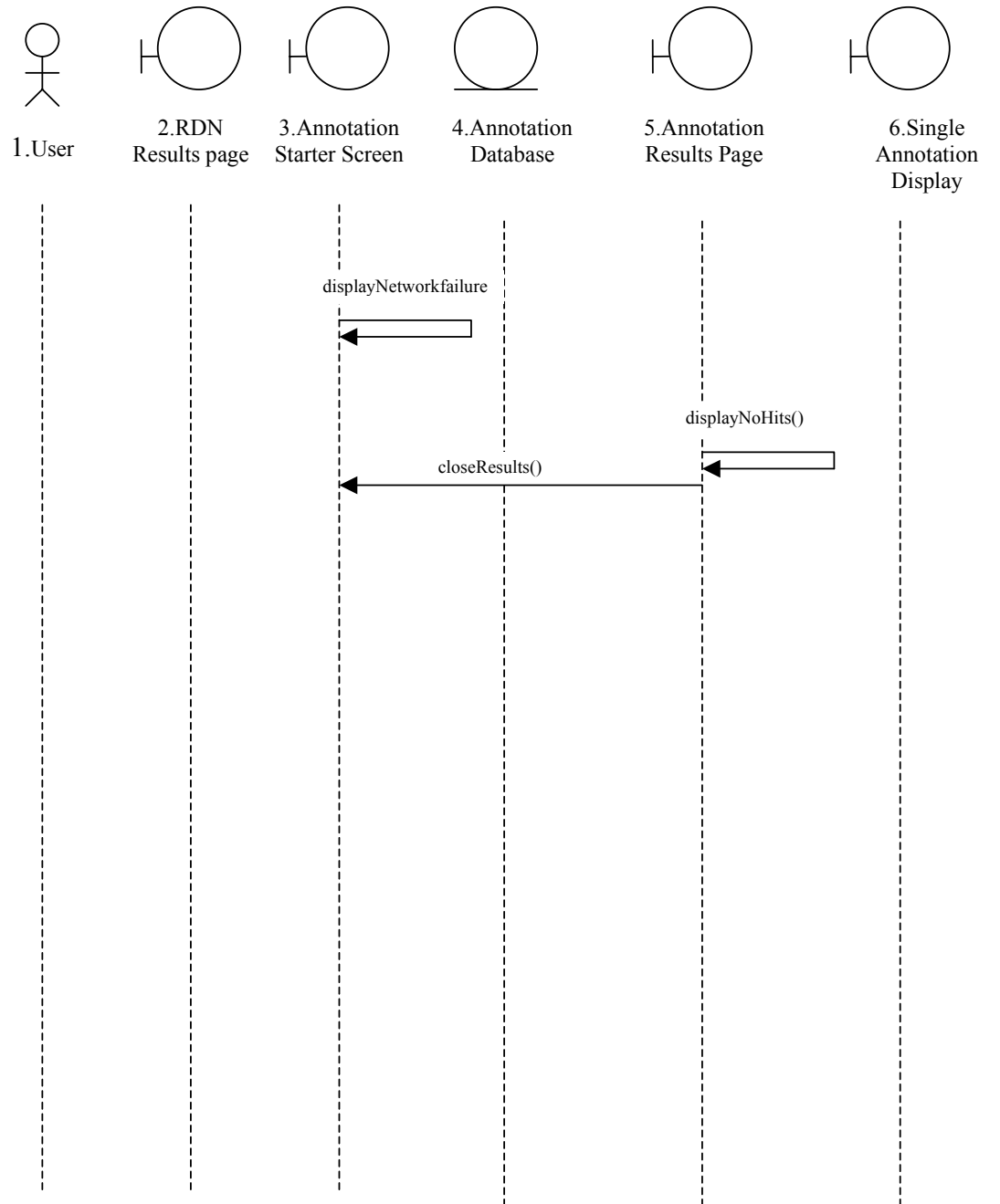


**View Annotation : Sequence Diagram**

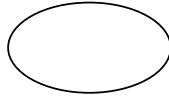
**Alternate Course**

3.1 System fails to connect to database; system issues network failure message.

4.1 System searches database but search url is not identified; system issues "No results" message and returns user to Annotation Starter Screen.



## Individual Use Case : Edit Annotation



### Edit Annotation

#### Preamble:

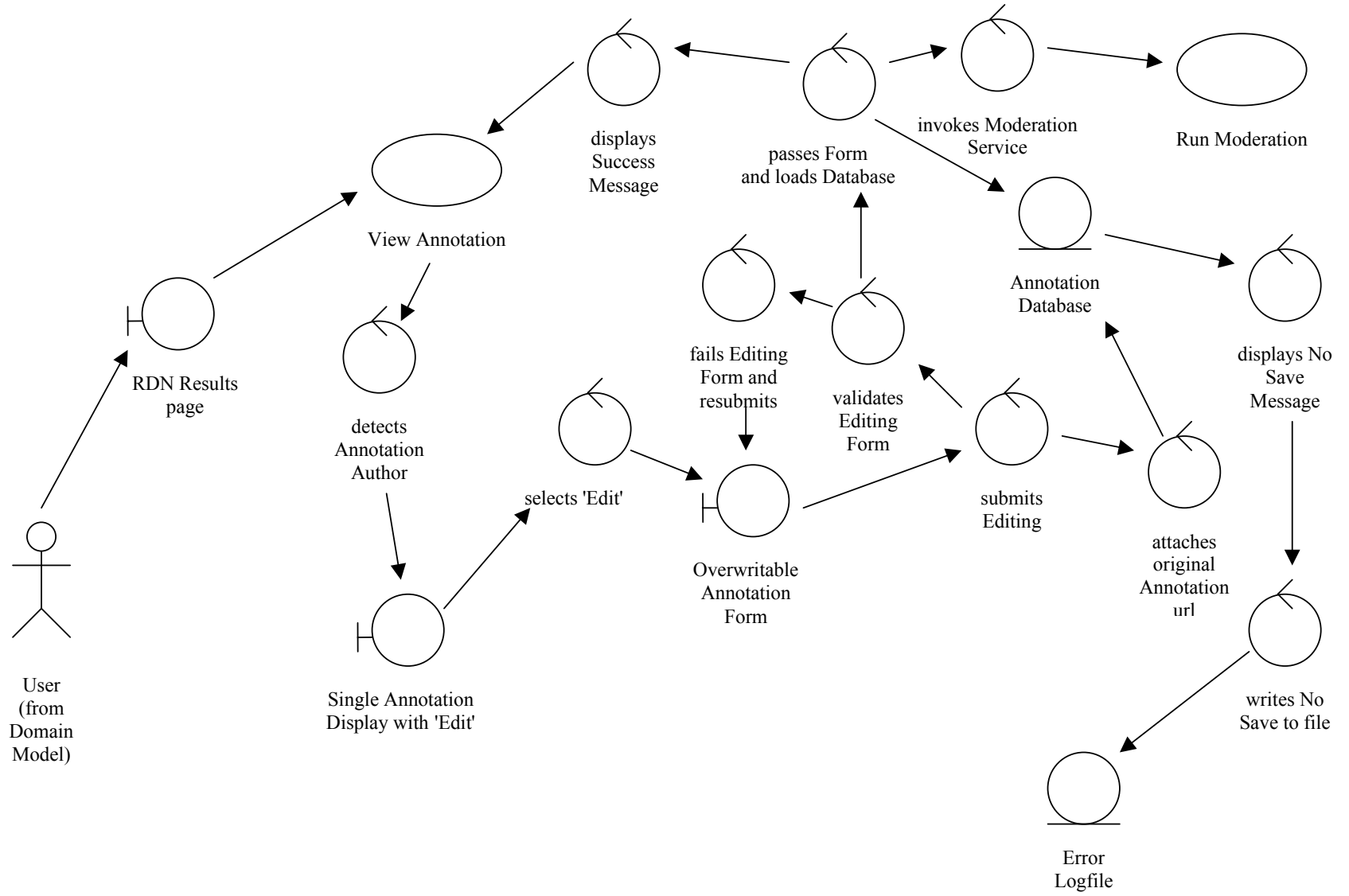
N.B. Beforehand, in the annotation starter screen, the user has selected the view option. The system has presented all relevant annotations.

#### Basic Course

- 1 User selects annotation for viewing and clicks on url link to view annotation.
- 2 System identifies link selected and loads all fields of particular annotation from database into an html form similar to creation form.
- 3 System identifies annotation's author and user as the same; the display form offers two further buttons to registered users: "Edit this annotation" and "Delete this annotation".
- 4 User selects button to edit annotation.
- 5 System reproduces form with same data but content and star-rating fields are made overwritable.
- 6 User amends entries in over-writable fields and clicks "Submit" button.
- 7 System attaches url of original annotation.
- 8 System validates form.
- 9 System displays message of successful editing.
- 10 System passes form data to Annotation Database.
- 11 System calls Moderation Service
- 12 System returns user to the Annotation results page.
- 13 User selects to return to Annotation Starter Screen.
- 14 System closes Annotation results page.
- 15 User selects link to return to the Resource Results Page.
- 16 System returns user to Resource Results Page.

#### Alternate Course

- 6.1 User submits an empty overwritable field, e.g. content or rating
  - 6.2 System validates form.
  - 6.3 System detects absence of content in overwritable field; issues warning message and represents editing form.
- 
- 10.1 System fails to save edited annotation to Annotation Database; system displays warning message and writes failure to Logfile.



Edit Annotation Robustness Diagram

## Edit Annotation Sequence Diagram

### Basic Course

1 User selects annotation for viewing and clicks on url link to view annotation.

2 System identifies link selected and loads all fields of particular annotation from database into an html form similar to creation form.

3 System identifies annotation's author and user as the same; the display form offers two further buttons to registered users: "Edit this annotation" and "Delete this annotation".

4 User selects button to edit annotation.

5 System reproduces form with same data but content and star-rating fields are made overwritable.

6 User amends entries in over-writable fields and clicks "Submit" button.

7 System attaches url of original annotation.

8 System validates form.

9 System displays message of successful editing.

10 System passes form data to Annotation Database

11 System calls Moderation service

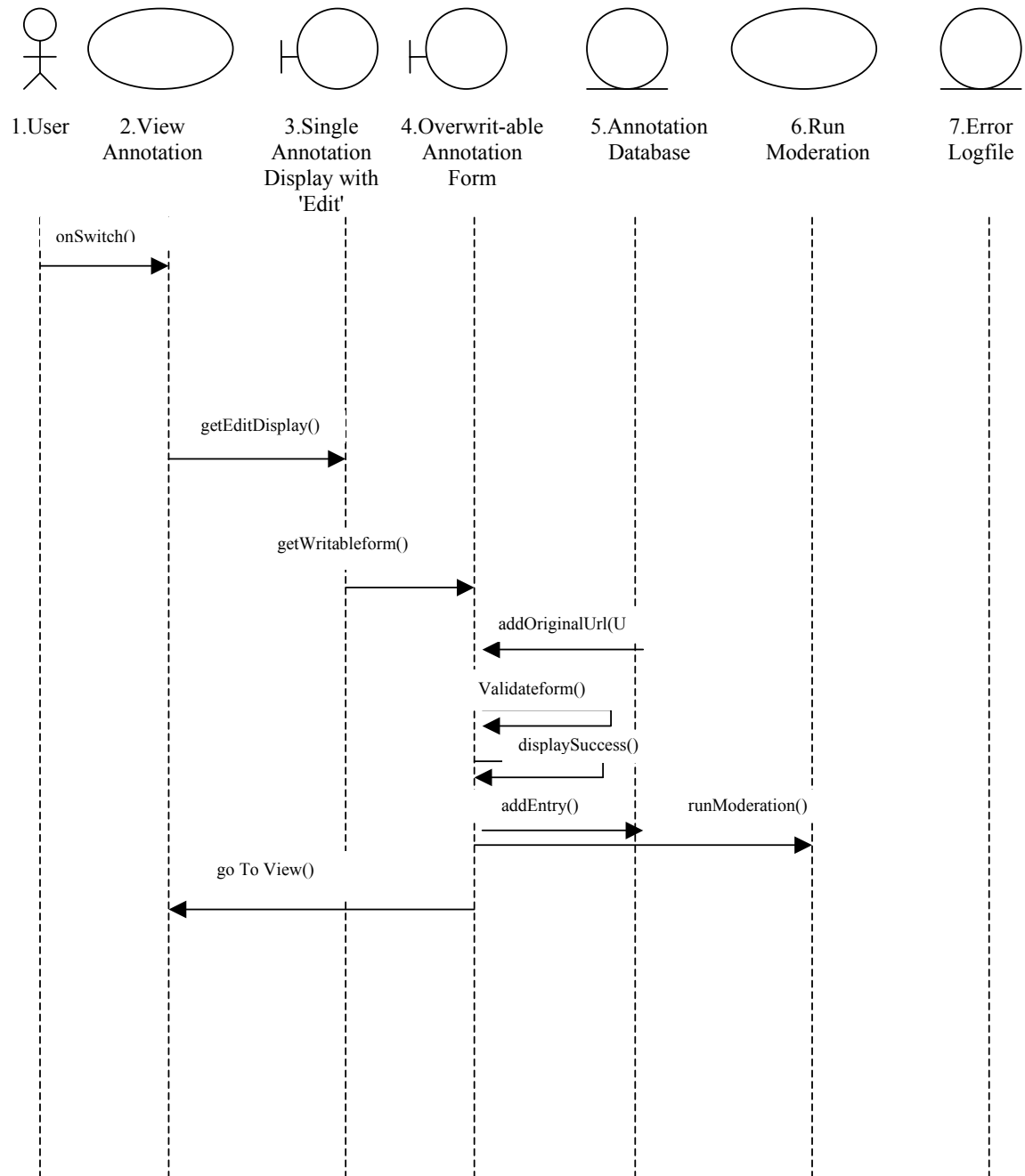
12 System returns user to the Annotation results page.

13 User selects to return to Annotation Starter Screen.

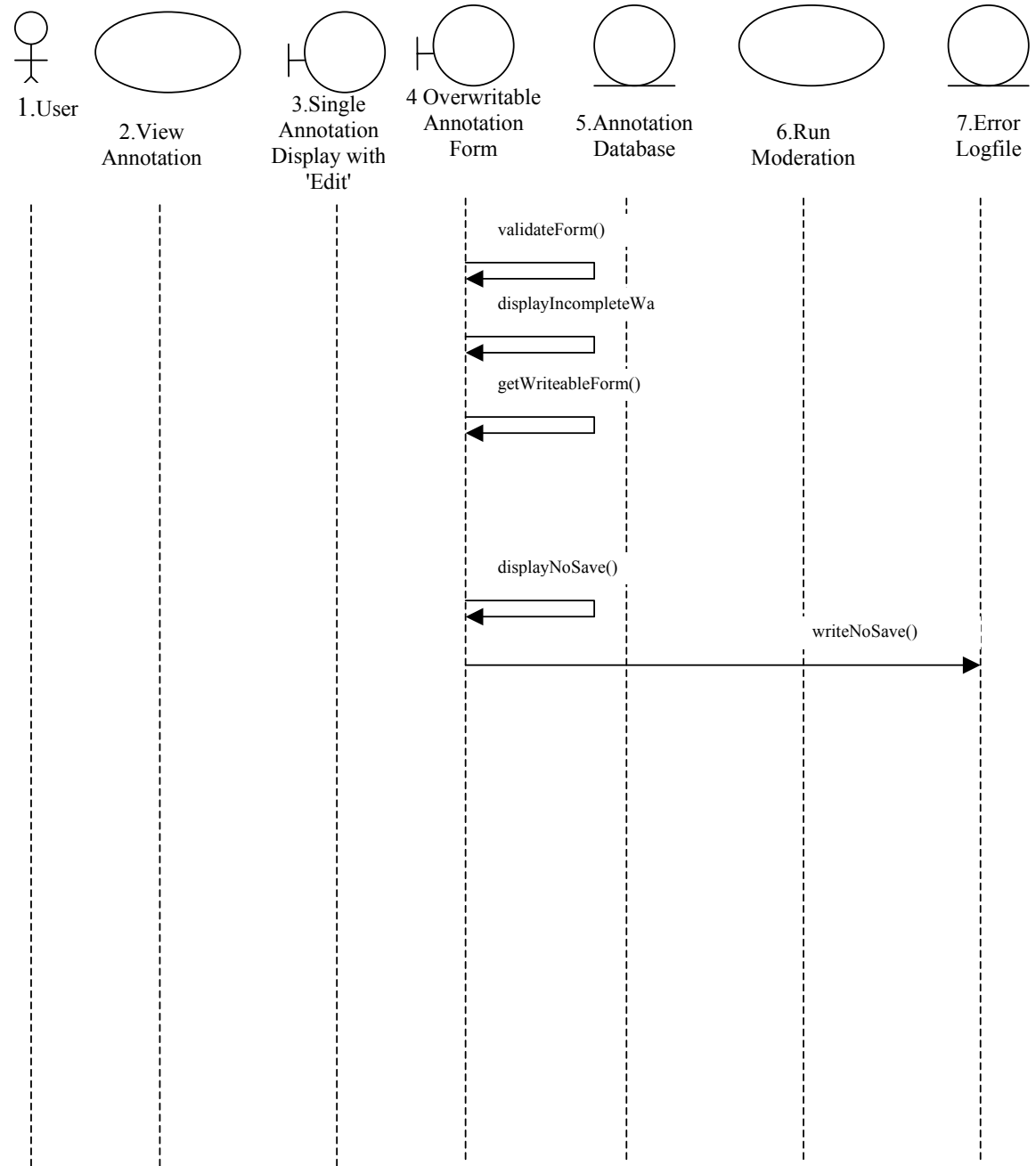
14 System closes Annotation results page.

15 User selects link to return to Resource Results Page.

16 System returns user to Resource results Page.



## Edit Annotation Sequence Diagram

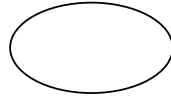


### Alternate Course

6.1 User submits an empty overwritable field, e.g. content or rating.  
6.2 System validates form.  
6.3 System detects absence of content in content field; issues warning message and represents editing form.

10.1 System fails to save edited annotation to Annotation Database; system displays warning message and writes failure to Logfile.

## Individual Use Case : Delete Annotation



### Delete Annotation

#### Preamble:

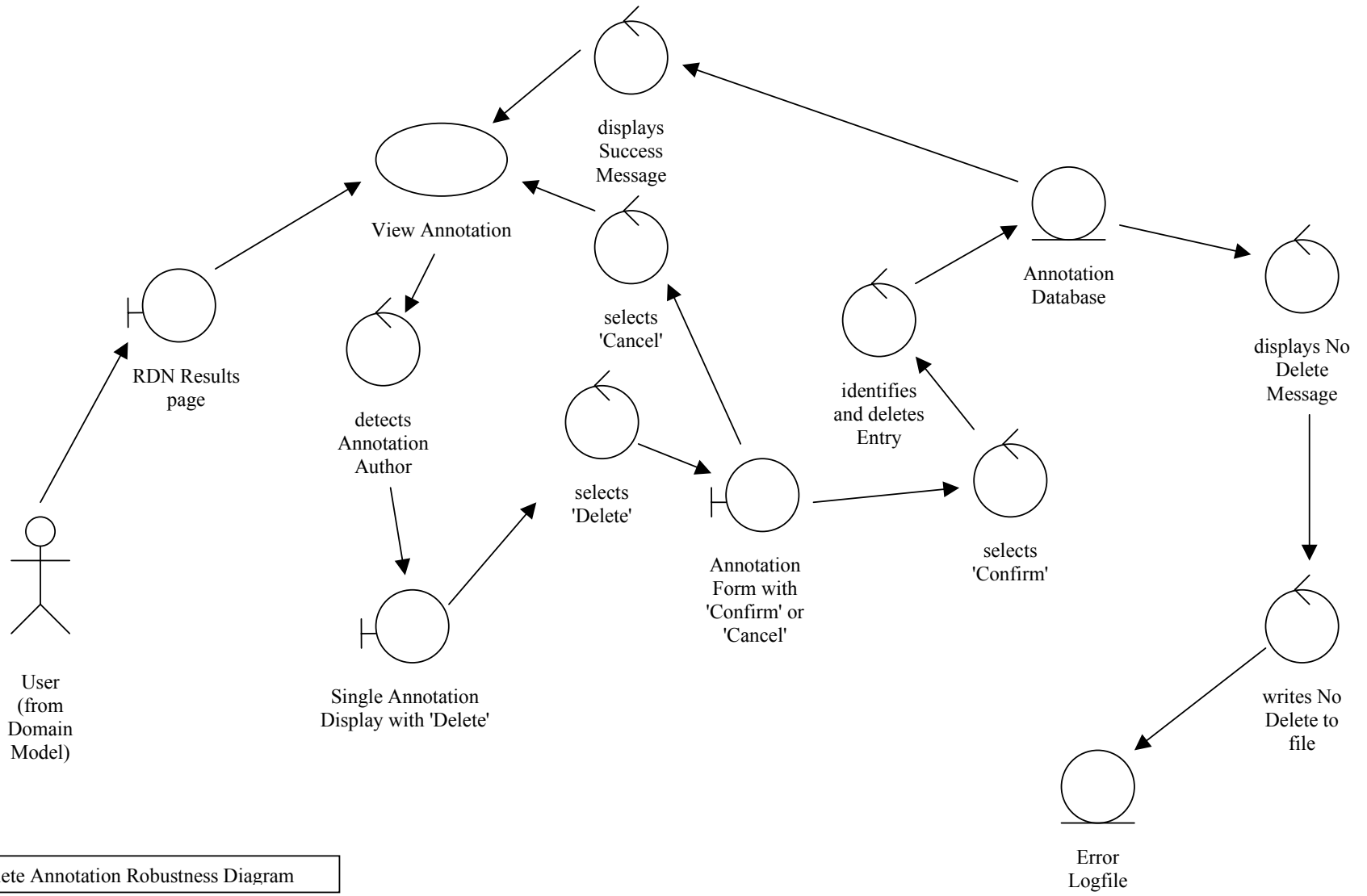
N.B. Beforehand, in the annotation starter screen, the user has selected the view option. The system has presented all relevant annotations.

#### Basic Course

- 1 User selects annotation for viewing and clicks on url link to view annotation.
- 2 System identifies link selected and loads all fields of particular annotation from database into an html form similar to creation form.
- 3 System identifies annotation's author and user as the same; the display form offers two further buttons to registered users: "Edit this annotation" and "Delete this annotation".
- 4 User selects the button to delete annotation.
- 5 System displays entire data on form again but displaying buttons "Confirm your deletion" and "Cancel".
- 6 User selects button "Confirm your deletion".
- 7 System identifies annotation url in database and deletes all the fields in that annotation. [Alternative: flag as unviewable and batch delete on 7<sup>th</sup> day].
- 8 System displays success message.
- 9 System returns user to annotations results set.

#### Alternate Course

- 3.1 User changes mind after clicking "Delete this annotation".
  - 3.2 System displays entire data on form again but displaying buttons "Confirm your deletion" and "Cancel".
  - 3.3 User selects "Cancel"
  - 3.4 System closes form window and returns user to annotations results set.
- 
- 7.1 System fails to connect to annotations database to delete entry; issues error message.
  - 7.2 System writes non-deletion to logfile.



Delete Annotation Robustness Diagram

## Delete Annotation Sequence Diagram

### Basic Course

1 User selects annotation for viewing and clicks on url link to view annotation.

2 System identifies link selected and loads all fields of particular annotation from database into an html form similar to creation form.

3 System identifies annotation's author and user as the same; the display form offers two further buttons to registered users: "Edit this annotation" and "Delete this annotation".

4 User selects the button to delete annotation.

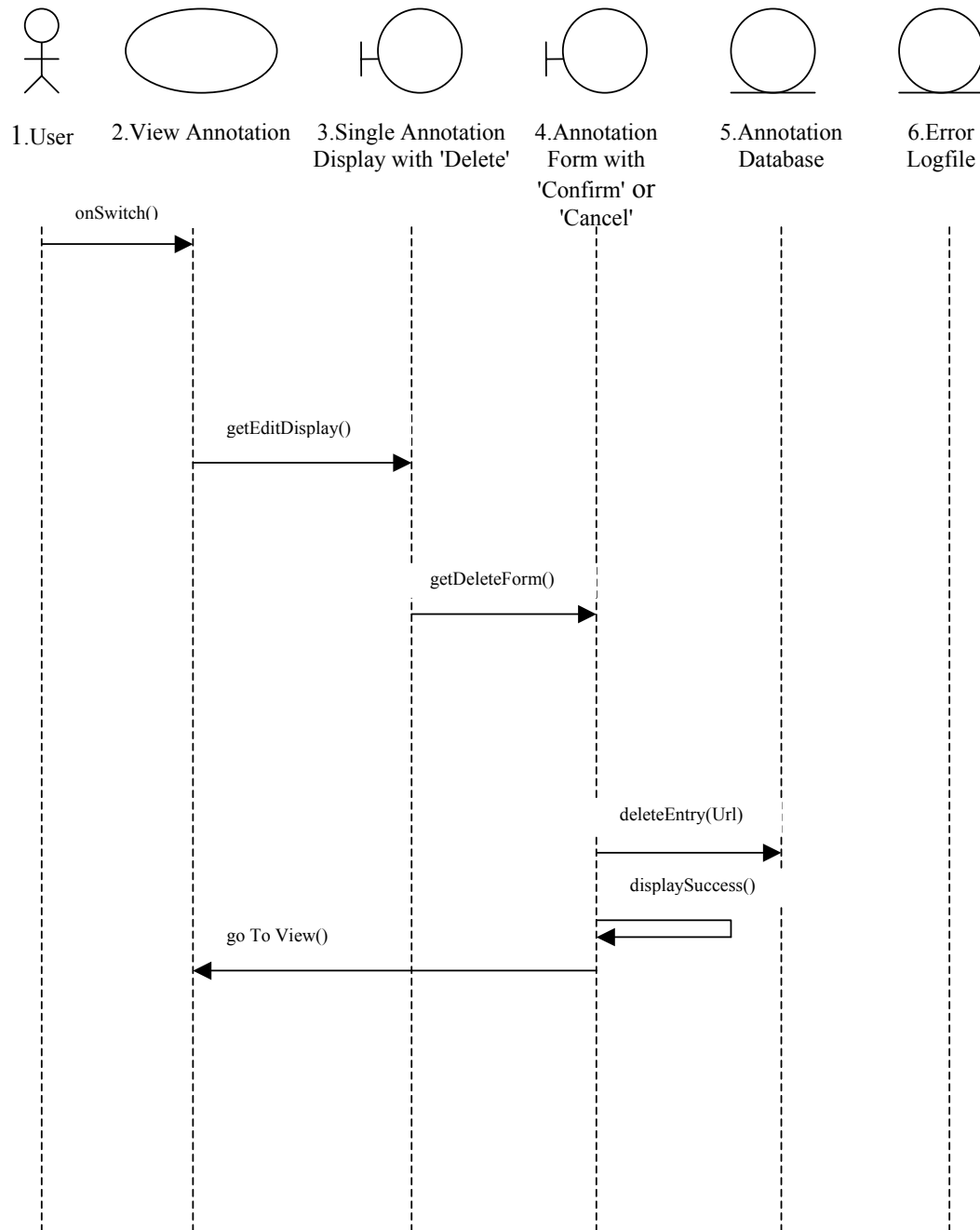
5 System displays entire data on form again but displaying buttons "Confirm your deletion" and "Cancel".

6 User selects button "Confirm your deletion"

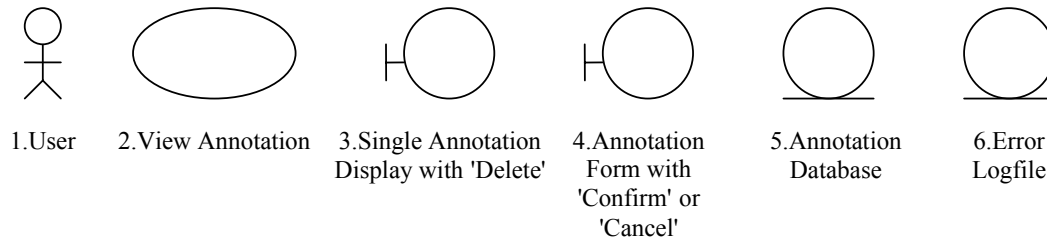
7 System identifies annotation url in database and deletes all the fields in that annotation.

8 System displays success message

9 System returns user to annotations results set.



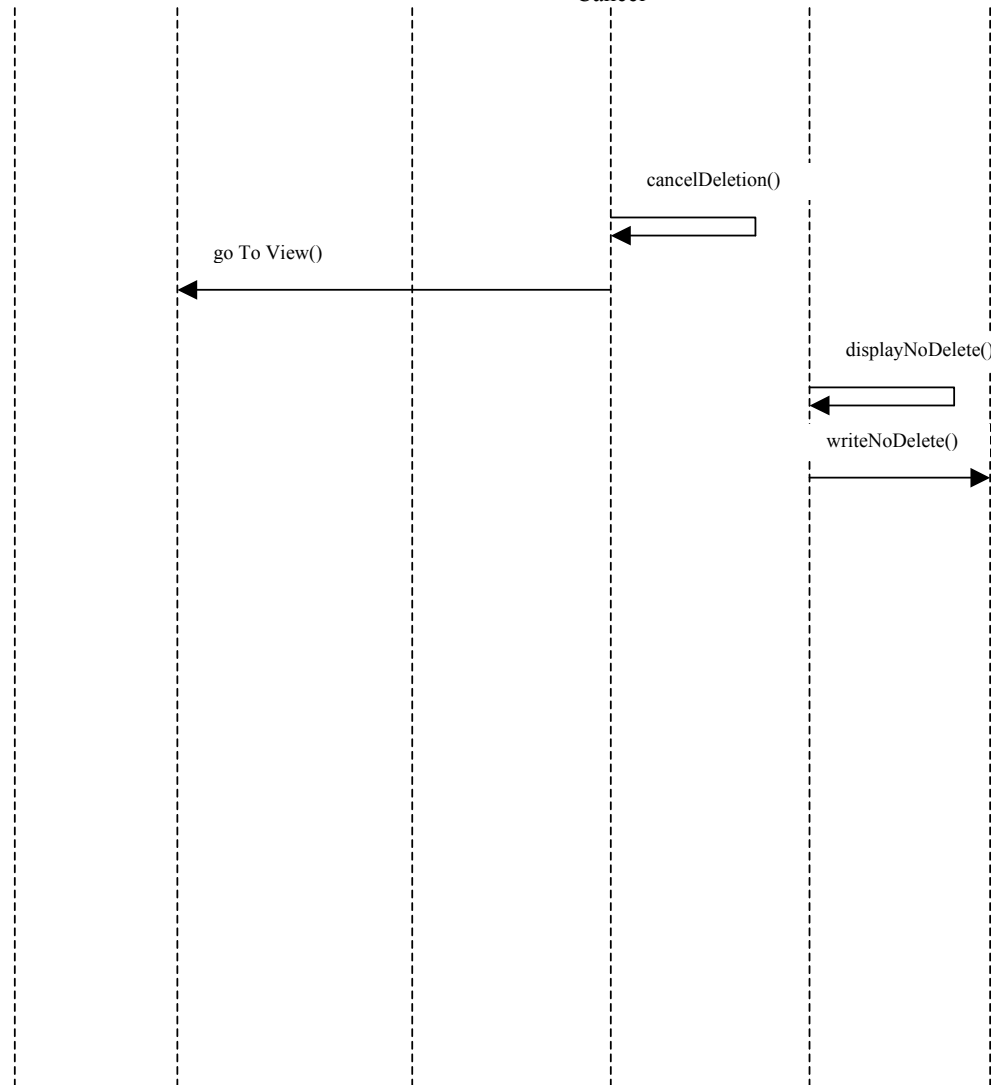
## Delete Annotation Sequence Diagram



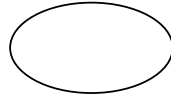
### Alternate Course

3.1 User changes mind after clicking "Delete this annotation".  
3.2 System displays entire data on form again but displaying buttons "Confirm your deletion" and "Cancel".  
3.3 User selects "Cancel"; system closes form window and returns user to annotations results set.

7.1 System fails to connect to annotations database to delete entry; issues error message.  
7.2 System writes non-deletion to logfile.



## Individual Use Case : Run Moderation



### Run Moderation

#### Basic Course

- 1 System passes validated Annotation form values to Annotation Assessor which loads Moderation values.
- 2 System begins priority assessment by checking star-rating value; assigns a value to the priority value based on the star-rating value.
- 3 System checks email address for domain suffix; adds a value to the priority value accordingly
- 4 System checks email address prefix, i.e. characters before @; adds a value to the priority value where digits are identified.
- 5 System compares content of annotation with a system-stored watchlist; adds a value to the priority value for each identification. \* \*\*
- 6 System compares accumulated priority value with Moderator-determined threat threshold value.
- 7 System flags Assessed Annotation as threat if threshold value is exceeded.
- 8 System assigns final priority rating to Assessed Annotation for mailing.
- 9 System amends annotation entry on Annotation database to render it unviewable.
- 10 System mails Moderator the annotation complete with priority and threat values.

#### Alternate Course

- 1.1 System fails to pass Annotation form values to beginning of Moderation process; system determines Moderation process not invoked and logs a warning message.
- 2.1 System identifies star-rating as complimentary; compares annotation email address with contributor watchlist.
- 2.2 If positive identification occurs, system adds threat threshold value to priority value.
- 2.3 System fails to make star rating assessment; issues warning message \*\*\*
- 3.1 System fails to analyse email address prefix; issues warning message. \*\*\*
- 4.1 System fails to analyse email address domain; issues warning message. \*\*\*
- 6.1 System fails to compare priority and threshold values ; issues warning. \*\*\*\*
- 9.1 System fails to amend annotation entry in Annotation database; issues warning message. \*\*\*\*\*
- 10.1 System fails to mail Moderator the annotation; issues Moderator error email. \*\*\*\*\*

#### Implementation Notes

- \* Consider converting input & watchlist to integers for greater speed;
- \*\* also excluding non-value words from process, e.g. the, a, in , etc.
- \*\*\* could identify problem by checking parameter of say addValue() , that is following the assessment of email suffix/prefix; where != 0 ..threshold\_value, returns error message.
- \*\*\*\* check to see if threshold\_value is present, out of bounds etc.
- \*\*\*\*\* check priority value; if greater than threshold\_value, issues warning possible no connection with database.
- \*\*\*\*\* check Annotation email for incomplete values, e.g. no threshold value; include fault in error email.



## Run Moderation SequenceDiagram (Moderator)

### Basic Course

1 System passes validated Annotation form values to Annotation Assessor which loads Moderation values.

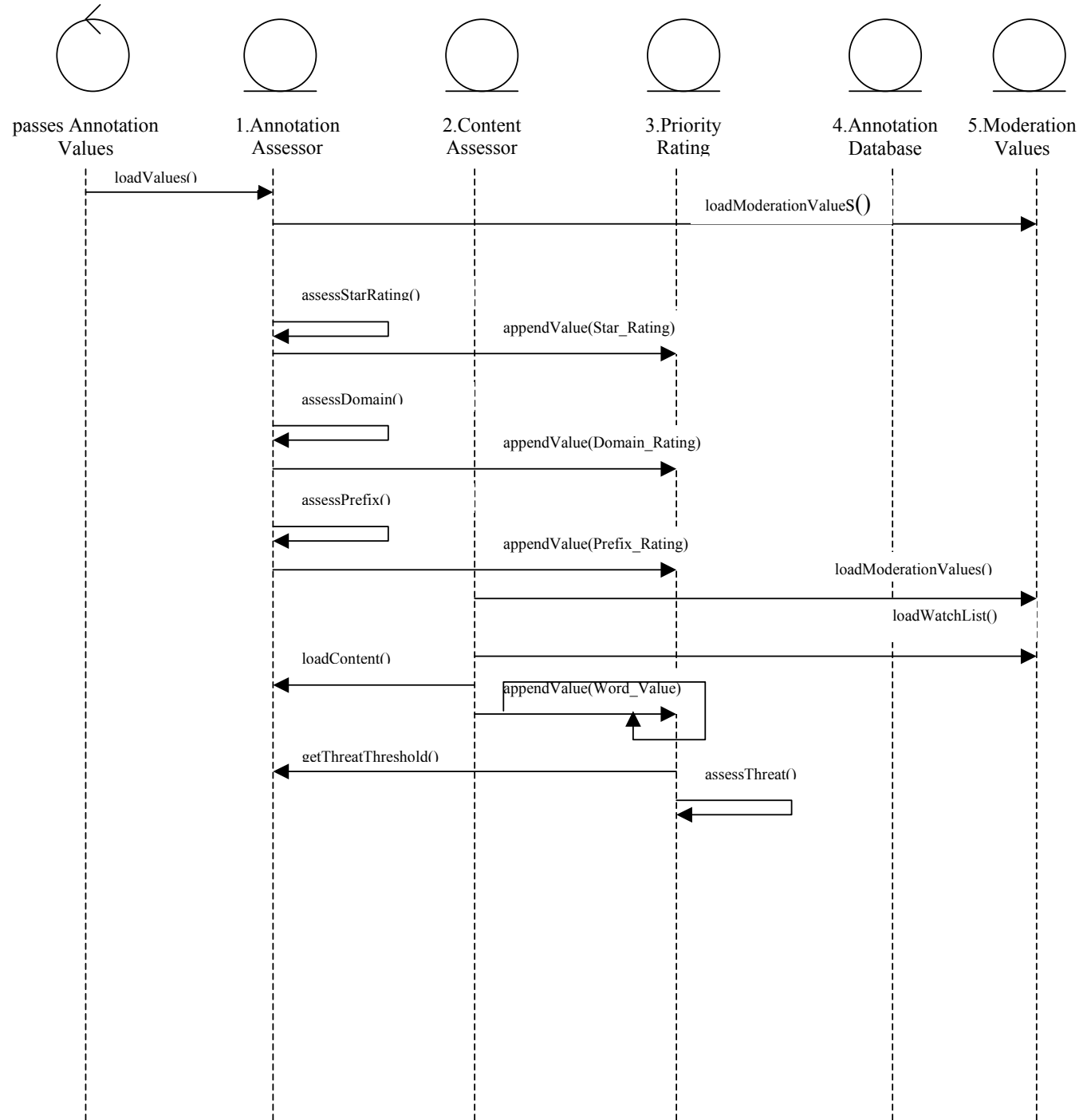
2 System begins priority assessment by checking star-rating value; assigns a value to the priority value based on the star-rating value.

3 System checks email address for domain suffix; adds a value to the priority value accordingly.

4 System checks email address prefix, i.e. characters before @; adds a value to the priority value where digits are identified.

5 System compares content of annotation with a system-stored watchlist; adds a value to the priority value for each identification.

6 System compares accumulated priority value with Moderator-determined threat threshold value.



## Run Moderation SequenceDiagram (Moderator)

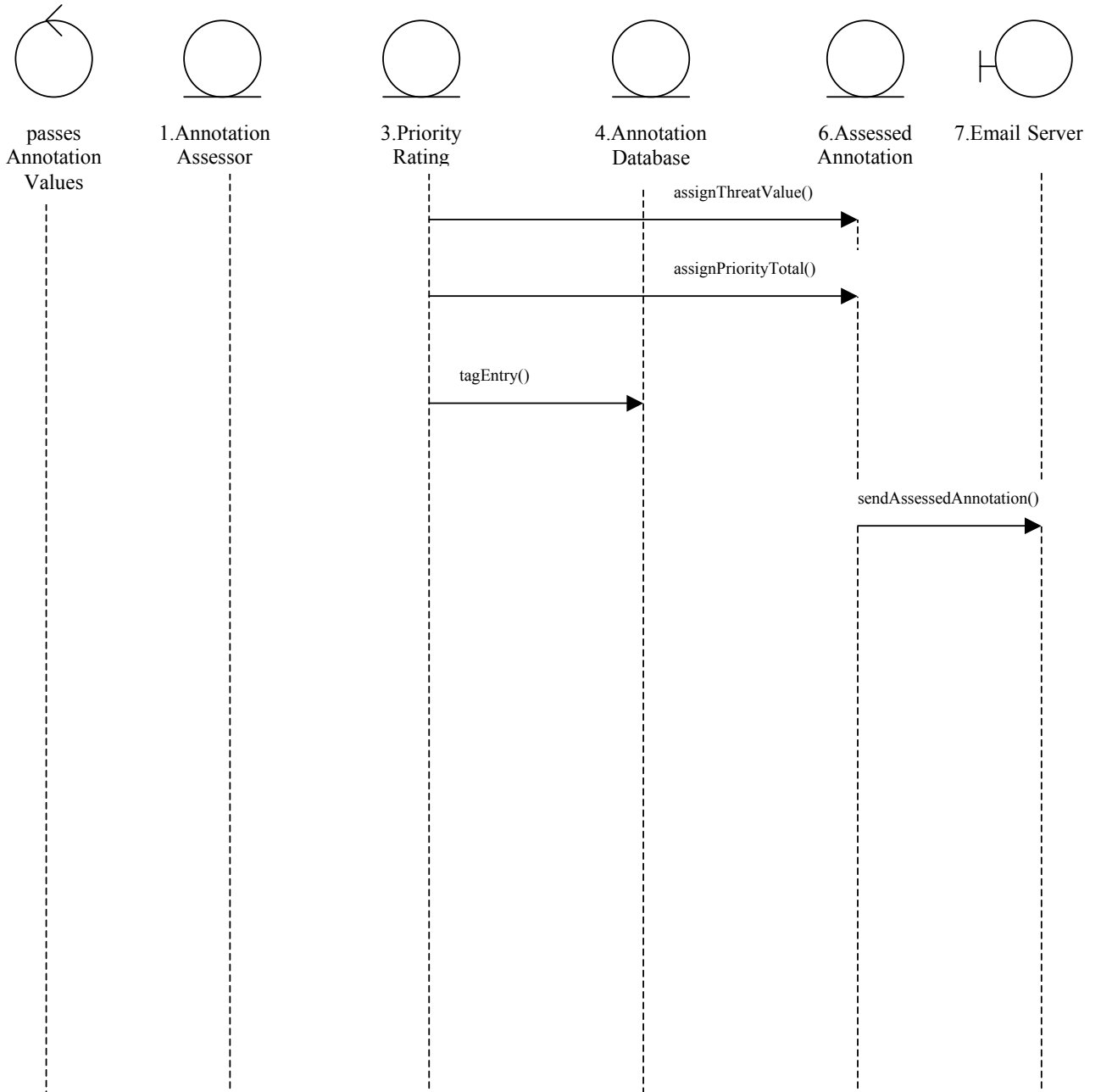
### Basic Course Continued

7 System flags Assessed Annotation as threat if threshold value is exceeded.

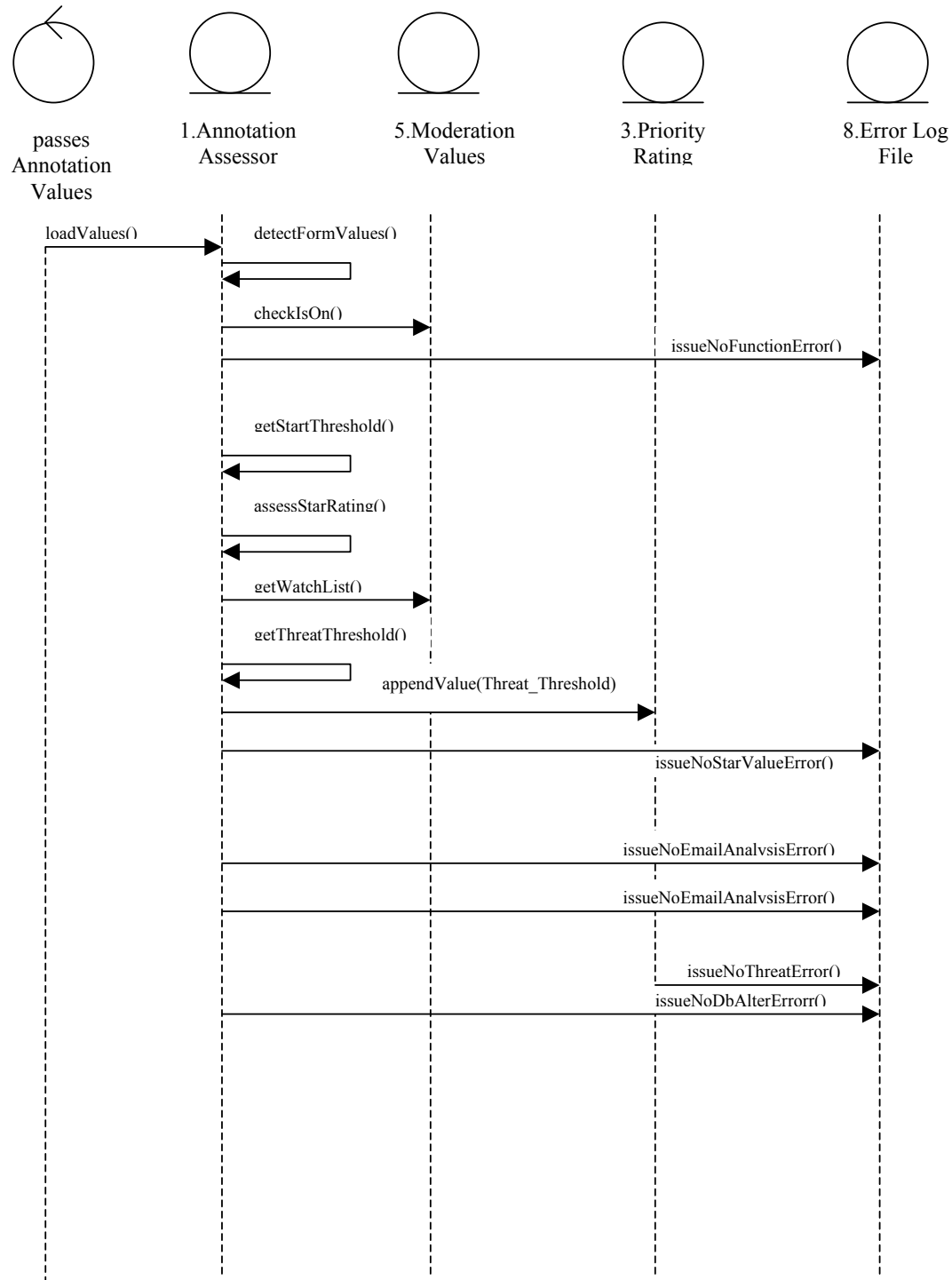
8 System assigns final priority rating to Assessed Annotation for mailing.

9 System amends annotation entry on Annotation database to render it unviewable.

10 System mails Moderator the annotation complete with priority and threat values.



## Run Moderation: Sequence Diagram



### Alternate Course (1)

1.1 System fails to pass Annotation form values to beginning of Moderation process; system determines Moderation process not invoked and logs a warning message.

2.1 System identifies star-rating as complimentary; compares annotation email address with contributor watchlist.

2.2 If positive identification occurs, system adds threat threshold value to priority value.

2.3 System fails to make star rating assessment; issues warning message.

3.1 System fails to analyse email address prefix; issues warning message.

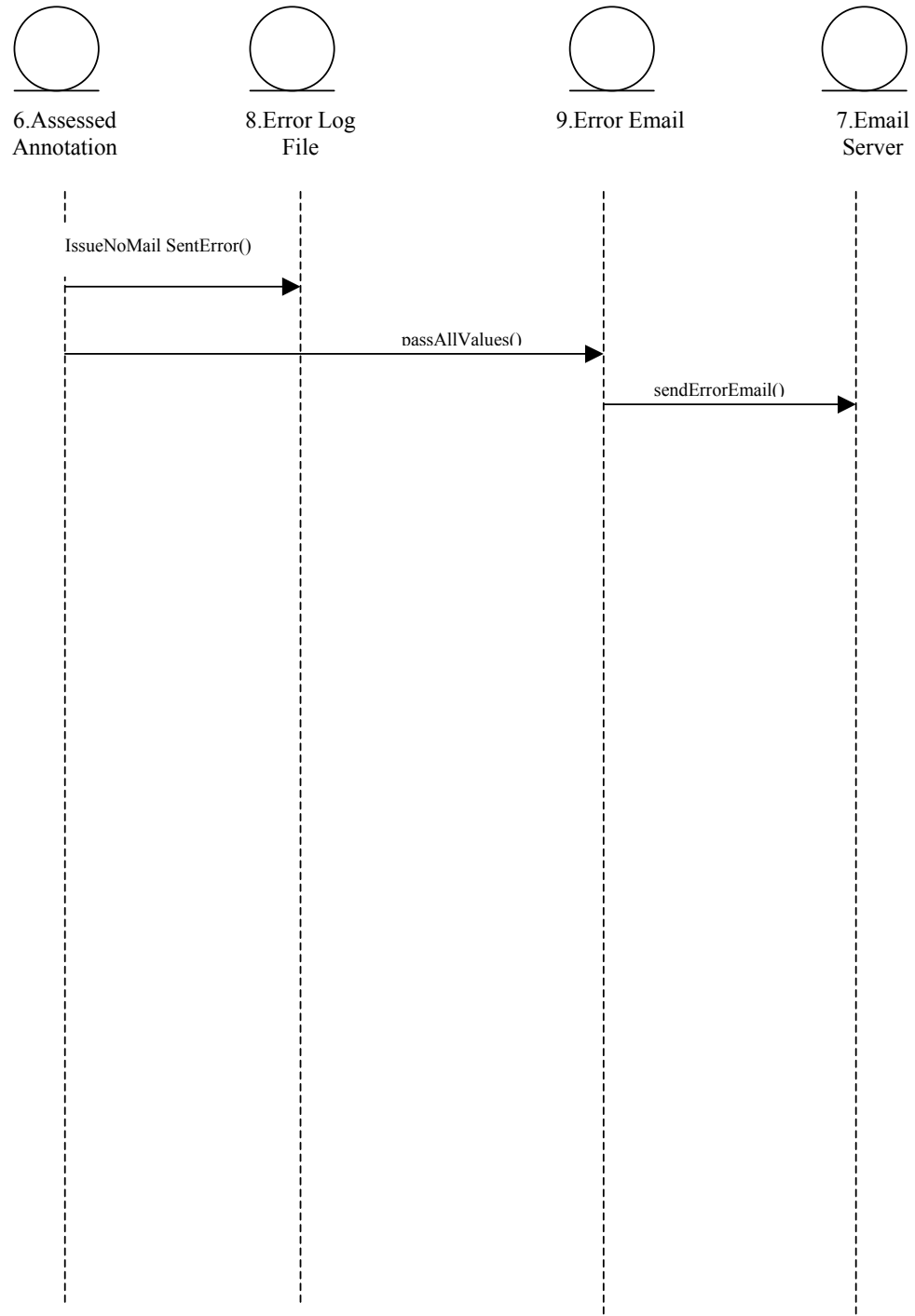
4.1 System fails to analyse email address domain; issues warning message.

6.1 System fails to compare priority and threshold values ; issues warning.

9.1 System fails to amend annotation entry in Annotation database; issues warning message.

**Run Moderation Sequence Diagram  
Alternate Course (2)**

10.1 System fails to mail Moderator the annotation; issues to Moderator an error email.



## Structure of Use Cases involving Moderators as Actors

### Moderators as Actors

Use Case : View Annotation

Contents:

Use Case Description

Robustness Diagram

Sequence Diagram

Use Case : Accept Annotation

Contents:

Use Case Description

Robustness Diagram

Sequence Diagram

Use Case : Auto-Reject Annotation

Contents:

Use Case Description

Robustness Diagram

Sequence Diagram

Use Case : Reject Annotation

Contents:

Use Case Description

Robustness Diagram

Sequence Diagram

Use Case : Edit Annotation

Contents:

Use Case Description

Robustness Diagram

Sequence Diagram

Use Case : Set Moderation Values

Contents:

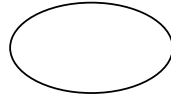
Use Case Description

Robustness Diagram

Sequence Diagram

Moderation values

## **Individual Use Case : View Annotations (Moderator)**



### **View Annotations**

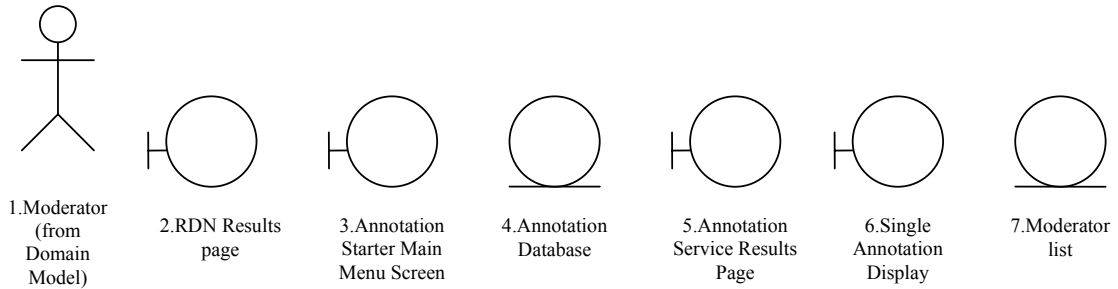
#### **Basic Course**

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator has no need to proceed further and selects Cancel.
- 9 The system returns to the Annotation Service Results Page.
- 10 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 11 System returns to the Annotation Service Main Menu screen.
- 12 Moderator selects link to return to the original RDN results screen.
- 13 System returns to the original RDN results screen.

#### **Alternate Course**

- 1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.
- 4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.
- 5.1 The system's search discovers no annotations for that resource.
- 5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.
- 5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.
- 5.4 System returns to Annotation Service Starter Main Menu Screen.

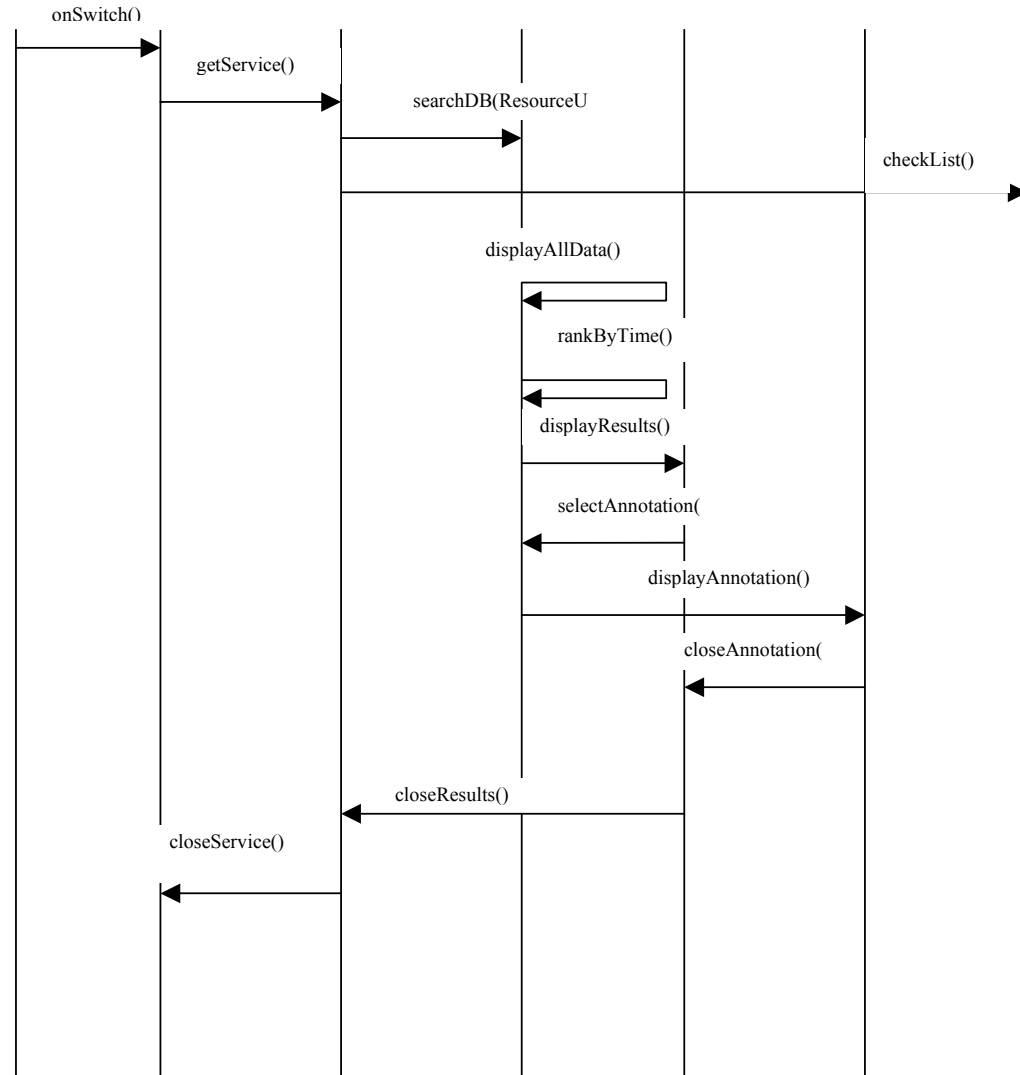




**Sequence Diagram : View Annotations (Moderator)**

**Basic Course**

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator has no need to proceed further and selects Cancel.
- 9 The system returns to the Annotation Service Results Page.
- 10 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 11 System returns to the Service Main Menu screen.
- 12 Moderator selects link to return to the original RDN results screen.
- 13 System returns to the original RDN results screen.



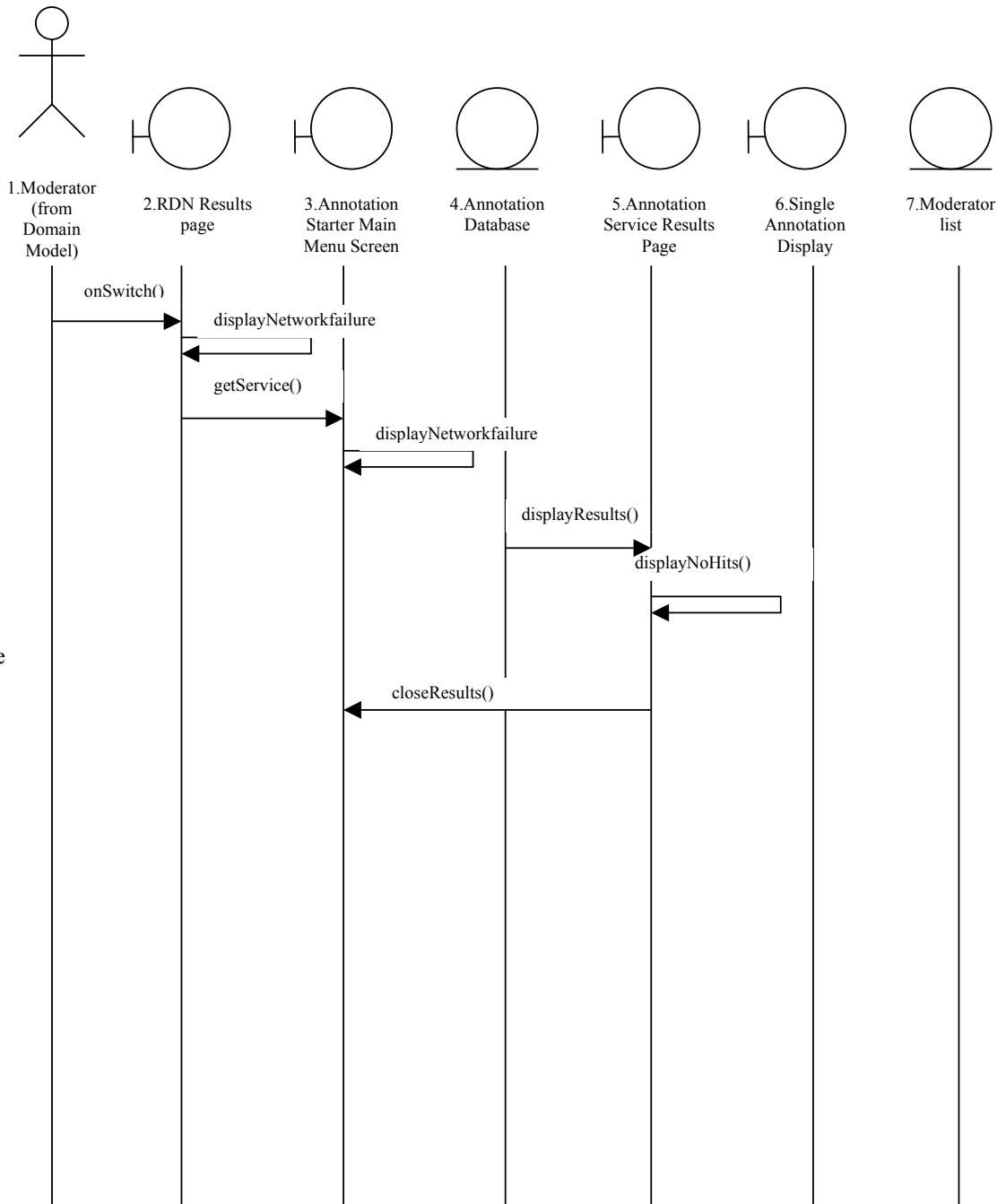
**Sequence Diagram : View Annotations (Moderator)**

**Alternate Course**

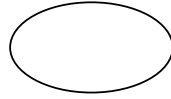
1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.

4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.

5.1 The system's search discovers no annotations for that resource.  
 5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.  
 5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.  
 5.4 System returns to Annotation Service Starter Main Menu Screen.



## Individual Use Case : Accept Annotation (Moderator)



### Accept Annotation

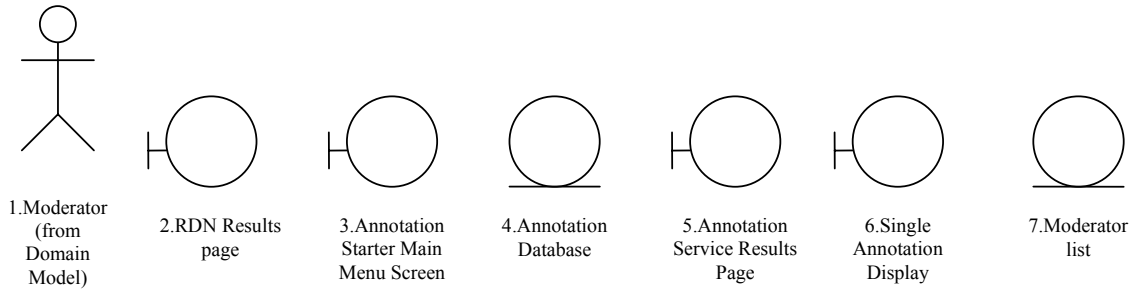
#### Basic Course

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator accepts annotation as found; clicks Accept button.
- 9 Where the annotation is flagged, system removes flag from database field and updates entry.
- 10 The system provides a success message in a screen displaying links to both RDN Results page and Annotation Service Results Page.
- 11 Moderator selects link to Annotation Service Results Page.
- 12 The system returns to the Annotation Service Results Page.
- 13 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 14 System returns to the Annotation Service Main Menu screen.
- 15 Moderator selects link to return to the original RDN results screen.
- 16 System returns to the original RDN results screen.

#### Alternate Course

- 1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.
- 4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.
- 5.1 The system's search discovers no annotations for that resource.
- 5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.
- 5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.
- 5.4 System returns to Annotation Service Starter Main Menu Screen.
- 8.1 Moderator decides to take no further action and clicks on Cancel.
- 8.2 System returns Moderator to Annotation Service Results Page.
- 9.1 Where the annotation is not flagged, the system does not have to update the database entry.
- 11.1 Moderator selects link to the original RDN results screen.
- 11.2 The system returns direct to the original RDN results screen.

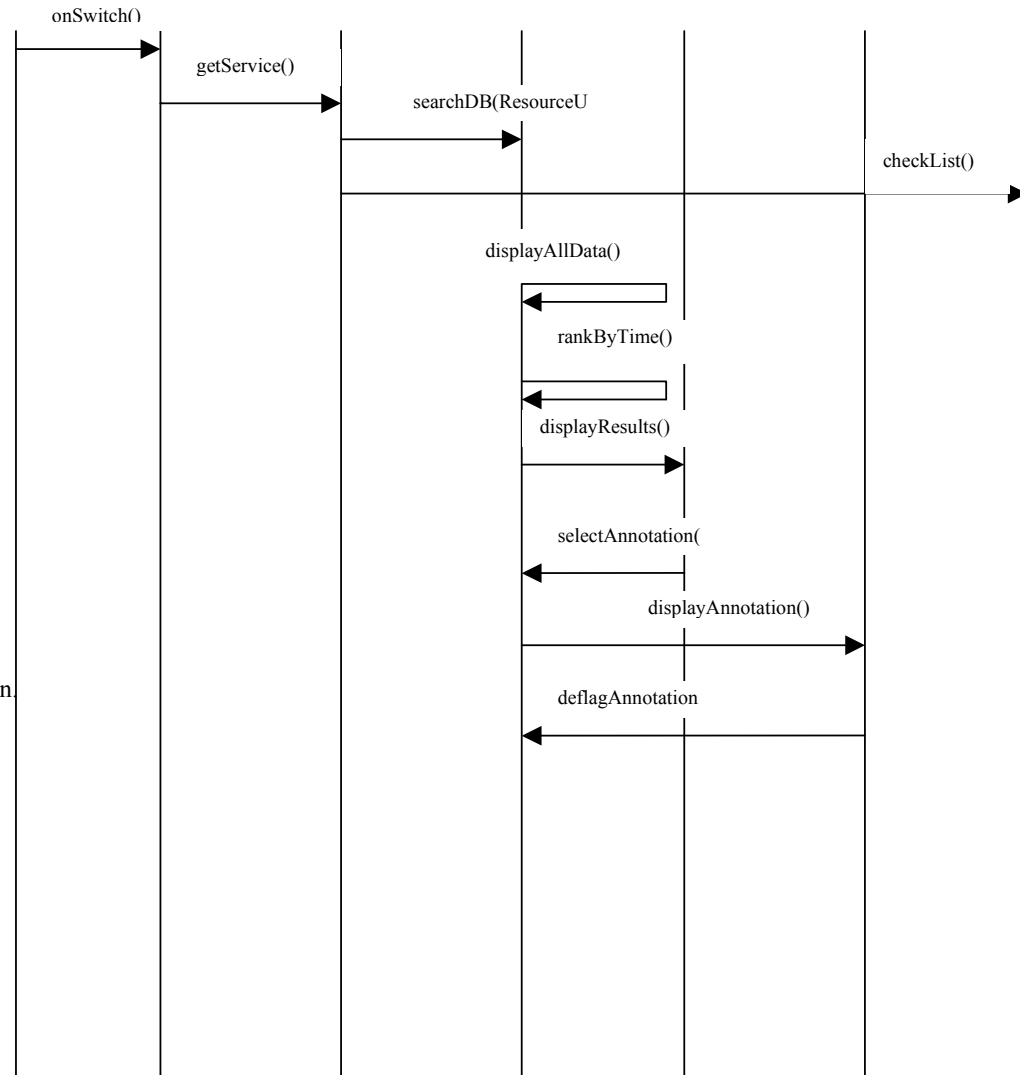


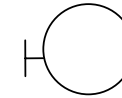
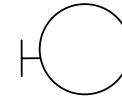
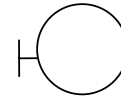
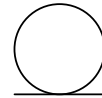
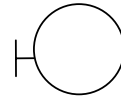
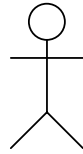


**Sequence Diagram: Accept Annotation (Moderator)**

**Basic Course**

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator accepts annotation as found; clicks Accept button
- 9 Where the annotation is flagged, system removes flag from database field and updates entry.





**Sequence Diagram: Accept Annotation(Moderator)**

**Basic Course (Cont.)**

10 The system provides a success message in a screen displaying links to both RDN Results page and Annotation Service Results Page.

11 Moderator selects link to Annotation Service Results Page.  
12 The system returns to the Annotation Service Results Page.

13 Moderator chooses to return to the Annotation Service Main Menu and clicks link.  
14 System returns to the Annotation Service Main Menu screen.

15 Moderator selects link to return to the original RDN results screen.  
16 System returns to the original RDN results screen.

**Alternate Course**

11.1 Moderator selects link to the original RDN results screen.  
11.2 The system returns direct to the original RDN results screen.

1.Moderator (from Domain Model)

2.RDN Results page

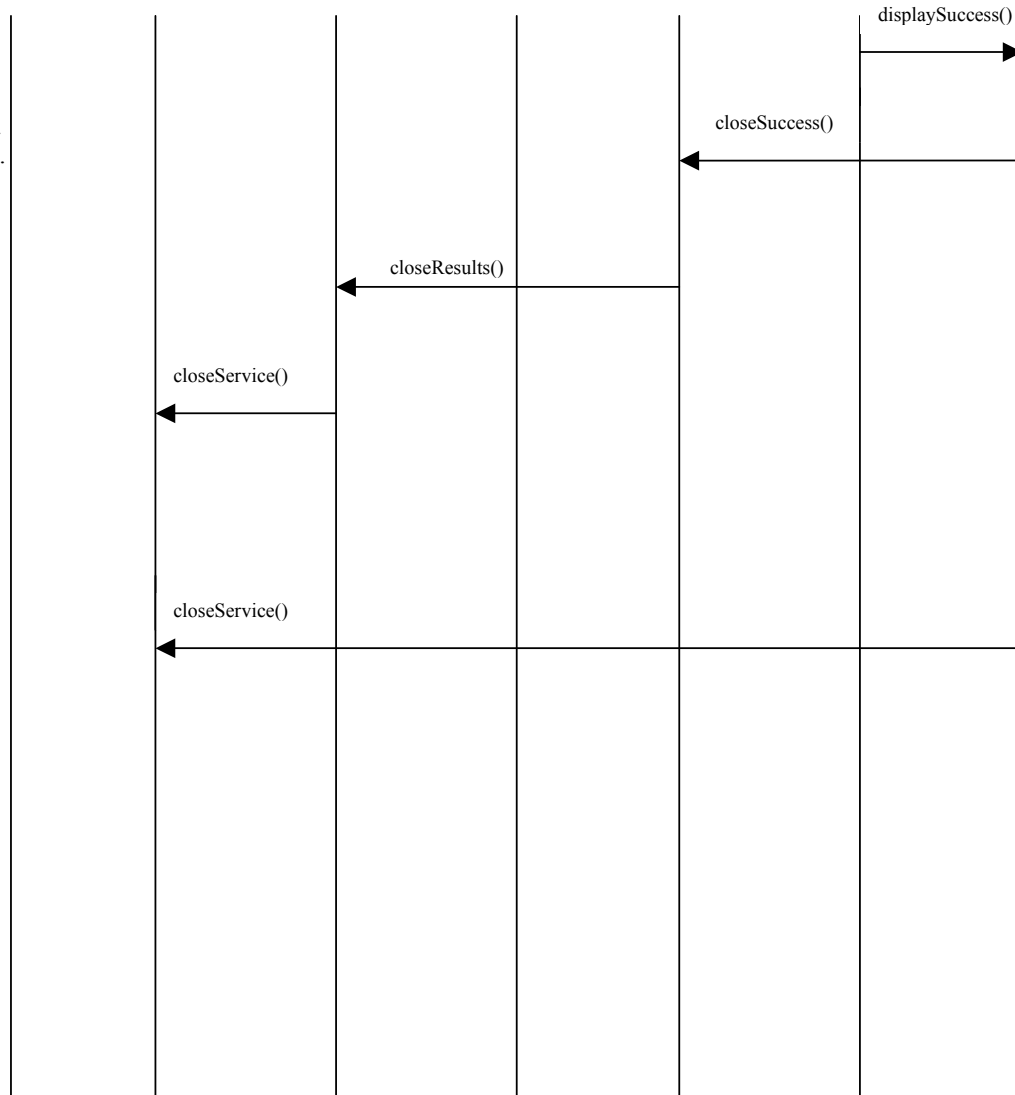
3.Annotation Starter Main Menu Screen

4.Annotation Database

5.Annotation Service Results Page

6.Single Annotation Display

8 Accept Success Screen



**Sequence Diagram: Accept Annotation(Moderator)**

**Alternate Course (Cont.)**

1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.

4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.

5.1 The system's search discovers no annotations for that resource.

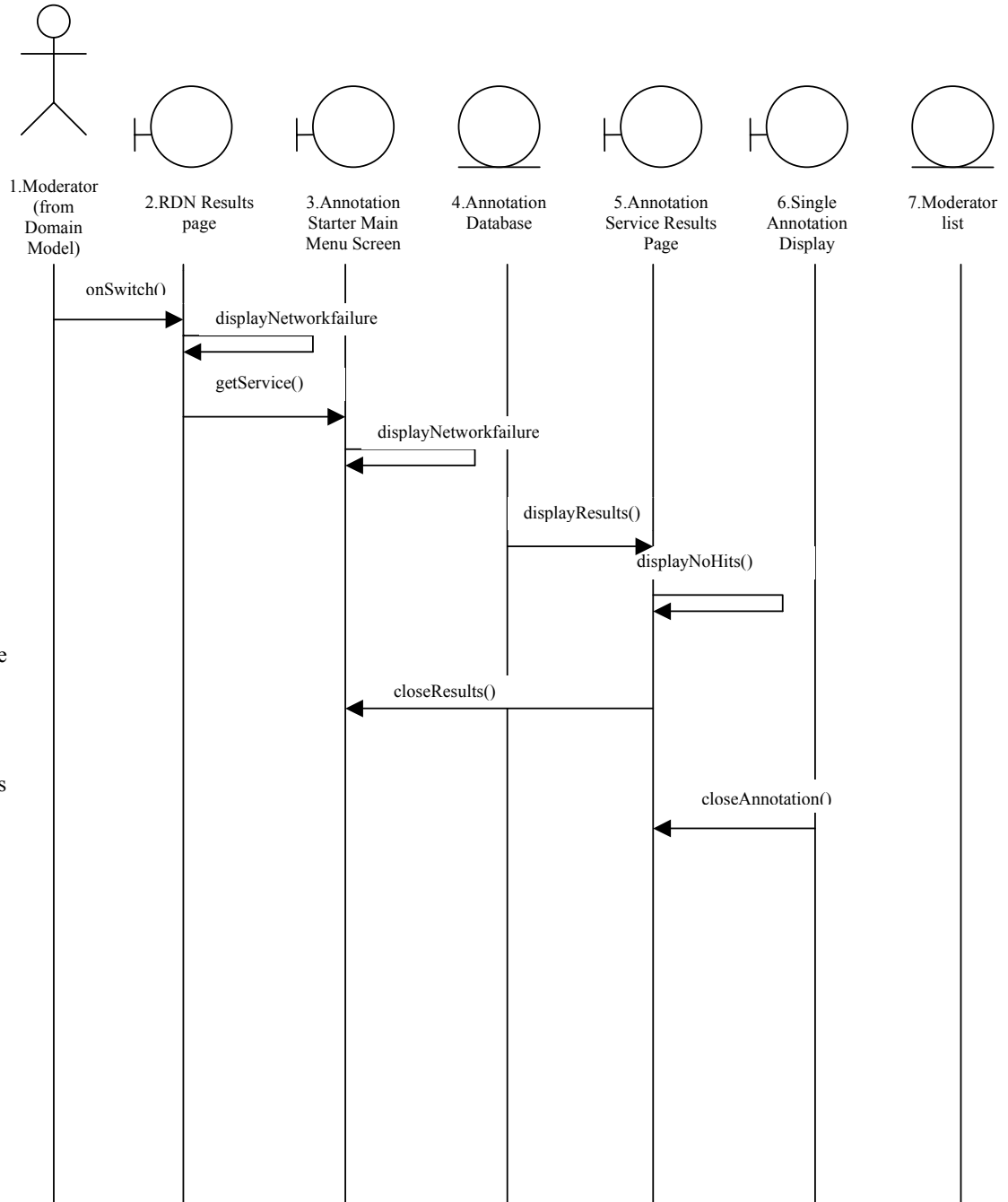
5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.

5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.

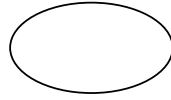
5.4 System returns to Annotation Service Starter Main Menu Screen.

8.1 Moderator decides to take no further action and clicks on Cancel.

8.2 System returns Moderator to Annotation Service Results Page.



## Individual Use Case : Auto-reject Annotation (Moderator)



### Auto-reject Annotation

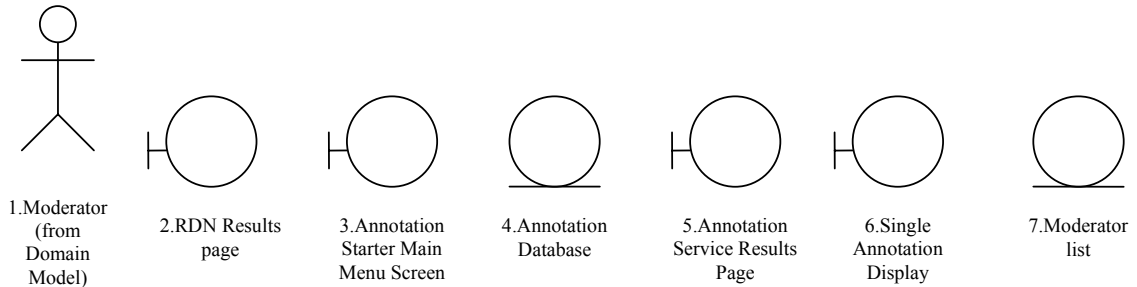
#### Basic Course

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator decides to reject annotation without notifying the originator of the annotation; he/she clicks the Auto-reject button.
- 9 System re-searches the Annotations Database using the id submitted by the Moderator.
- 10 System identifies the entry on the database and deletes it from the table of annotations.
- 11 The system updates the display on the Annotation Service Results Page to which it returns.
- 12 The system displays updated list of annotations on the Annotation Service Results Page to the Moderator.
- 13 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 14 System returns to the Annotation Service Main Menu screen.
- 15 Moderator selects link to return to the original RDN results screen.
- 16 System returns to the original RDN results screen.

#### Alternate Course

- 1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.
  - 4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.
    - 5.1 The system's search discovers no annotations for that resource.
    - 5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.
    - 5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.
    - 5.4 System returns to Annotation Service Starter Main Menu Screen.
  - 8.1 Moderator decides to take no further action and clicks on Cancel.
  - 8.2 System returns Moderator to Annotation Service Results Page.
- 9.1 System fails to connect to Annotations Database; system fails to display and issues standard error.

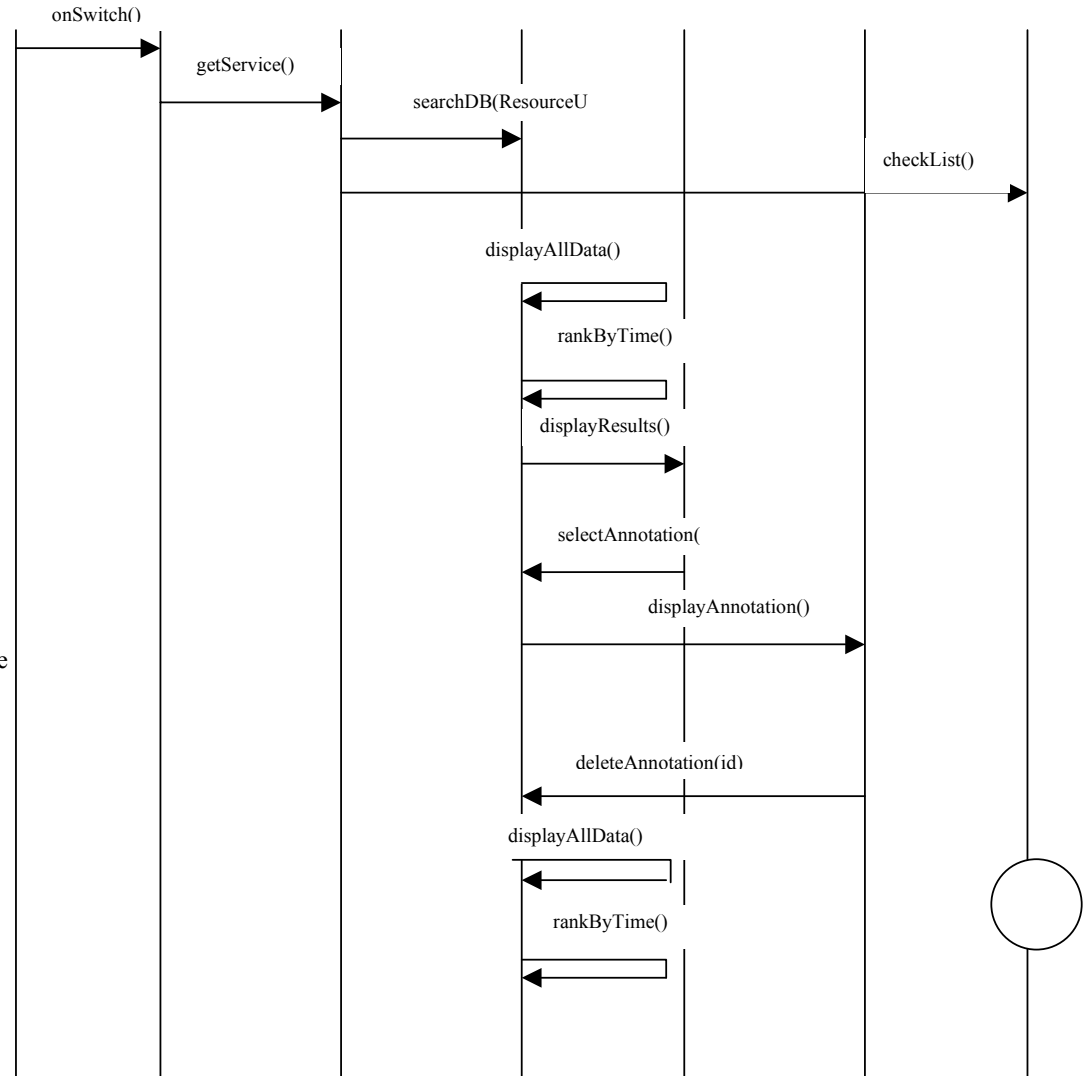




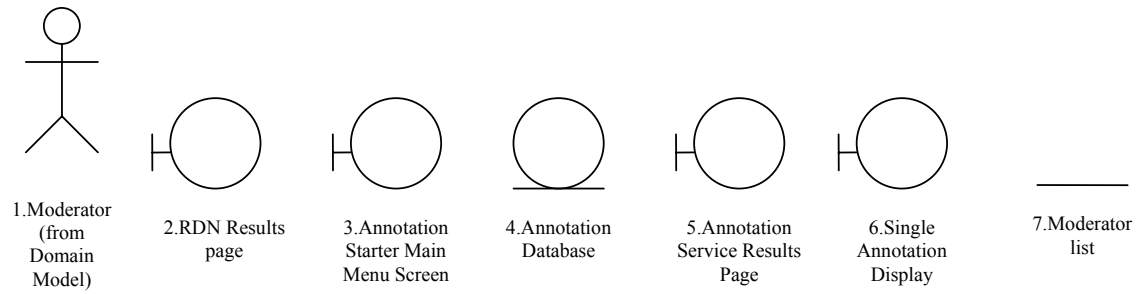
**Sequence Diagram: Auto-reject Annotation (Moderator)**

**Basic Course**

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator decides to reject annotation without notifying the originator of the annotation; he/she clicks the Auto-reject button.
- 9 System re-searches the Annotations Database using the id submitted by the Moderator.
- 10 System identifies the entry on the database and deletes it from the table of annotations.
- 11 The system updates the display on the Annotation Service Results Page to which it returns.



**Sequence Diagram:  
Auto-reject Annotation (Moderator)  
Basic Course (Cont.)**



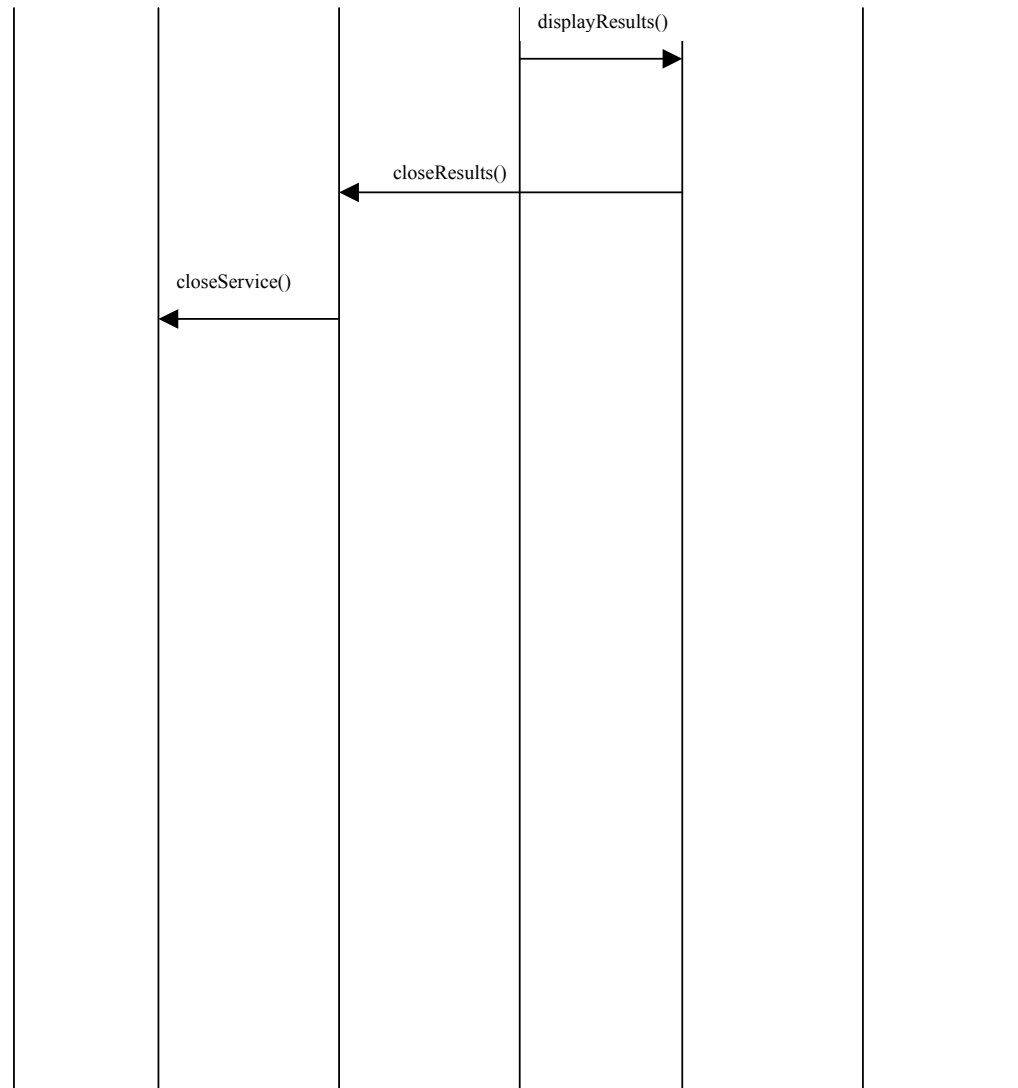
12 The system displays updated list of annotations on the Annotation Service Results Page to the Moderator.

13 Moderator chooses to return to the Annotation Service Main Menu and clicks link.

14 System returns to the Annotation Service Main Menu screen.

15 Moderator selects link to return to the original RDN results screen.

16 System returns to the original RDN results screen.



**Sequence Diagram:  
Auto-reject Annotation (Moderator)  
Alternate Course**

1.1 Moderator selects link to the Annotation Service;  
system fails to display and issues standard error.

4.1 System fails to connect to Annotations Database;  
system fails to display and issues standard error.

5.1 The system's search discovers no annotations for  
that resource.

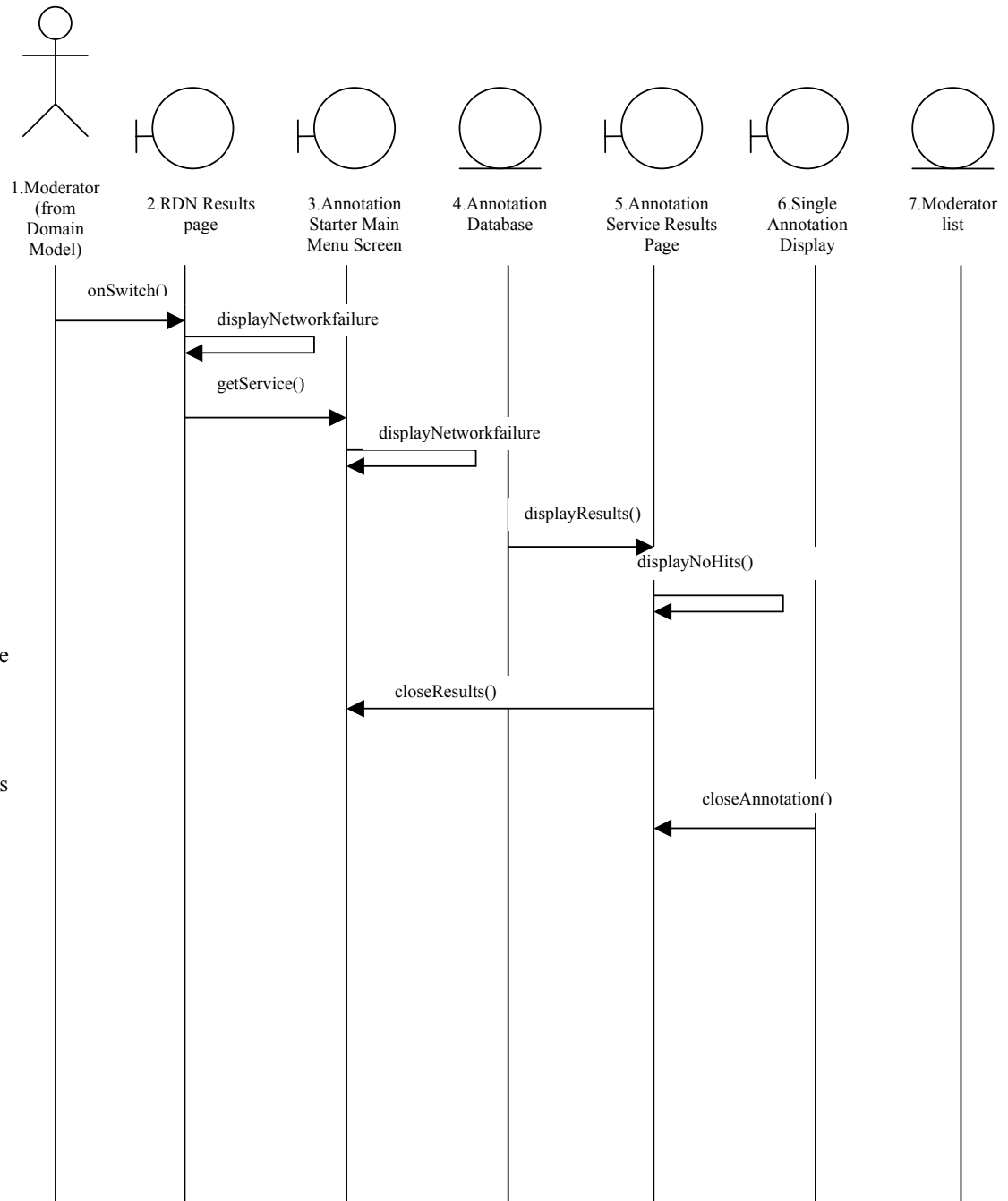
5.2 The system opens the Annotation Service Results  
Page displaying a no hits message and link back to the  
Main Menu.

5.3 Moderator selects link to return to Annotation Service  
Starter Main Menu Screen.

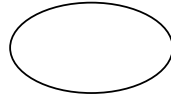
5.4 System returns to Annotation Service Starter Main  
Menu Screen.

8.1 Moderator decides to take no further action and clicks  
on Cancel.

8.2 System returns Moderator to Annotation Service  
Results Page.



## Individual Use Case : Reject Annotation (Moderator)



### Reject Annotation

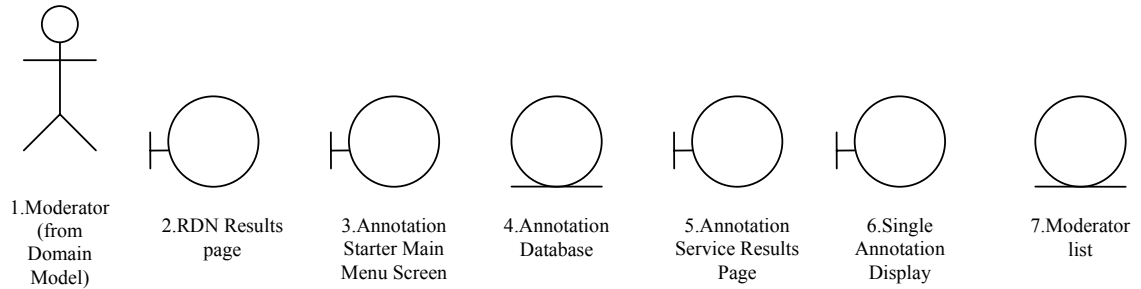
#### Basic Course

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire read-only content of the author's comment.
- 8 Moderator decides to reject annotation whilst notifying the originator of the reason; he/she clicks the Reject button.
- 9 System displays a Reject annotation screen containing id, author, date, star-rating and the entire read-only content of the author's comment together with a text field for the Moderator's reason for rejection.
- 10 Moderator enters text into the text field stating reason and signing off, e.g. System Moderator.
- 11 Moderator presses Submit button.
- 12 System re-searches the Annotations Database using the id submitted by the Moderator.
- 13 System identifies the entry on the database and deletes it from the table of annotations.
- 14 The system composes email from data in Reject annotation screen form by using author email address, star rating, textual comment and text of the Moderator's reason for rejection.
- 15 System sends email to email server for transmission to annotation author.
- 16 The system provides a success message in a screen displaying links to both RDN Results page and Annotation Service Results Page.
- 17 Moderator selects link to Annotation Service Results Page.
- 18 The system updates the display on the Annotation Service Results Page to which it returns.
- 19 The system displays updated list of annotations on the Annotation Service Results Page to the Moderator.
- 20 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 21 System returns to the Annotation Service Main Menu screen.
- 22 Moderator selects link to return to the original RDN results screen.
- 23 System returns to the original RDN results screen.

#### Alternate Course

- 1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.
- 4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.
- 5.1 The system's search discovers no annotations for that resource.
- 5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.
- 5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.
- 5.4 System returns to Annotation Service Starter Main Menu Screen.
- 8.1 Moderator decides to take no further action and clicks on Cancel.
- 8.2 System returns Moderator to Annotation Service Results Page.
- 12.1 System fails to connect to Annotations Database; system fails to display and issues standard error.
- 15.1 System fails to connect with email server; issues standard error and writes to logfile.

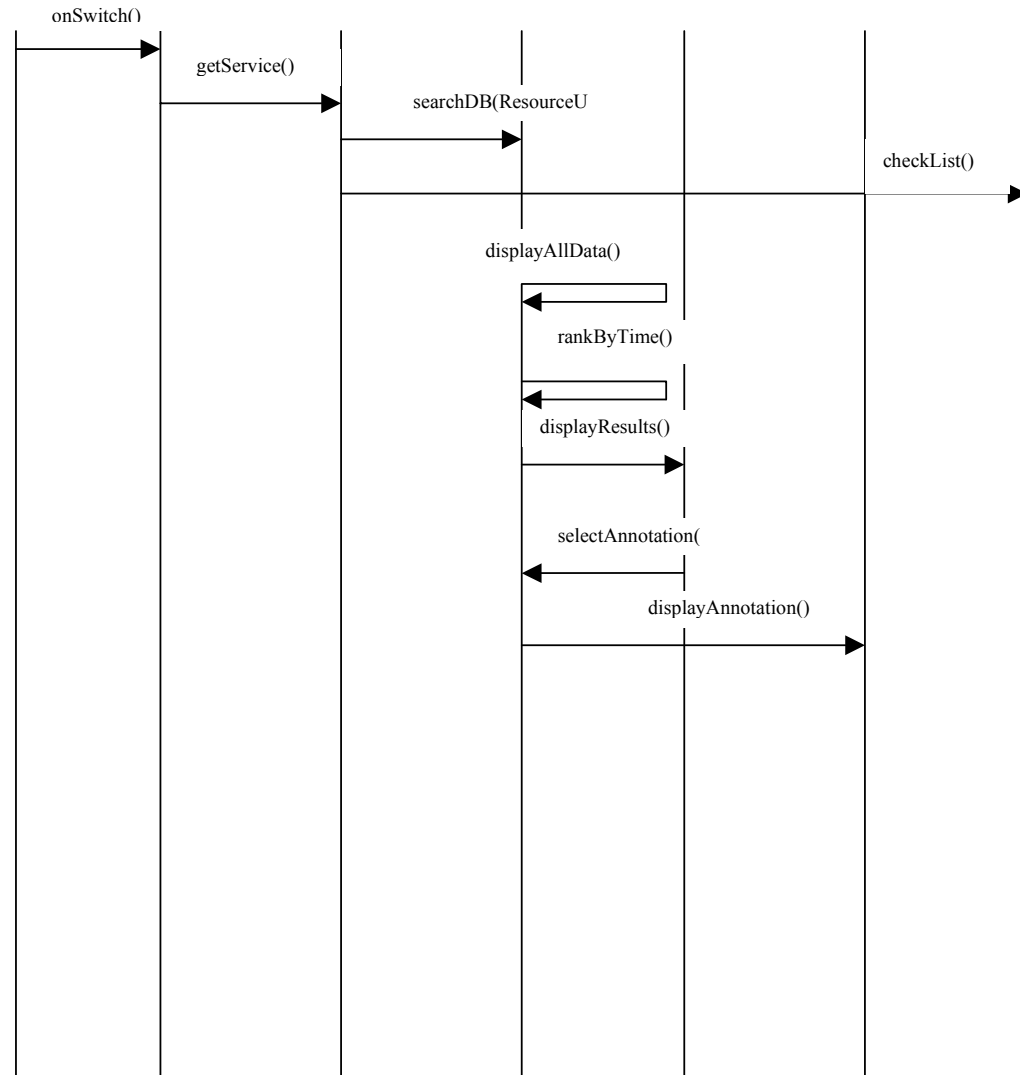


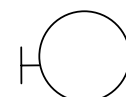
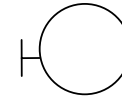
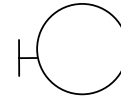
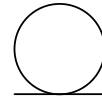
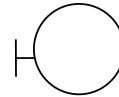
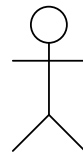


**Sequence Diagram: Reject Annotation (Moderator)**

**Basic Course**

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment





### Sequence Diagram: Reject Annotation(Moderator)

#### Basic Course (Cont.)

1. Moderator  
(from  
Domain  
Model)

2. RDN Results  
page

3. Annotation  
Starter Main  
Menu Screen

4. Annotation  
Database

5. Annotation  
Service Results  
Page

6. Single  
Annotation  
Display

8. Rejection  
Form

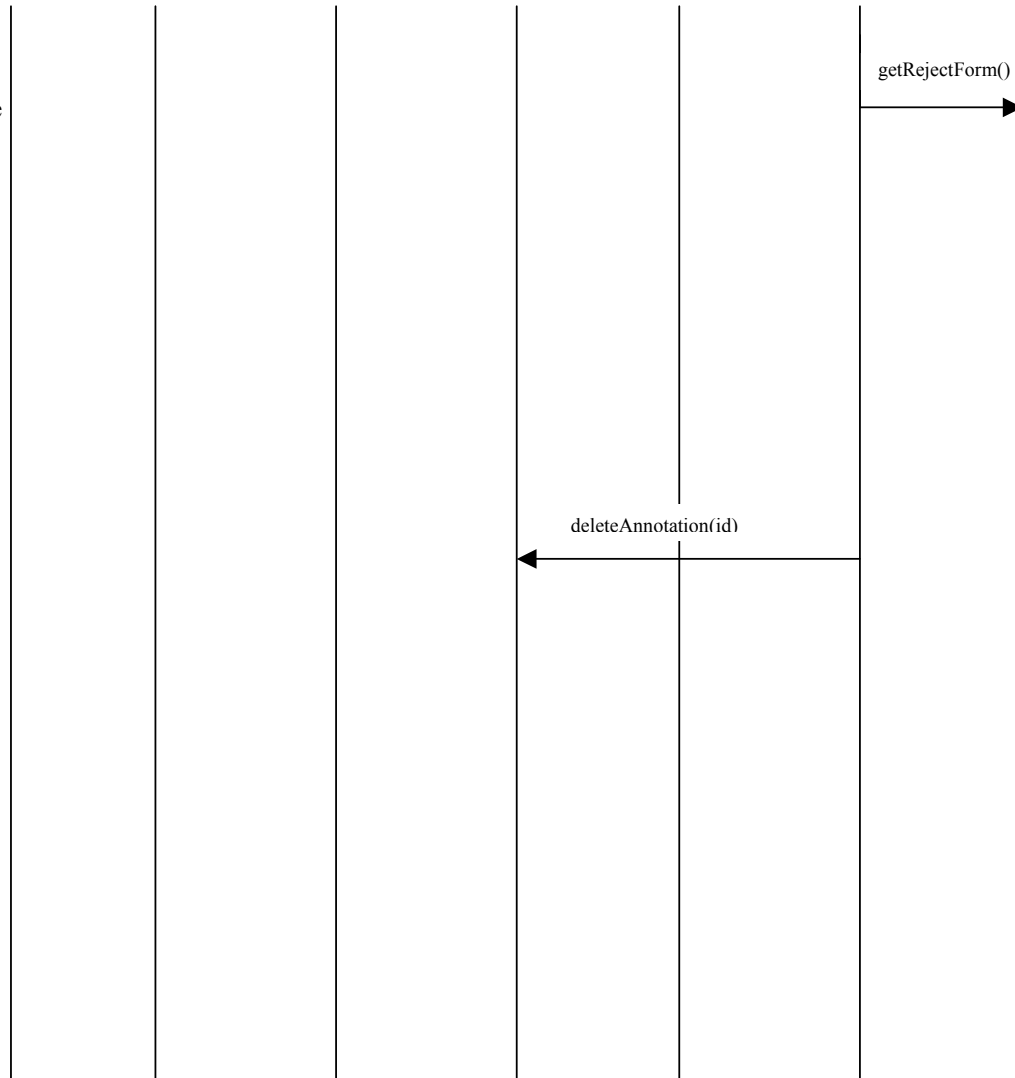
8 Moderator decides to reject annotation whilst notifying the originator of the reason; he/she clicks the Reject button.  
9 System displays a Reject annotation screen containing id, author, date, star-rating and the entire read-only content of the author's comment with a text field for reason for rejection.

10 Moderator enters text into the text field stating reason and signing off, e.g. System Moderator.  
11 Moderator presses Submit button.

12 System re-searches the Annotations Database using the id submitted by the Moderator.  
13 System identifies the entry on the database and deletes it from the table of annotations.

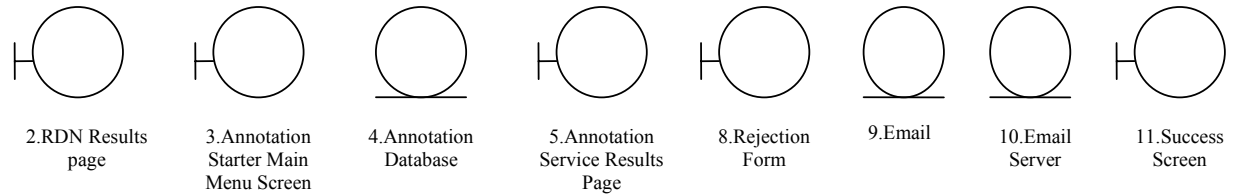
getRejectForm()

deleteAnnotation(id)

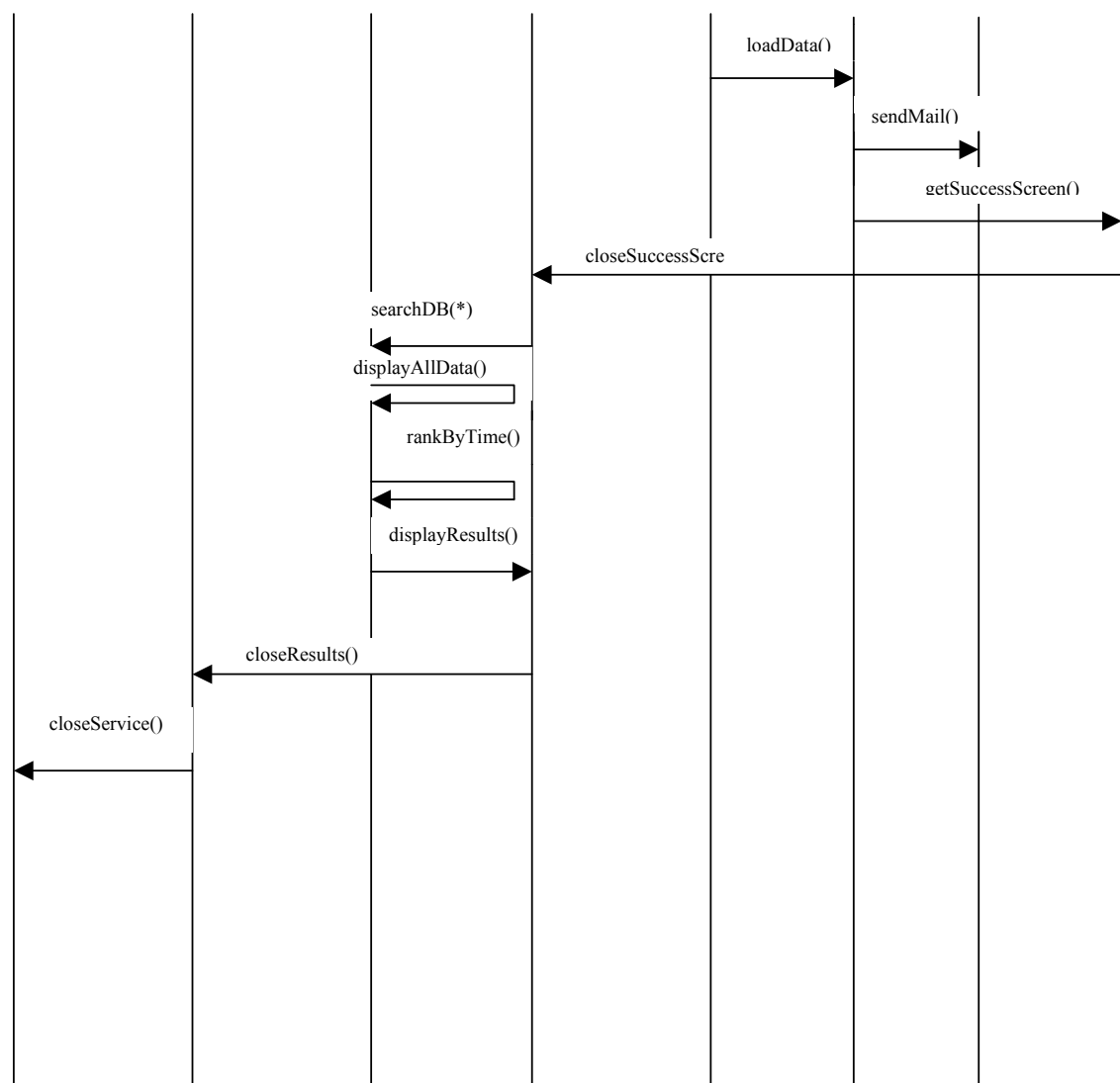


**Sequence Diagram: Reject Annotation (Moderator)**

**Basic Course (Cont.)**



- 14 The system composes email from data in Reject annotation screen form by using author email address, star-rating textual comment and text of the Moderator's reason for rejection.
- 15 System sends email to email server for transmission to annotation author.
- 16 The system provides a success message in a screen displaying links to both RDN Results page and Annotation Service Results Page.
- 17 Moderator selects link to Annotation Service Results Page.
- 18 The system updates the display on the Annotation Service Results Page to which it returns.
- 19 The system displays updated list of annotations on the Annotation Service Results Page to the Moderator.
- 20 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 21 System returns to the Annotation Service Main Menu screen.
- 22 Moderator selects link to return to the original RDN results screen.
- 23 System returns to the original RDN results screen.



**Sequence Diagram: Reject Annotation(Moderator)**

**Alternate Course**

1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.

4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.

5.1 The system's search discovers no annotations for that resource.

5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.

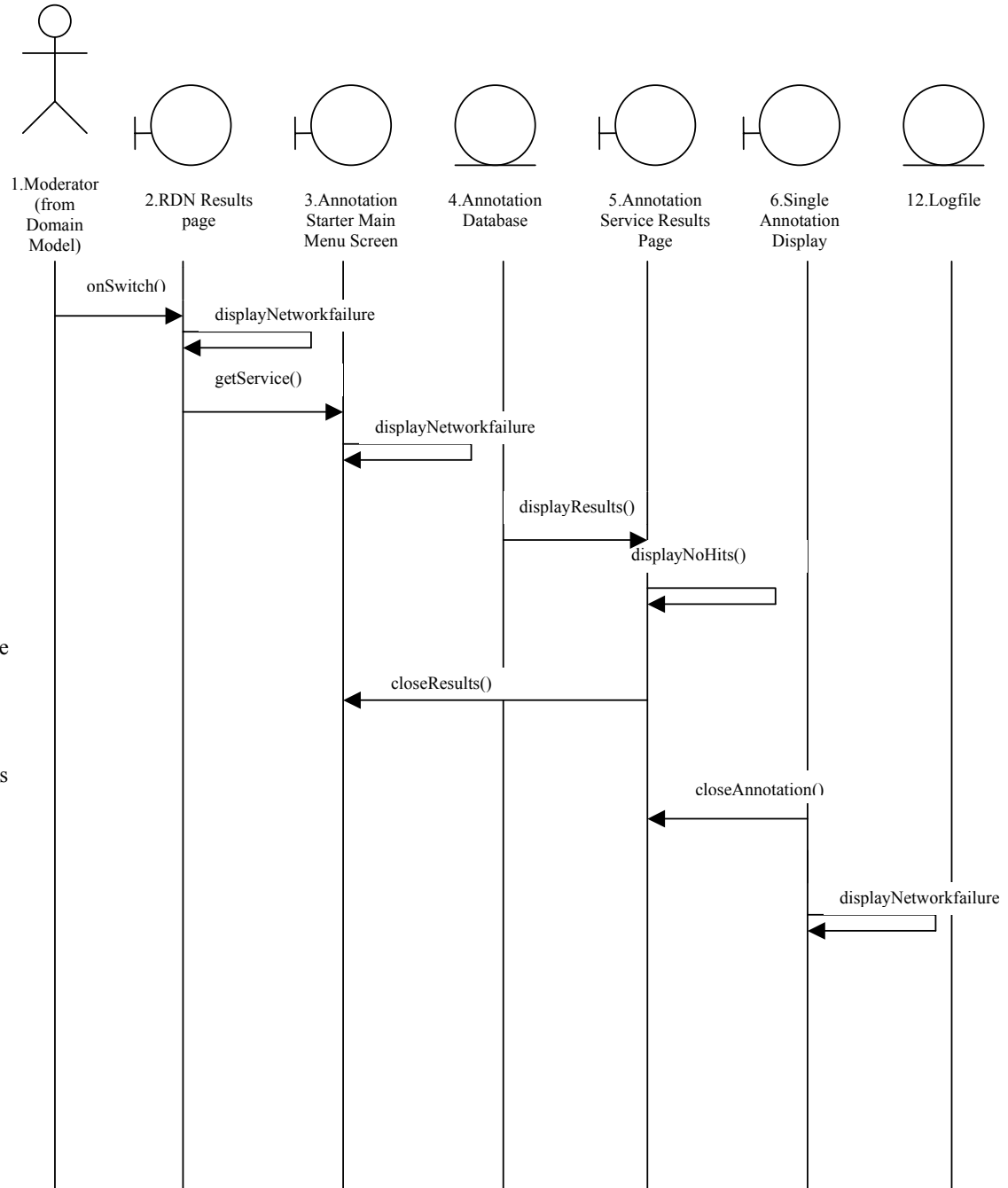
5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.

5.4 System returns to Annotation Service Starter Main Menu Screen.

8.1 Moderator decides to take no further action and clicks on Cancel.

8.2 System returns Moderator to Annotation Service Results Page.

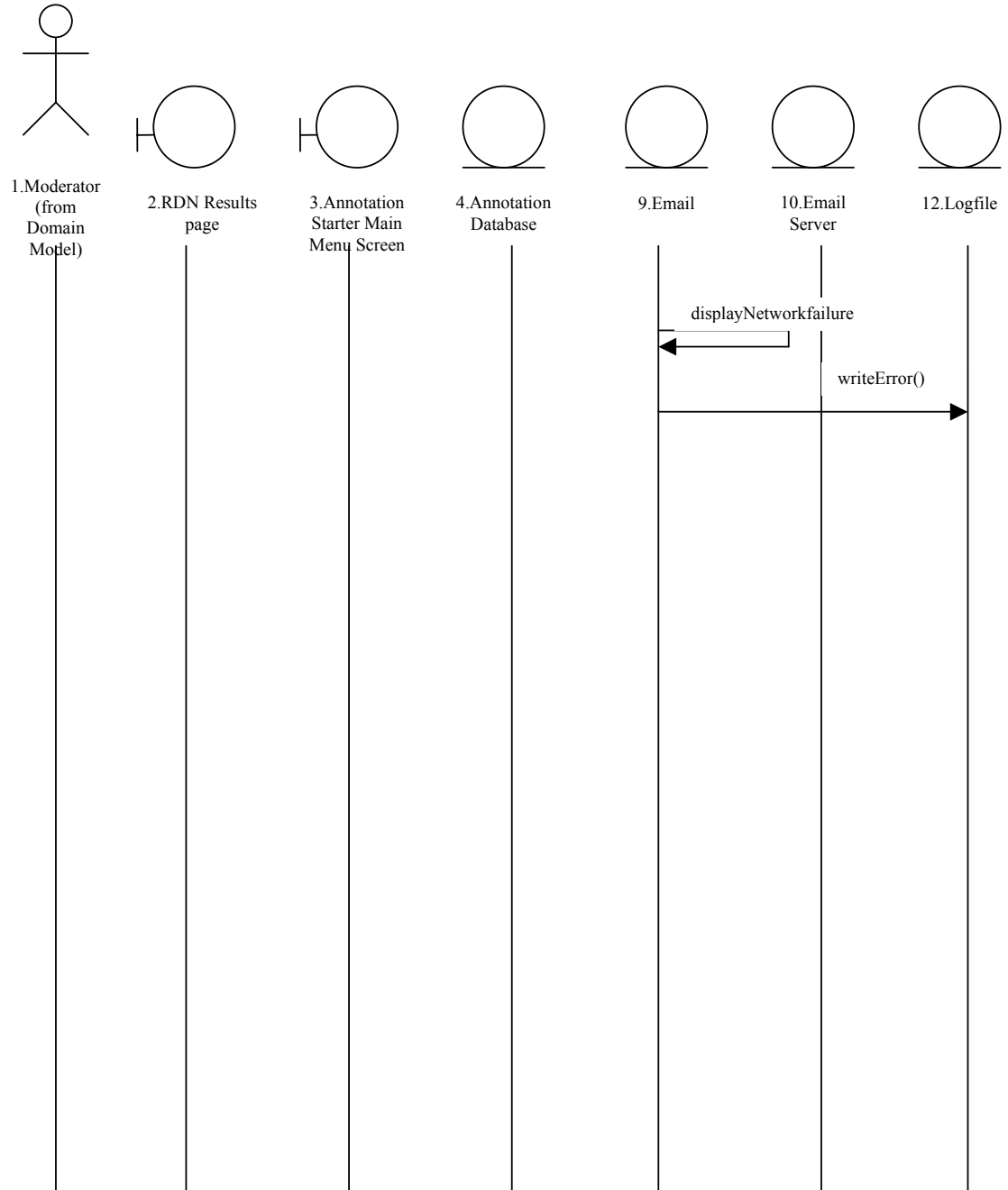
12.1 System fails to connect to Annotations Database; system fails to display and issues standard error.



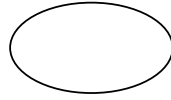
**Sequence Diagram: Reject Annotation(Moderator)**

**Alternate Course (Cont.)**

15.1 System fails to connect with email server;  
issues standard error and writes to logfile.



## Individual Use Case : Edit Annotation (Moderator)



### Edit Annotation

#### Basic Course

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment
- 8 Moderator decides to edit annotation in some way; he/she clicks Edit button.
- 9 System opens Editing Form screen displaying a read-only star rating and overwritable comment text.
- 10 Moderator edits text often by adding corrected word or comment; also writes a reason for the editing and appends signature, e.g. System Moderator, etc.
- 11 Moderator selects Submit button.
- 12 Where the annotation is not flagged, system adds flag to relevant database field and updates entry.\*
- 13 The system composes email from data in Editing Form by using author email, star rating and content of the Moderator's text editing.
- 14 System sends email to email server for transmission to annotation author.
- 15 The system provides a success message in a screen displaying links to both RDN Results page and Annotation Service Results Page.
- 16 Moderator selects link to Annotation Service Results Page.
- 17 The system updates the display on the Annotation Service Results Page to which it returns.
- 18 The system displays updated list of annotations on the Annotation Service Results Page to the Moderator.
- 19 Moderator chooses to return to the Annotation Service Main Menu and clicks link.
- 20 System returns to the Annotation Service Main Menu screen.
- 21 Moderator selects link to return to the original RDN results screen.
- 22 System returns to the original RDN results screen.

#### Alternate Course

- 1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.
- 4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.
- 5.1 The system's search discovers no annotations for that resource.
- 5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.
- 5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.
- 5.4 System returns to Annotation Service Starter Main Menu Screen.
- 8.1 Moderator decides to take no further action and clicks on Cancel.
- 8.2 System returns Moderator to Annotation Service Results Page.
- 12.1 Where the annotation is flagged, the system does not have to update the database entry.

## **Individual Use Case : Edit Annotation (Moderator)**

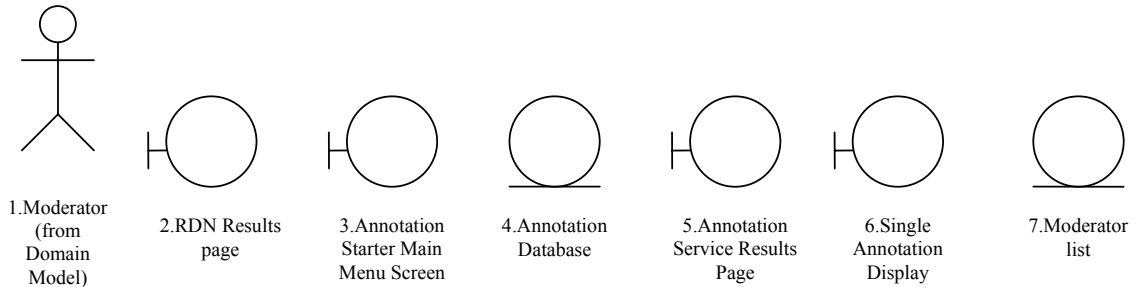
### **Alternate Course (Cont.)**

12.2 System fails to connect to Annotations Database; system fails to display and issues standard error.

14.1 System fails to connect to email server; issues standard error and writes to logfile.

\* as the annotation is now deemed "pending author's update", the flag will render it unviewable to users. If and when the author submits the amended annotation, it is processed as if new, and may well pass the Moderation process without obstacle and appear directly on the annotation server for viewing. At such a point the Moderator can just auto-reject the original attempt.

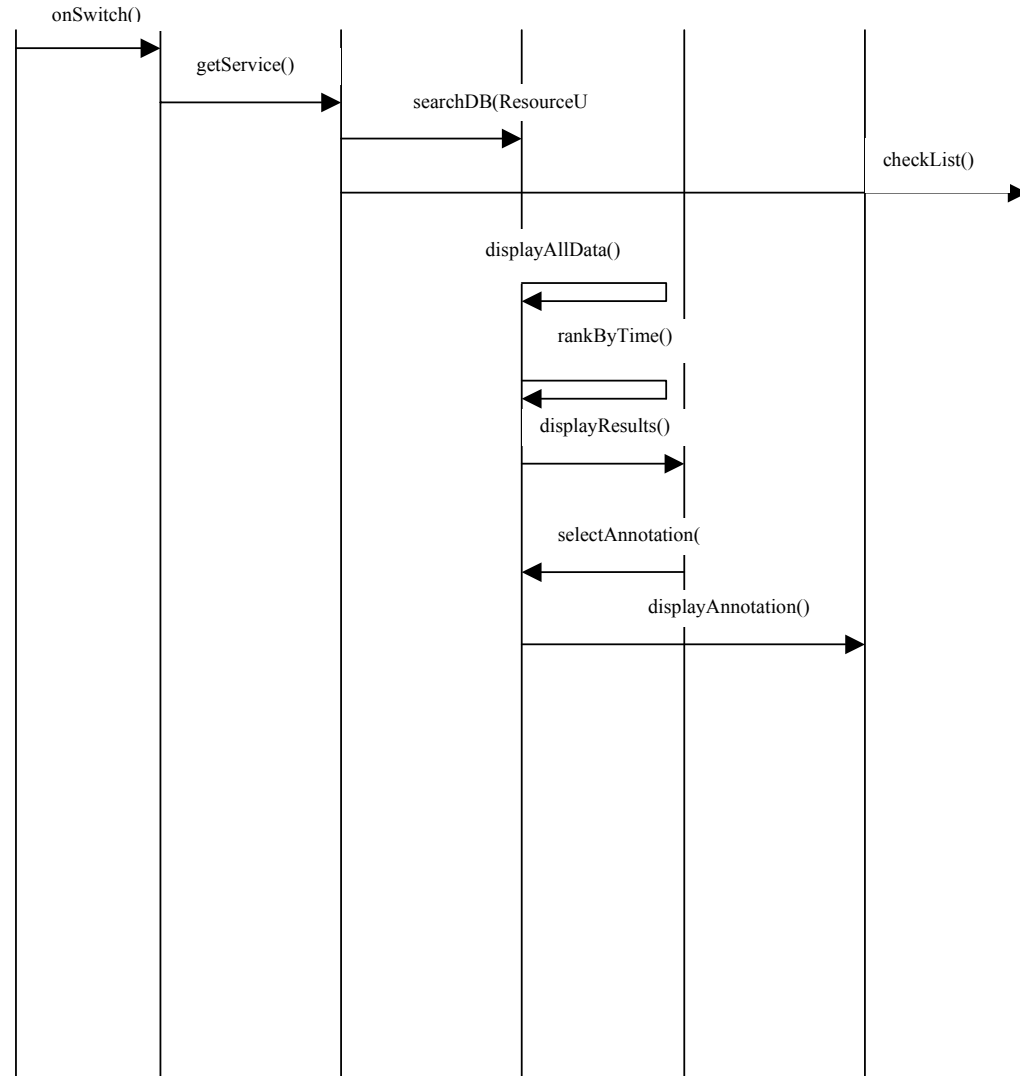


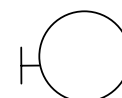
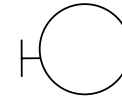
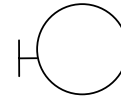
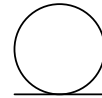
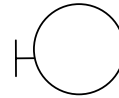
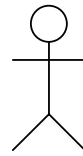


**Sequence Diagram: Edit Annotation (Moderator)**

**Basic Course**

- 1 Moderator selects link in RDN results page to the Annotation Service for his/her resource.
- 2 The system opens the Annotation Service Starter Main Menu Screen.
- 3 Moderator selects link to view annotations made on the resource.
- 4 System recognises the id of the Moderator ; it searches the Annotations Database for all annotations on the chosen resource including items flagged by the Run Moderation use case process.
- 5 The system opens the Annotation Service Results Page displaying first any flagged annotations in chronological order followed by any others also in chronological order. The page will list each annotation by id, author, date, star-rating and the first words of the comment. Flagged items will display the priority rating.
- 6 Moderator selects the id of the annotation he/she wishes to view.
- 7 System will open a single annotation result screen; this will display id, author, date, star-rating and the entire content of the comment





**Sequence Diagram: Edit Annotation(Moderator)**

1.Moderator (from Domain Model)

2.RDN Results page

3.Annotation Starter Main Menu Screen

4.Annotation Database

5.Annotation Service Results Page

6.Single Annotation Display

8.Editing Form

**Basic Course (Cont.)**

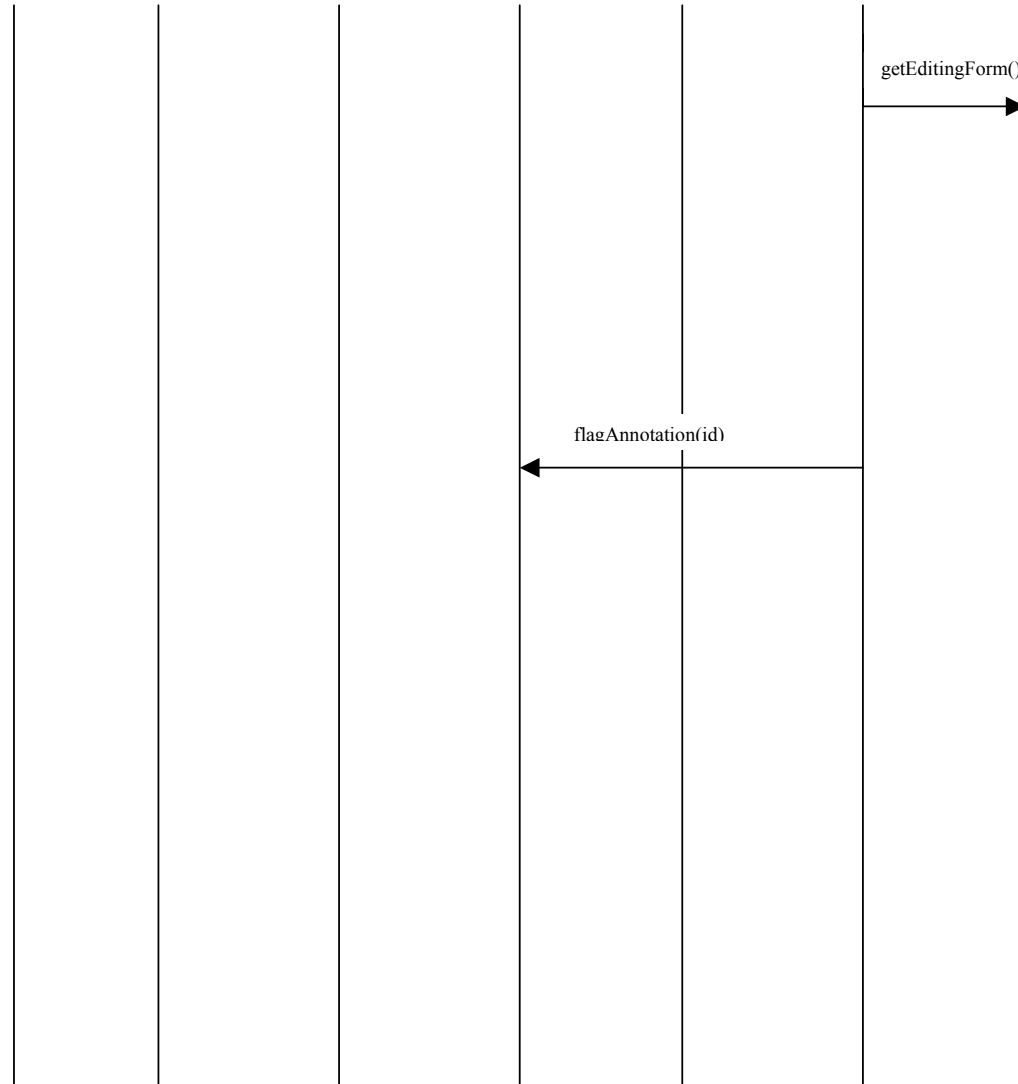
8 Moderator decides to edit annotation in some way; he/she clicks Edit button.

9 System opens Editing Form screen displaying a read-only star rating and overwritable comment text.

10 Moderator edits text often by adding corrected word or comment; also writes a reason for the editing and appends signature, e.g. System Moderator, etc.

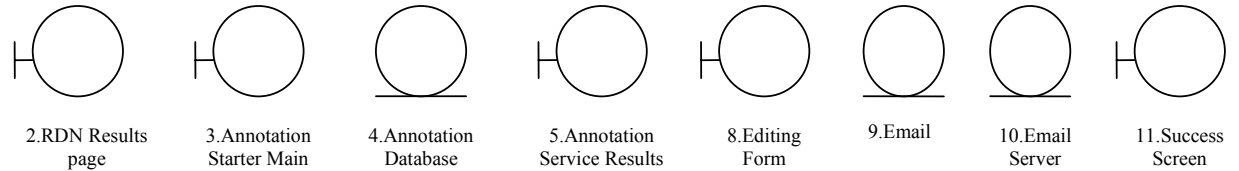
11 Moderator presses Submit button.

12 Where the annotation is not flagged, system adds flag to relevant database field and updates entry.



**Sequence Diagram: Edit Annotation (Moderator)**

**Basic Course (Cont.)**



13 The system composes email from data in Editing Form by using author email, star rating and content of the Moderator's text editing.

14 System sends email to email server for transmission to annotation author.

15 The system provides a success message in a screen displaying links to both RDN Results page and Annotation Service Results Page.

16 Moderator selects link to Annotation Service Results Page.

17 The system updates the display on the Annotation Service Results Page to which it returns.

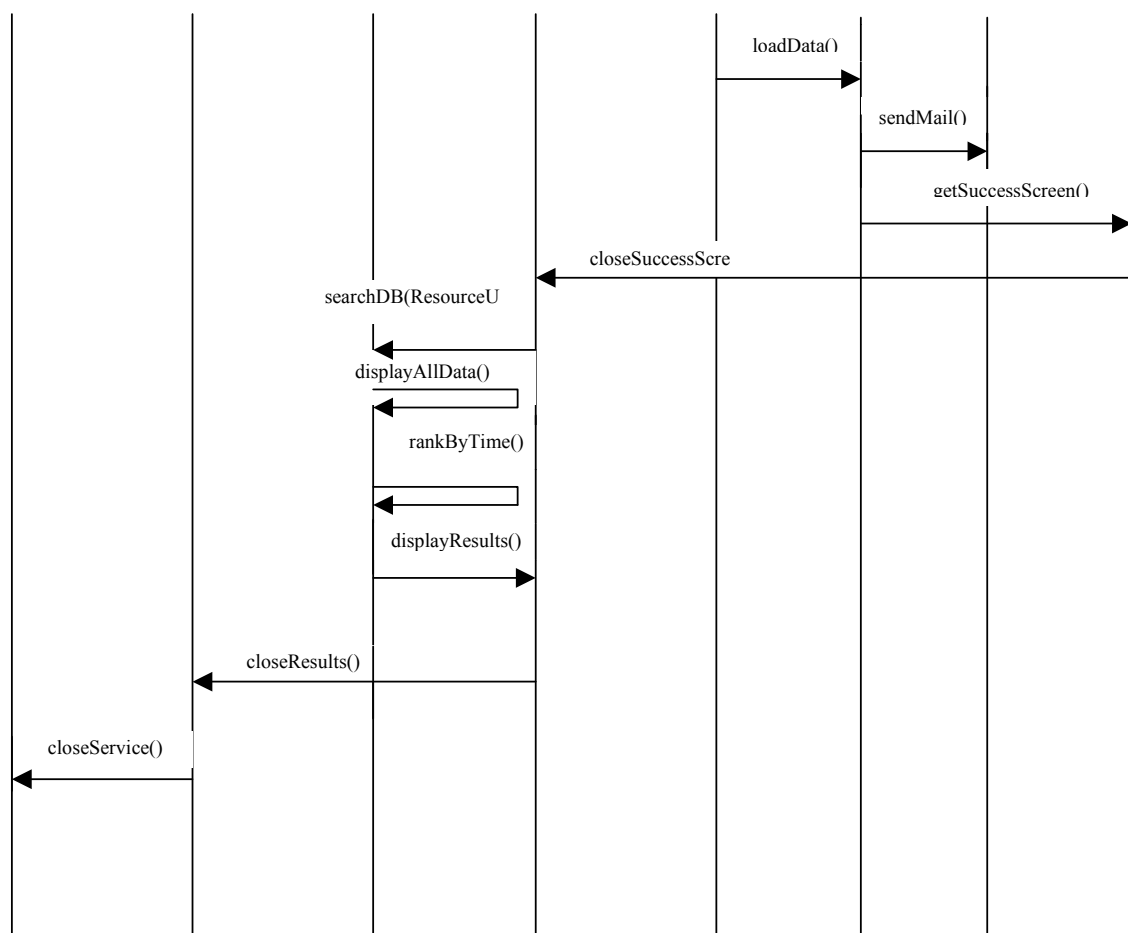
18 The system displays updated list of annotations on the Annotation Service Results Page to the Moderator.

19 Moderator chooses to return to the Annotation Service Main Menu and clicks link.

20 System returns to the Annotation Service Main Menu screen.

21 Moderator selects link to return to the original RDN results screen.

22 System returns to the original RDN results screen.



**Sequence Diagram: Edit Annotation(Moderator)**

**Alternate Course**

1.1 Moderator selects link to the Annotation Service; system fails to display and issues standard error.

4.1 System fails to connect to Annotations Database; system fails to display and issues standard error.

5.1 The system's search discovers no annotations for that resource.

5.2 The system opens the Annotation Service Results Page displaying a no hits message and link back to the Main Menu.

5.3 Moderator selects link to return to Annotation Service Starter Main Menu Screen.

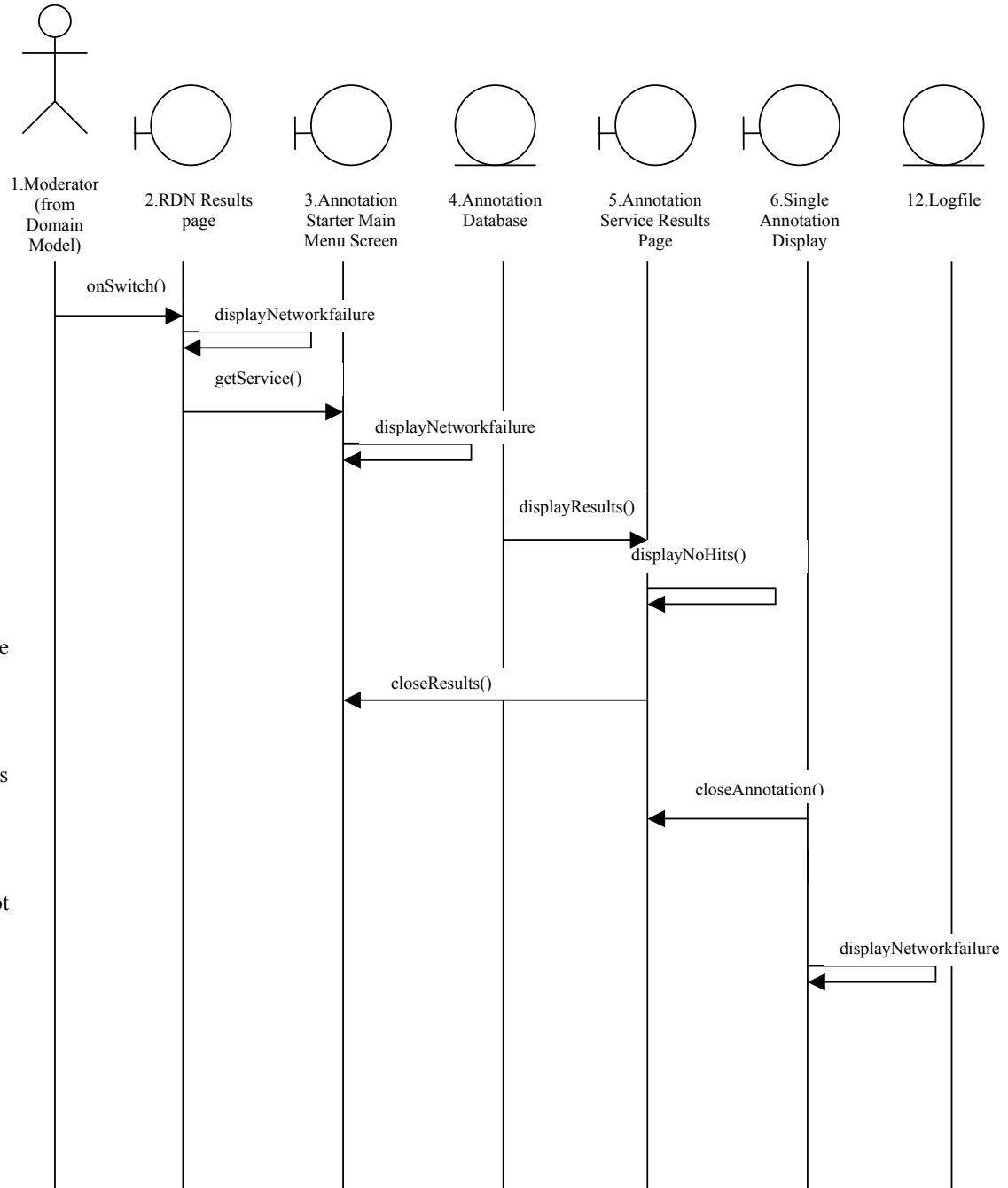
5.4 System returns to Annotation Service Starter Main Menu Screen.

8.1 Moderator decides to take no further action and clicks on Cancel.

8.2 System returns Moderator to Annotation Service Results Page.

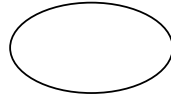
12.1 Where the annotation is flagged, the system does not have to update the database entry.

12.2 System fails to connect to Annotations Database; system fails to display and issues standard error.





## Individual Use Case : Set Moderation Values



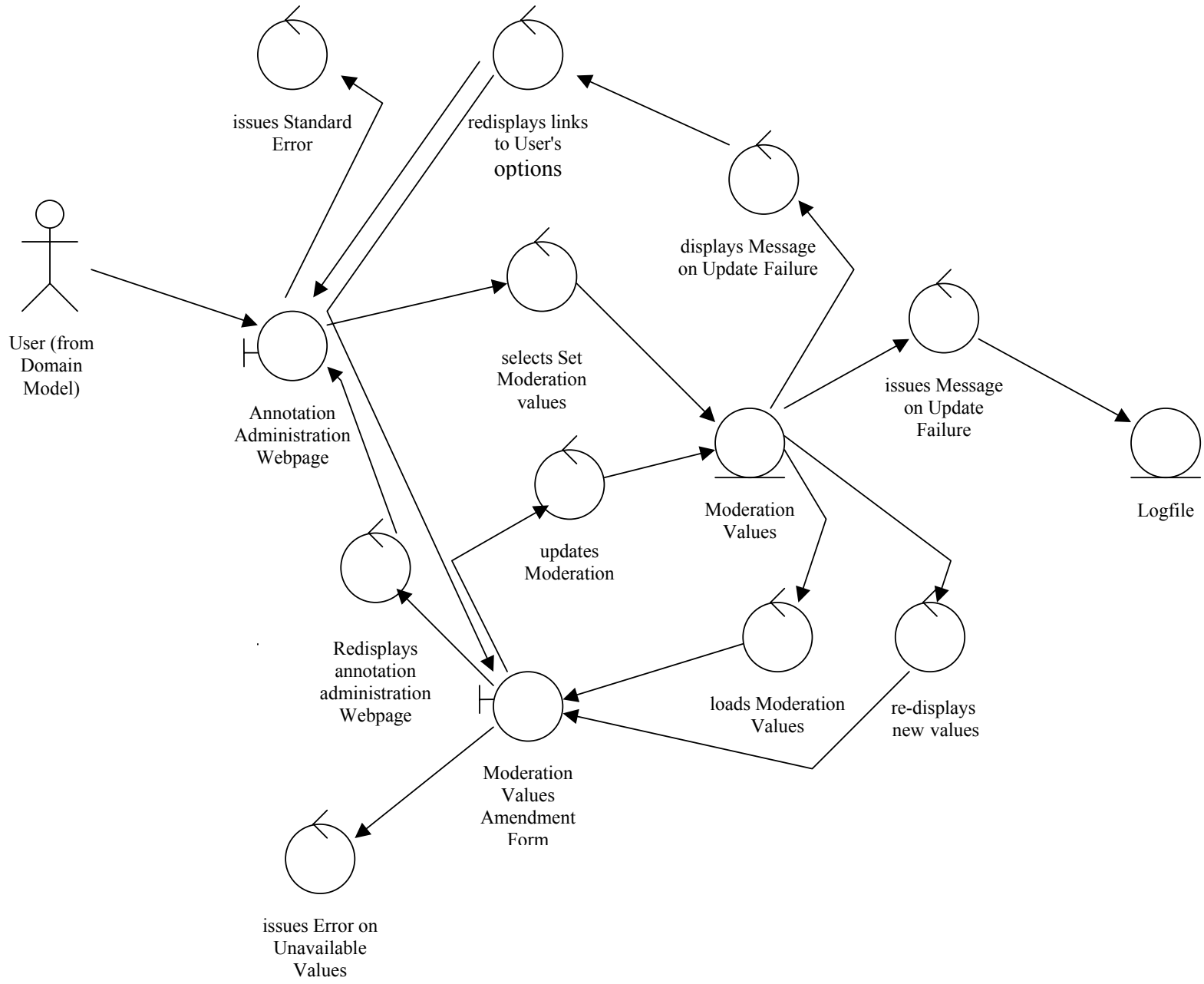
### Set Moderation Values

#### Basic Course

- 1 Moderator accesses the Annotation Administration webpage.
- 2 The system displays the Annotation Administration webpage showing a link to Set Moderation Values.
- 3 Moderator selects link to Set Moderation Values.
- 4 System displays Moderation Values Amendment Form showing current values.
- 5 Moderator sets Moderation System to "on"; (on submission system alters Moderation System value to "on").
- 6 Moderator sets Star Rating higher threshold value to one of 3,4,or 5; (on submission system alters Start Rating High value to value submitted).
- 7 Moderator sets Star Rating lower threshold value to one of 1,2 or 3; (on submission system alters Start Rating Low value to value submitted).
- 8 Moderator disables/enables email domain filter system by selecting "off"/"on" ; (on submission system disables/enables email domain filter system).
- 9 Moderator adds/deletes chosen email domain to/from list of favoured domains; (on submission, system updates list of favoured domains).
- 10 Moderator disables/enables email prefix filter system by selecting "off"/"on" ; (on submission system disables/enables email prefix filter system).
- 11 Moderator adds/deletes chosen email prefix to/from list of favoured prefixes; (on submission, system updates list of favoured prefixes).
- 12 Moderator amends default initial priority value; (on submission, system updates default initial priority value).
- 13 Moderator amends default Threat Threshold value; (on submission, system updates default Threat Threshold value).
- 14 Moderator disables/enables Watchlist by selecting "off"/"on" ; on submission system disables/enables Watchlist.
- 15 Moderator adds/deletes word to/from Watchlist and appends/deletes Word value; (on submission system updates Watchlist. Any word without an appended value is assigned the default value).
- 16 Moderator disables/enables Contributorlist by selecting "off"/"on" ; (on submission system disables/enables Contributorlist).
- 17 Moderator adds/deletes word to/from Contributorlist;(on submission system updates the list).
- 18 Moderator selects Submit on Moderation Values Amendment Form.
- 19 System reads all values on submitted form and updates Moderation Values.
- 20 System redisplay Moderation Values Amendment Form with new values to permit checking/editing.
- 21 Moderator edits Moderation Values Amendment Form and re-submits.
- 22 System responds as for 18.
- 23 Moderator closes redisplayed Moderation Values Amendment Form.
- 24 System redisplay original Annotation Administration page.
- 25 Moderator selects closure.
- 26 System redisplay Moderator's original page. [discuss with PDC]

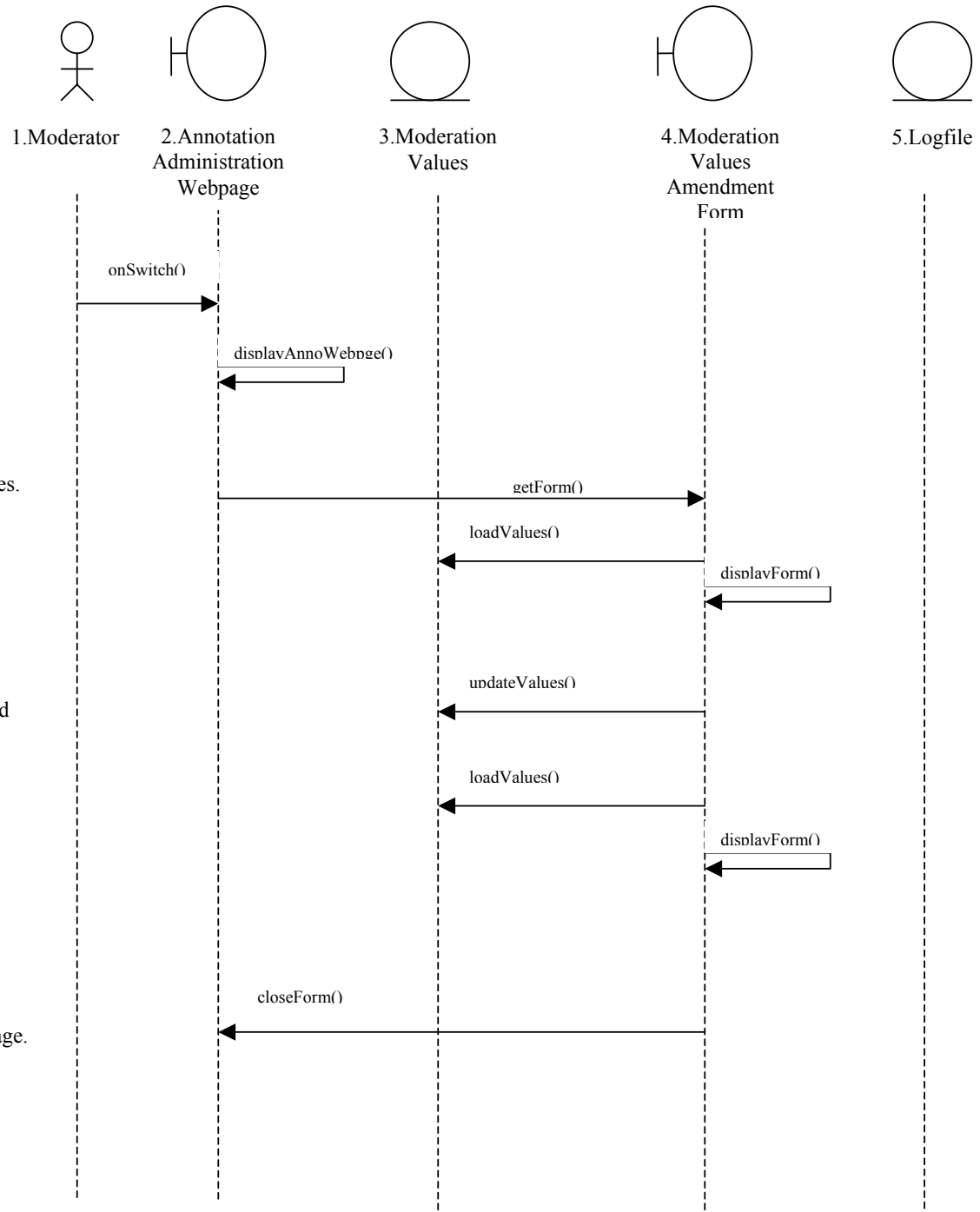
#### Alternate Course

- 2.1 Moderator selects Annotation Administration webpage;system fails to display and issues standard error.
- 4.1 Moderator selects link to Set Moderation Values; system fails to display Moderation Values Amendment Form and issues error that values are unavailable.
- 18.1 Moderator submits Moderation Values Amendment Form; system fails to update values ; system logs failure and issues an error message (with links to the Moderation Values Amendment Form again or to the Annotation Administration webpage).



Set Moderation Values: Robustness Diagram (Moderator)

**Set Moderation Values Sequence Diagram:**



**Basic Course**

1 Moderator accesses the Annotation Administration webpage.  
 2 The system displays the Annotation Administration webpage showing a link to Set Moderation Values.

3 Moderator selects link to Set Moderation Values.  
 4 System displays Moderation Values Amendment Form showing current values.

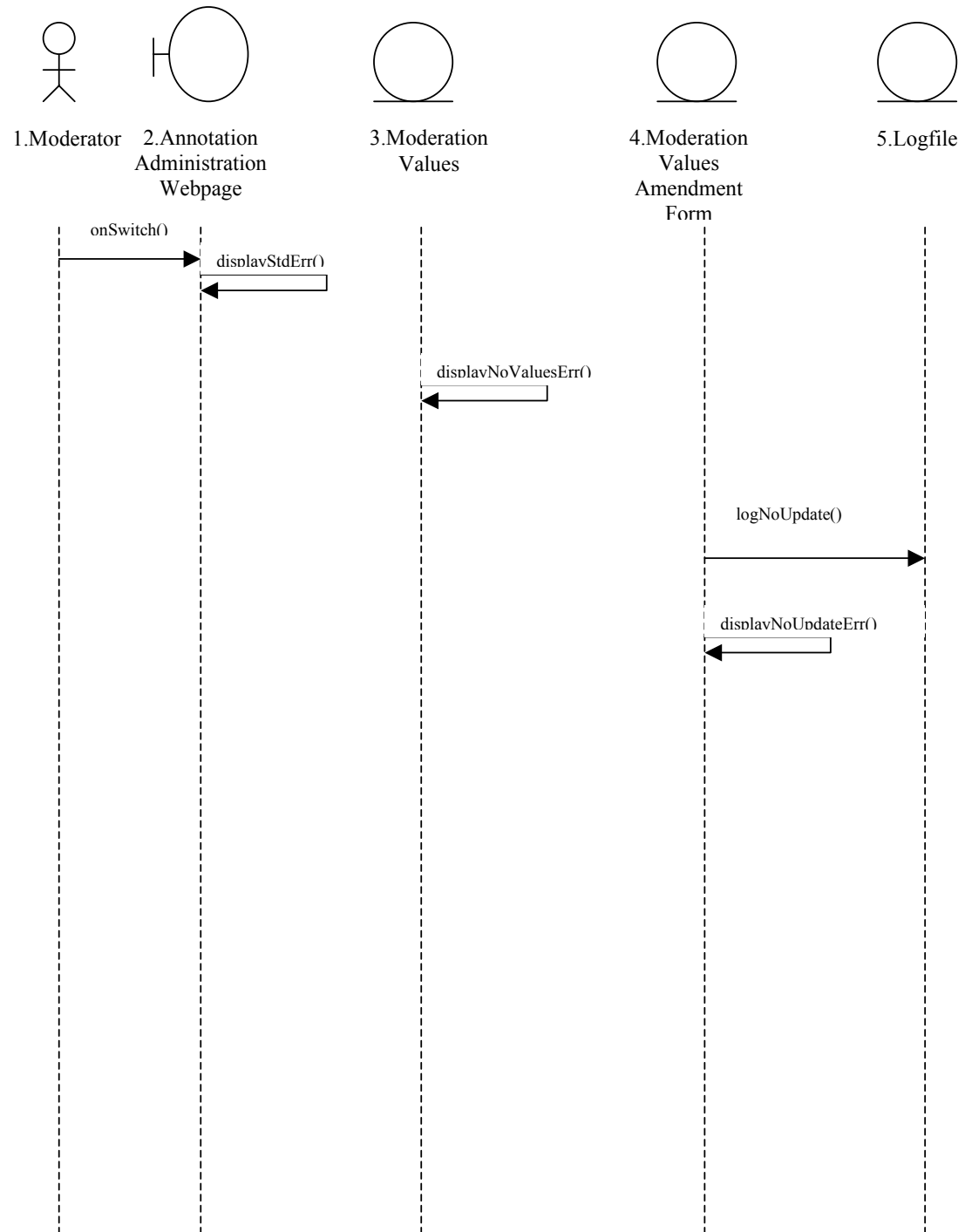
(5- 17 involve Moderator updating form)

18 Moderator selects Submit on Moderation Values Amendment Form.  
 19 System reads all values on submitted form and updates Moderation Values.  
 20 System redisplay Moderation Values Amendment Form with new values to permit checking/editing.

21 Moderator edits Moderation Values Amendment Form and re-submits.  
 22 System responds as for 18.

23 Moderator closes redisplayed Moderation Values Amendment Form.  
 24 System redisplay original Administration page.

## Set Moderation Values Sequence Diagram



### Alternate Course

2.1 Moderator selects Annotation Administration webpage; system fails to display and issues standard error.

4.1 Moderator selects link to Set Moderation Values; system fails to display Moderation Values Amendment Form and issues error that values are unavailable.

18.1 Moderator submits Moderation Values Amendment Form; system fails to update values ; system logs failure and issues an error message (with links to the Moderation Values Amendment Form again or to the Annotation Administration webpage).

## Moderation Values



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Boolean	processStatus = 'true'
Integer	starRating
Boolean	domainFilterStatus='true'
String [ ]	domainsList
Boolean	prefixFilterStatus = 'true'
String [ ]	prefixList
Integer	defaultInitialPriority = 0
Integer	defaultThreatThreshold
Boolean	watchListStatus = 'true'
String [ ]	watchList
Integer [ ]	watchListValues
Boolean	contributorsListStatus = 'true'
String [ ]	contributorsList

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