SSN College of Engineering

Permission and Request Online System

Use Case Diagram and Fully Dressed Use Case

Version 2.0

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Use Case UC1: PROS

Scope: Permission and Request Online System

Level: user goal

Primary Actor: Student

Stakeholders and Interests:

- Student: Wants fast and easy grant of permissions, as current procedure is too tedious. Wants an easy to use User Interface to enter their reason and other information for asking permission. Wants to be able to upload supporting documents. Wants to be able to download granted permission for any verification.

- Faculty: Wants easily visible information of students requesting for permissions. Wants supporting proof of request. Wants to be able to check students' request history and rating. Wants to be able to Accept or Decline requests of one or more than one student. Wants to be able to give rating to the student based on the request. Wants to be able to chat with student incase more information is needed.

- Database: Wants to authenticate and remove redundancy in student and faculty login information. Wants to accurately record all incoming requests along with the supporting documents. Wants to track status of Request. Wants to maintain request history and student rating based on request history. Wants automatic and fast update of request information

- College: Wants to collect details of each student and assess student behavior

Preconditions: The student is identified and authenticated

Success Guarantee (or Postconditions): Requests are saved. Rating is calculated. Database is Updated. Permissions are recorded along with the priority ones. QR Code is generated.

Main Success Scenario (or Basic Flow):

1. Student visits the site to request for permissions

2. Student logs in or register into the system

3. Database identifies the student

4. Students choose a permission out of a list of permissions.

5. System asks for student to enter the reason and upload supporting document

6. Faculty gets notification of request

7. Faculty views the request and supporting information and chats with student for validation

8. Faculty accepts or declines the request and gives rating to the student

9. Student receives the notification of request decision along with the QR code

10. Student logs off the system

Extensions (or Alternate Flows):

1.At any time, system fails:

To support recovery, and ensure all details and events can be recovered from any step of the scenario.

2.Student enter invalid/forgot login credentials mode:

- System provides the option of entering a registered email address for password reset.
- Student or Faculty reset their old password to a new password by answering the security question
- Student or faculty can search for the mail address and send login link to it
    a. If mail Id does not exist:
        - System should tell student or faculty to contact administrator

3.Invalid/Not Existing Username is database:

- System signals error and asks student to register and add necessary credentials

4.The permission entered is not wanted

- Student can delete the permission before it gets approved

5. Supporting document exceeds the size limit:

- System restarts the upload service again

6. Timeout is achieved

- The request is turned into a priority request and the notification is sent to the faculty

Special Requirements:

1. Touch Screen UI on mobile. Text visible from 1 meter
2. Laptop with touch pad or mouse and keyboard on laptop.
3. Language internationalization on the text displayed
4. QR scanner for verification

Technology and Data Variations List:

1. QR verification can be done by using a QR code scanner or or by entering the associated unique ID.
2. The documents uploaded by the students may be in the .docx, .pdf, .jpeg, .png, .tiff, .avi or .mp3 format.
3. The chat between the staff and professor will be encoded in the Unicode character representation standard only.
4. The permission history of each student can be stored in a database. However, it may become necessary to transfer the less recent history of the student to a secondary storage as the number of users on the system increase.

Frequency of Occurrence:
The frequency of use of this software could be nearly continuous.

Miscellaneous/Open Issues:

1. What are the variations in the storage of different data formats?
2. Explore the database recovery issue.
3. What customization is needed for different colleges?
4. Can users log in on more than one device?
5. Explore the document storage techniques.

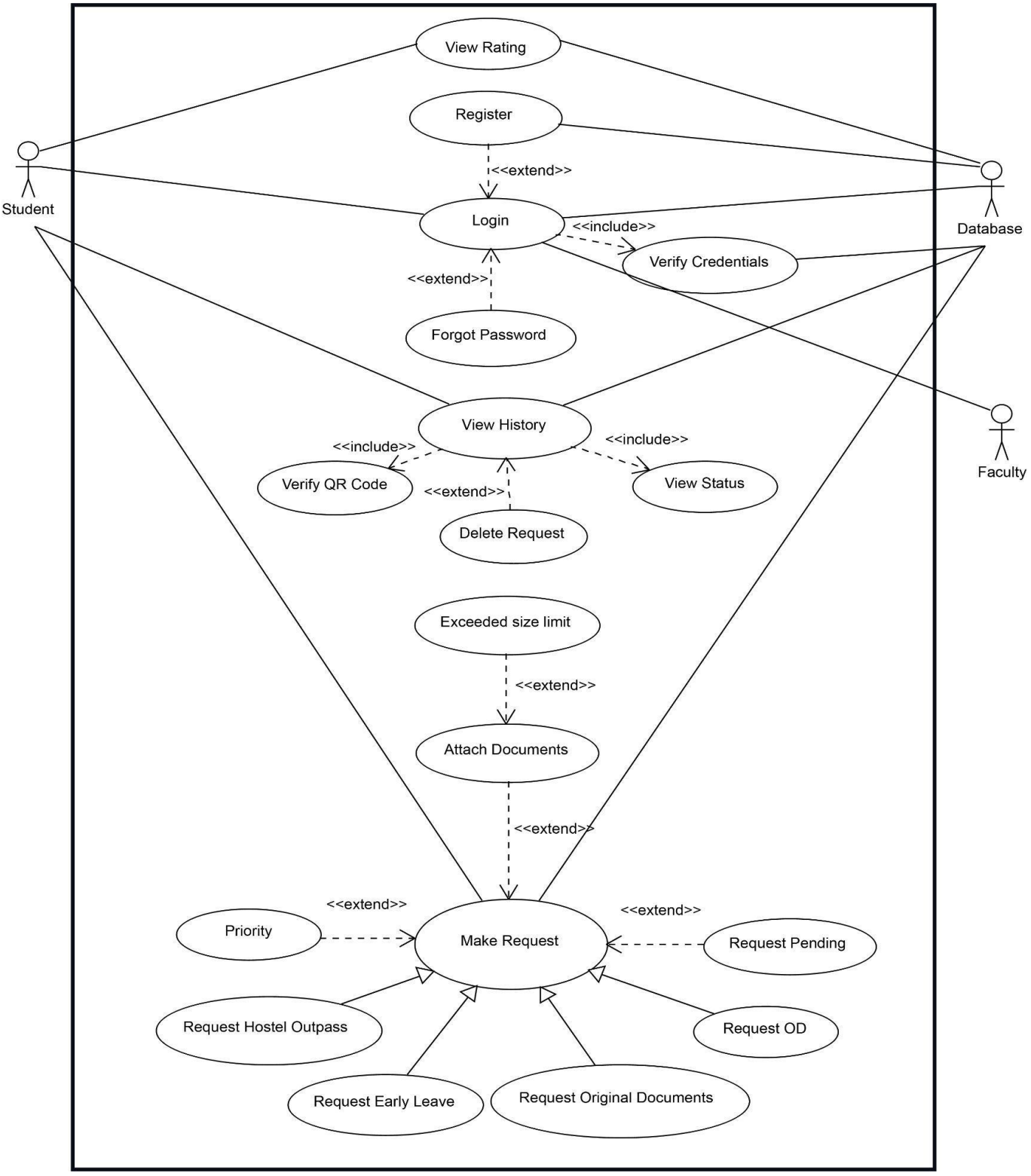
All Actors present and their type:

Actor	**Type**
Student	Primary
Faculty/Warden	Secondary
Database	Secondary

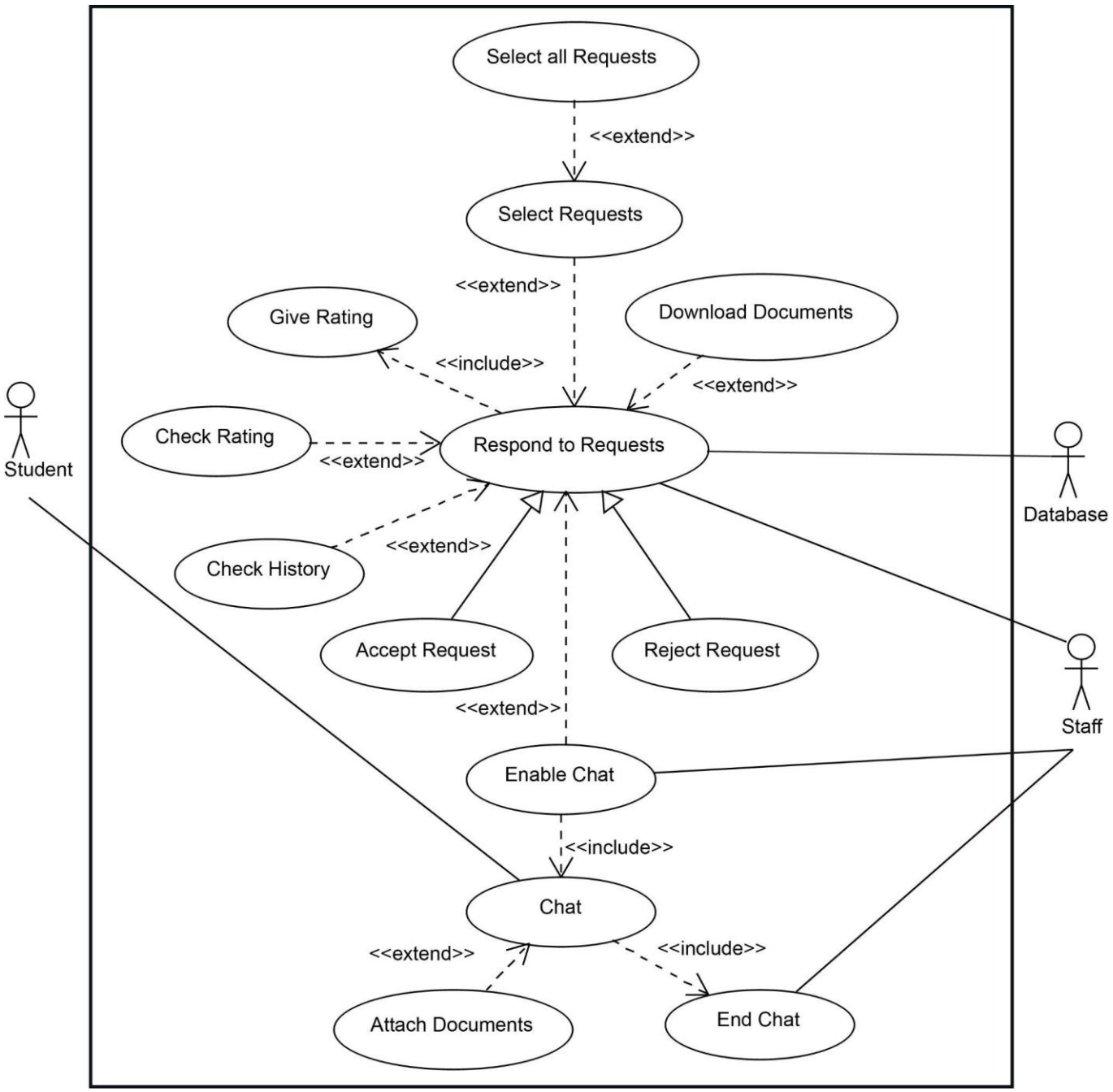
Use Case Diagrams:

There are a total of 3 use case diagrams. One denotes the major flow of the System, the other 2 denotes the details of the sub use cases present.

Use Case Diagram 1:



Use Case Diagram 2:



Use Case Diagram 3: