# **Elicit and Document Requirements**

#### Users:

- Non-admin users
  - SCSE students
  - NTU students who have been enrolled in SCSE courses
  - SCSE professors
  - SCSE staff
- Admins of the app

## Functional Requirements:

- 1. Navigation/Map
  - 1.1. The navigation/map page must show the floor map of the SCSE when accessed
    - 1.1.1. The map must show the layout of the first floor by default
    - 1.1.2. The map of the SCSE must contain the layouts of the different floors
      - 1.1.2.1. The layout must consist of the floor plan of the different rooms
      - 1.1.2.2. The layout must contain all the 360-degree photos taken on it
  - 1.2. The user shall be able to search for a particular room
    - 1.2.1. The result from the search must be pinned location on the layout
      - 1.2.1.1. The pinned location shall appear in a bubble shape
        - 1.2.1.1.1. The pinned location bubble shall consist of the floor number on which the room is located
        - 1.2.1.1.2. The pinned location bubble shall consist of the full name of the room
    - 1.2.2. When searched room is found, the user shall be able to choose to navigate to it
      - 1.2.2.1. The user shall be able to to enter a start location
      - 1.2.2.2. The navigation to room must appear as combination of arrow pointing to the searched room
        - 1.2.2.2.1. If multiple floors are involved in the route, stair directions shall appear (e.g. "Go up/down to Xth floor")
        - 1.2.2.2.2. If multiple floors are involved in the route, arrow directions must be shown for every floor
          - 1.2.2.2.2.1. Floor on which the only directions are to go up/down the stairs must not be included
      - 1.2.2.3. The user shall be able to see a preview of the route as a sequence of 360-degree photos
  - 1.3. The user shall be able to input the room numbers
    - 1.3.1. After inputting the room number, the app will be able to locate you.
- 2. Course Reviews
  - 2.1. The app must have records of different SCSE courses
    - 2.1.1. Every record must have information about the course's name
    - 2.1.2. Every record must have information about the course's code

- 2.1.3. Every record must have information about the year the course is typically taken in (based on SCSE curriculum structure.)
- 2.1.4. Every record must have information about the set of reviews about it
- 2.2. The course review page must show all course records at first
  - 2.2.1. The whole set of courses must be sorted in ascending order of the year the course is taken in (based on SCSE curriculum structure.)
  - 2.2.2. The courses in the same year must be sorted in ascending order of their course code (based on SCSE curriculum structure)
- 2.3. User shall be able to search among all of the available courses records on the app based on their different features
  - 2.3.1. The user shall be able to directly search with a course code
  - 2.3.2. The user shall be able to search by the year in which the course is taken
  - 2.3.3. The user shall be able to search with the full name of the course
- 2.4. The search result must show all the courses with the requirements from the search sorted in ascending order of their course code
- 2.5. A sorting functionality for the search results shall be available to the user
  - 2.5.1. The results shall be able to be sorted in ascending/descending order of their course code
  - 2.5.2. The results shall be able to be sorted in ascending/descending order of their course name
- 2.6. The user shall be able to enter the page of any course (Database)
  - 2.6.1. The page must consist of the reviews about the selected course
    - 2.6.1.1. The review record must include the course code
    - 2.6.1.2. The review record must include the date of publication of the review
    - 2.6.1.3. The review record must include the name of the author (if any)
      - 2.6.1.3.1. If the review's author didn't include their name, the name shall appear as "Anonymous"
    - 2.6.1.4. The review record must include text description of the review
    - 2.6.1.5. The review record must include the numeric grade about the course
      - 2.6.1.5.1. The numeric grade must be a number between 1 to 5 (included)
  - 2.6.2. The page of the selected course must show all of the reviews for the selected course (UXUI)
    - 2.6.2.1. The reviews must be sorted in an descending order of their publish date by a default
    - 2.6.2.2. The user shall be able to sort the reviews
      - 2.6.2.2.1. The user shall be able to sort the reviews in ascending/descending order of the date the review is published
      - 2.6.2.2.2. The user shall be able to sort the review in the ascending/descending order of the review's numeric grade about the course

- 2.6.3. The page of the selected course must allow the user to give a review
  - 2.6.3.1. The user must enter a numeric grade about the course
  - 2.6.3.2. The user shall be able to give text feedback about the course (optional)
  - 2.6.3.3. The date and time of the publishing of the review must be recorded
  - 2.6.3.4. The user shall be able to select whether they want the review to be anonymous or not (name is optional)

#### 3. Forum

- 3.1. The application must contain a set of topics
  - 3.1.1. Every topic record must contain the name of the topic
  - 3.1.2. Every topic record must contain the date it was created
  - 3.1.3. Every topic record must contain the name of the user who created it
  - 3.1.4. Every topic records must contain the set of all posts about the topic
- 3.2. The forum page must show all the topics available
  - 3.2.1. The topics must be sorted in descending order of the date that the last post about the topic was posted (default)
  - 3.2.2. The user shall have be able to sort the topics
    - 3.2.2.1. The user shall be able to sort the topics in ascending/descending order of the date they were created
    - 3.2.2.2. The user shall be able to sort the topics in ascending/descending order of the number of posts in a topic
    - 3.2.2.3. The user shall be able to sort the topics in ascending/descending order of their names
  - 3.2.3. The user shall be able to search for a topic by parts of its name
  - 3.2.4. The result of the search must contain all the topics with names containing the search entry
  - 3.2.5. The user shall be able to enter the individual page of every topic
    - 3.2.5.1. The individual page of every topic must include all the posts in the topic
      - 3.2.5.1.1. Every post record must contain the date the post was published
      - 3.2.5.1.2. Every post record must contain the number of likes it has
      - 3.2.5.1.3. Every post record must contain a text description
      - 3.2.5.1.4. Every post record must contain the name of its author
      - 3.2.5.1.5. Every post record should be able to contain a set of comments
        - 3.2.5.1.5.1. Every comment record must contain the name of its author
        - 3.2.5.1.5.2. Every comment record must contain a text description
        - 3.2.5.1.5.3. Every comment record must contain the date of publishing it
    - 3.2.5.2. The user shall be able to like a post

- 3.2.5.2.1. The user shall be able to remove the like at any time
- 3.2.5.3. The user shall be able to sort the posts
  - 3.2.5.3.1. The user shall be able to sort the post in ascending/descending order of the number of like
  - 3.2.5.3.2. The user shall be able to sort the post in ascending/descending order of date published
- 3.2.5.4. The user shall be able to publish a post
  - 3.2.5.4.1. The user must enter the text description of the post
  - 3.2.5.4.2. The name of the user must be recorded
  - 3.2.5.4.3. The date of publishing must be recorded
- 3.2.6. The user shall be able to suggest a topic
  - 3.2.6.1. The topic suggestion record must contain the user name
  - 3.2.6.2. The topic suggestion record must contain the name of the topic
  - 3.2.6.3. The topic must be approved by an admin before being published
- 4. Sign In/Up
  - 4.1. Every user shall be able to create an account in the application
    - 4.1.1. The user account record must contain their name
    - 4.1.2. The user account record shall be able to contain the year of study of the student (optional)
    - 4.1.3. The user account record must contain their email (not visible to other users)
    - 4.1.4. The user account record must contain their password (not visible to other users)
  - 4.2. Every user must be able to login into their account
    - 4.2.1. The user shall be able to contribute to the application only if they have an account
- 5. Admin Functionality
  - 5.1. The admins should be able to enter their admin page where they can moderate the app
  - 5.2. The admins should be able to administer the application content
    - 5.2.1. The admins should be able to administer both posted and suggested topics
      - 5.2.1.1. The admins should be able to see both the posted and waiting for approval topics
      - 5.2.1.2. The admins should be able to approve topics for posting
      - 5.2.1.3. The admins should be able to delete topics
      - 5.2.1.4. The admins should be able to delete posts
      - 5.2.1.5. The admins should be able to delete comments
      - 5.2.1.6. The admins should be able to delete course reviews

## Non-Functional Requirements:

1. The application must run on android OS 10.0 and up.

- 2. Creating an account should be done within 5 minutes.
- 3. Upon opening the app, the home page should show up within 1 second.
- 4. The search of rooms in maps should be completed within 1 second.
- 5. The search for the courses should be completed within 1 second.
- 6. The sorting of the courses should be completed within 1 second.
- 7. The search for the forum should be completed within 1 second.
- 8. The sorting of the forum should be completed within 1 second.