

# Screen Sketches

Team: Mk1\_1

## Members:

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# Actors

1. **Users:** Have the privilege to:
  - Join study groups
  - View different study resources available for every course they're currently enrolled in
  - Create study groups, which will make them manager of the group.
2. **Managers:** Have the same privileges as users in addition to:
  - Naming the study group
  - Deciding the accessibility of the group(free to join or request to join)
  - Removing members from the group
  - Deciding the number of users in a group
3. **Administrators:** Allowed to manipulate aspects of the application itself:
  - Create, modify, and delete accounts. Assist with password reset.
  - Ban users who violate the code of conduct while communicating with one another using the group chat
  - Update the available resources for each course, i.e., delete, add, or modify existing resources available for each course.
  - Change the manager of a study group if the present manager has been inactive for a prolonged period of time.

## Non-Functional Requirements

- The app should respond to group creation requests within a second, ensuring a smooth and efficient user experience.
- The app should support at least 1000 concurrent users without experiencing significant performance degradation or downtime.
- The application should have minimal downtime, ensuring continuous availability for users.
- User data, including personal information and study group details, must be securely stored and transmitted.
- The user should not have to wait for longer than 0.5 seconds for any UI element to respond.
- The user interface should be intuitive and easy to navigate, facilitating seamless interaction for users of all levels.
- The application should cater to all Iowa State students including undergraduate and graduate students.
- The application should be easy to set up to add new kinds of user in the future.
- The application utilizes Iowa State Single Sign On(SSO) authentication to securely verify user credentials.

# Data Model

## Users:

- UserID (Primary Key): Unique identifier for each user, typically the netID.
- UserName: Full name of the user, including first and last name.
- UserEmail: Email address associated with the user, typically in the format netID@iastate.edu.
- Password: Encrypted password for user authentication.
- Role: Role of the user within the application (student/manager/admin).
- InstagramHandleID: Optional field for the user's Instagram handle.
- SnapchatHandleID: Optional field for the user's Snapchat handle.
- DiscordHandleID: Optional field for the user's Discord handle.
- CoursesEnrolled: Foreign key referencing the Courses table, indicating the courses the user is currently enrolled in.
- PhoneNumber: Contact number of the user.
- UserPrivacySettings: Settings related to the user's privacy preferences.
- ProfilePhoto: Image representing the user's profile.
- AdditionalFields: Additional information such as user's major, graduation year, and any other relevant details.

## Courses:

- CourseID (Primary Key): Unique identifier for each course.
- CourseName: Name or title of the course.
- Section: Section number or identifier for the course.
- Instructor: Name of the instructor teaching the course.

## StudyGroups:

- GroupID (Primary Key): Unique identifier for each study group.
- GroupName: Name or title of the study group.
- GroupManagerID: Foreign key referencing the Users table, indicating the user ID of the manager or creator of the study group.
- GroupDescription: Description or summary of the study group.

- NumberOfMembers: Count of members currently in the study group.
- LastActive: Timestamp indicating the last activity or interaction within the study group.
- MaximumCapacity: Maximum number of members allowed in the study group.
- UsualMeetingTimeAndLocation: Details about the typical meeting schedule and location for the study group.

#### GroupMembers:

- MemberID (Primary Key): Unique identifier for each group member.
- MemberRole: Role or position of the member within the group.
- JoinDate: Date when the member joined the group.
- GroupID: Foreign key referencing the StudyGroups table, indicating the study group the member belongs to.
- UserID: Foreign key referencing the Users table, indicating the user ID of the member.

#### ChatFeature:

- MessageID (Primary Key): Unique identifier for each message.
- GroupID: Foreign key referencing the StudyGroups table, indicating the group chatbox.
- SenderID: Foreign key referencing the Users table, indicating the user ID of the sender.
- MessageText: Content of the message.
- Timestamp: Date and time when the message was sent.

#### StudyResources:

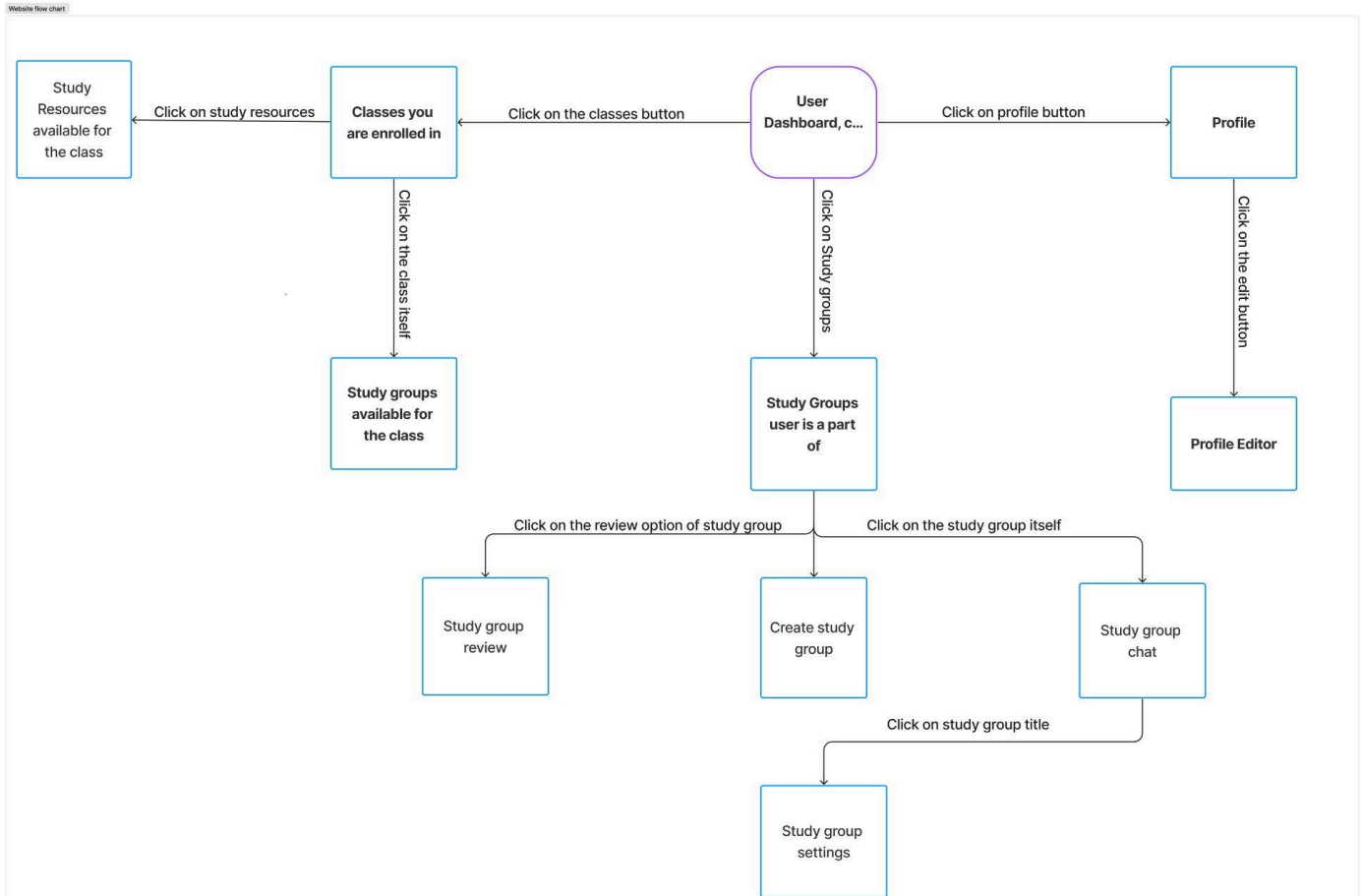
- ResourceID(Primary Key): Unique identifier for each study resource
- CourseID: Foreign Key referencing the course, indicating which course the study resource is a part of.
- We will have an intermediate table course\_Study\_resources that will have an extra column called availability that will specify if a certain study resource is available for the course or not, for example, tutoring or supplemental Instruction.

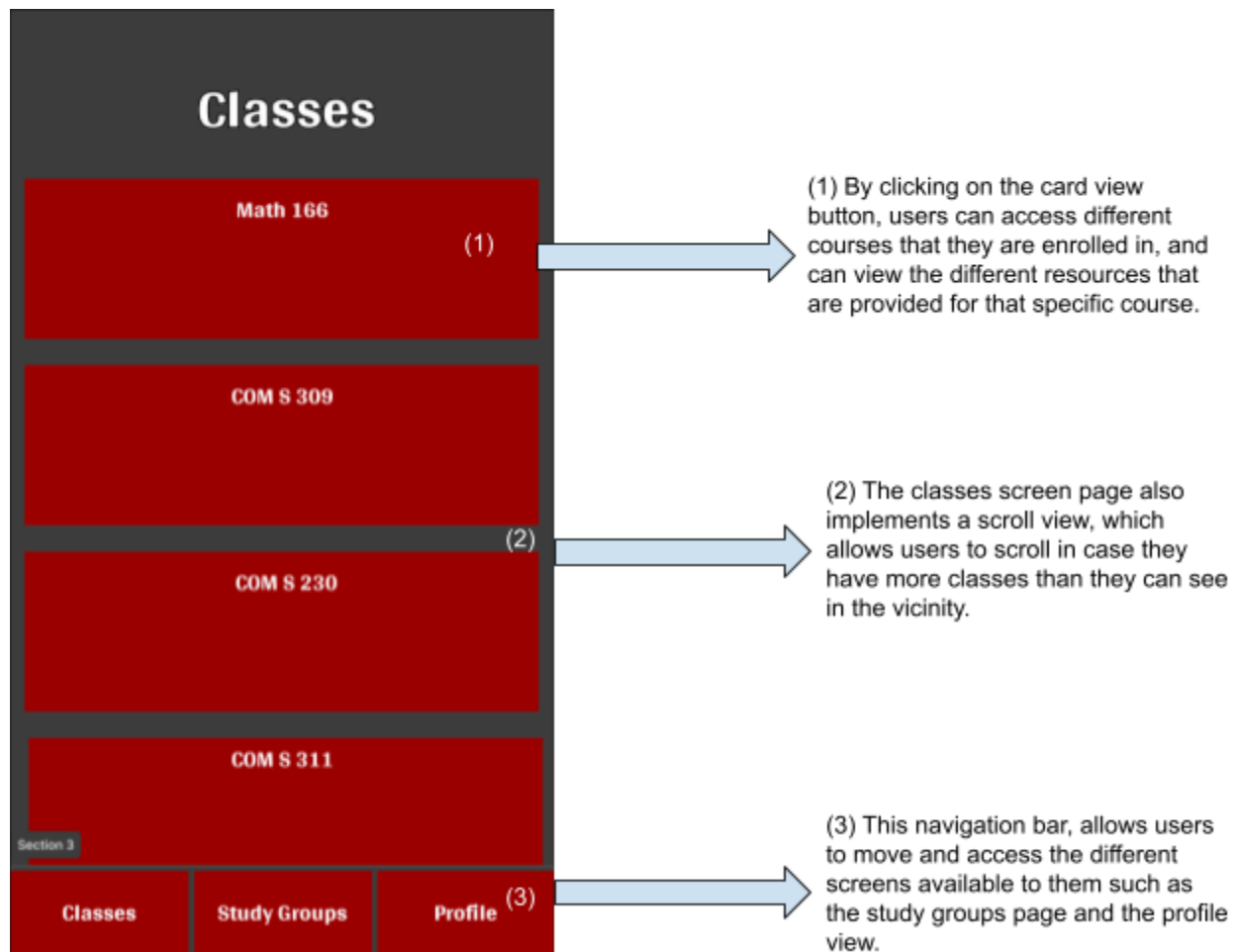
#### GroupReviews:

- ReviewID(primaryKey): Unique identifier for each review

- Group ID: Foreign key referencing the course the review is a part of.

# Screen Flow Diagram





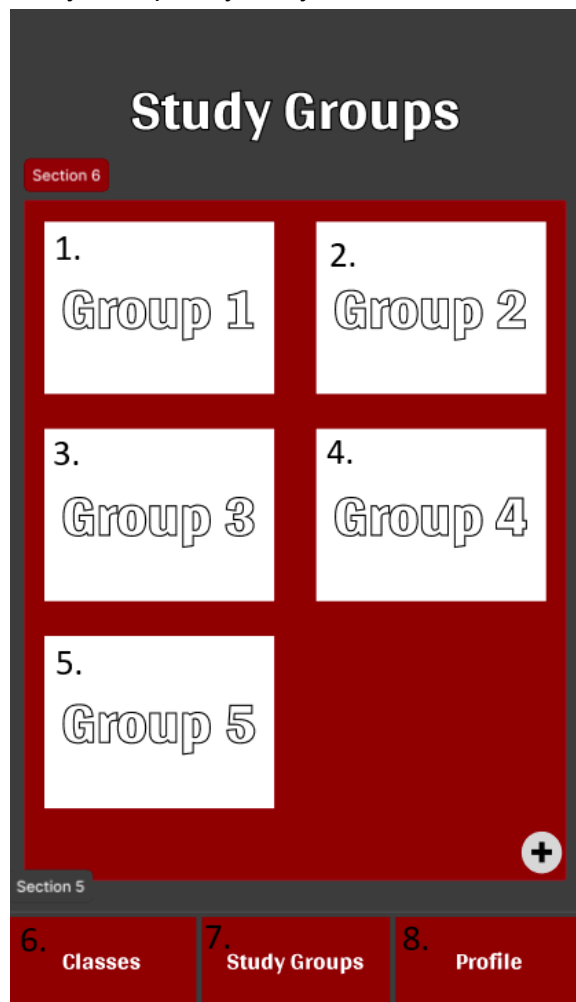
Screen 2 by Tanish Visanagiri

## Classes - CyStudy

(1) This screen shows a list of classes that will automatically be generated when the user logs in with their student credentials. Clicking on each class will take you to a list of study resources available for each class. (2) There's a scroll view that allows you to see multiple classes on the screen. You will be able to view a class's study groups even after joining one for the class, in case the user wants to switch groups. (3) There is also a navigation bar that allows you to visit the other screens in the application.



## Study Groups- CyStudy



1. Takes you to Study Group 1
2. Takes you to Study Group 2
3. Takes you to Study Group 3
4. Takes you to Study Group 4
5. Takes you to Study Group 5
6. Takes you to your Classes screen
7. Takes you to your Study Groups screen
  - a. Will take you back to this screen if you are in a study group's screen.
8. Takes you to your Profile screen

Screen 3 - Gavin McClure

This screen shows all the current study groups you are in.

If you are in more than 6, a scroll bar will appear on the side of the screen to allow you to scroll through all your current study groups.

They will automatically appear and disappear when you join/leave them respectively.

Clicking on a group button will take you to a chat page where you will be able to send messages to your study group.



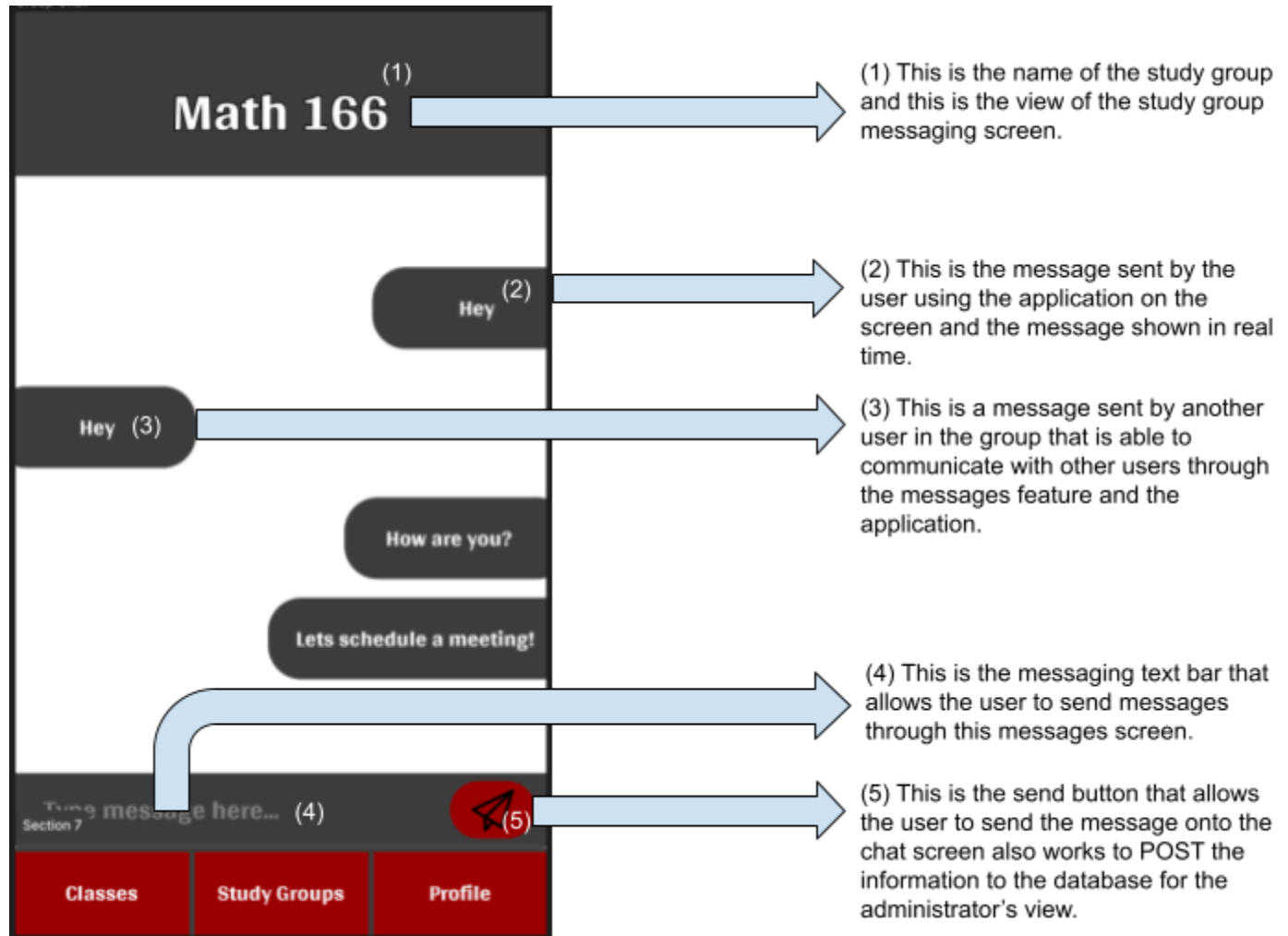
1. The name of the application.
2. Takes you to your list of classes.
3. Takes you to a screen displaying your study groups.
4. Takes you to your profile customization screen.

Screen 1 - Gavin McClure

## CyStudy Home Page

This is the home screen of the application. Users will be able to access this screen after logging into their account or creating a new account.

Through the home page, you can access your classes, study groups, or user profile. There is also a calendar that will display your study group meetup dates.



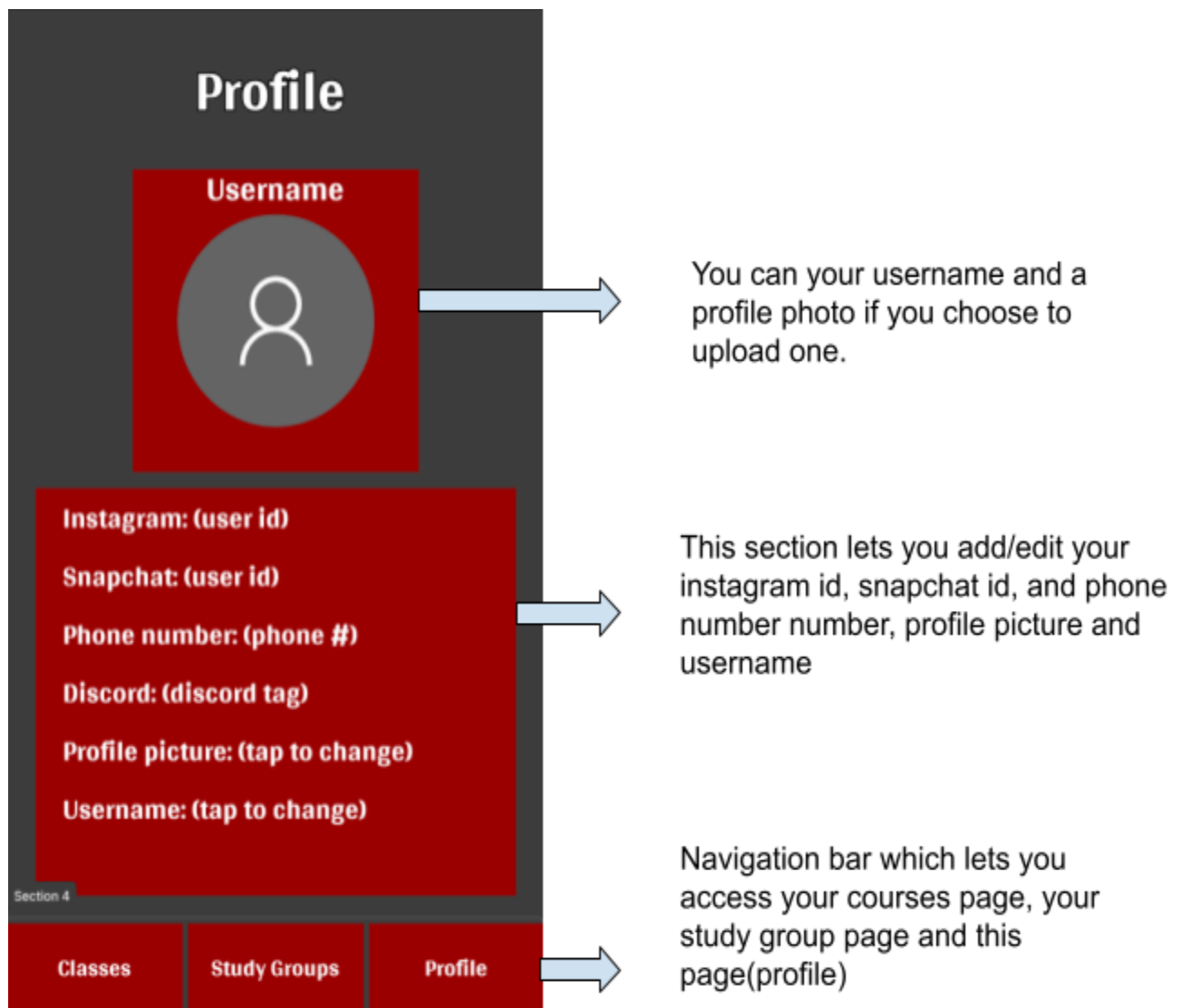
Screen 4 by Tanish Visanagiri

### Study Group Chat - CyStudy

(1) The header shows the group name of the study group. The user can access this screen by clicking on the respective study group from the Study Groups screen.

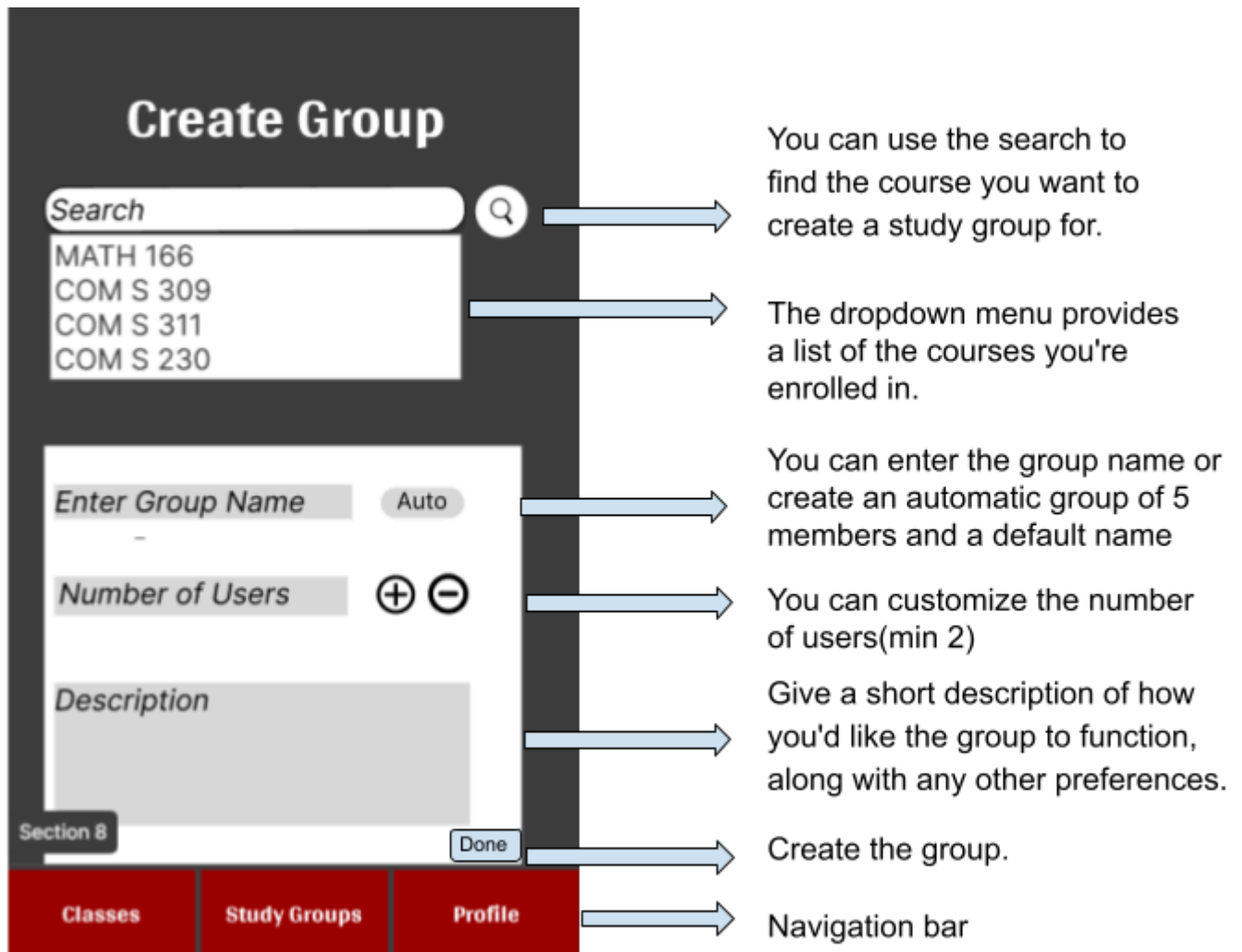
(2)(3) On this screen, the user can send direct messages to the rest of their study group in real time. (4) To type a message, the user can click the "Type message here..." box and start typing.

(5) Once finished, they simply press the red button in the bottom left to message the rest of their group directly.



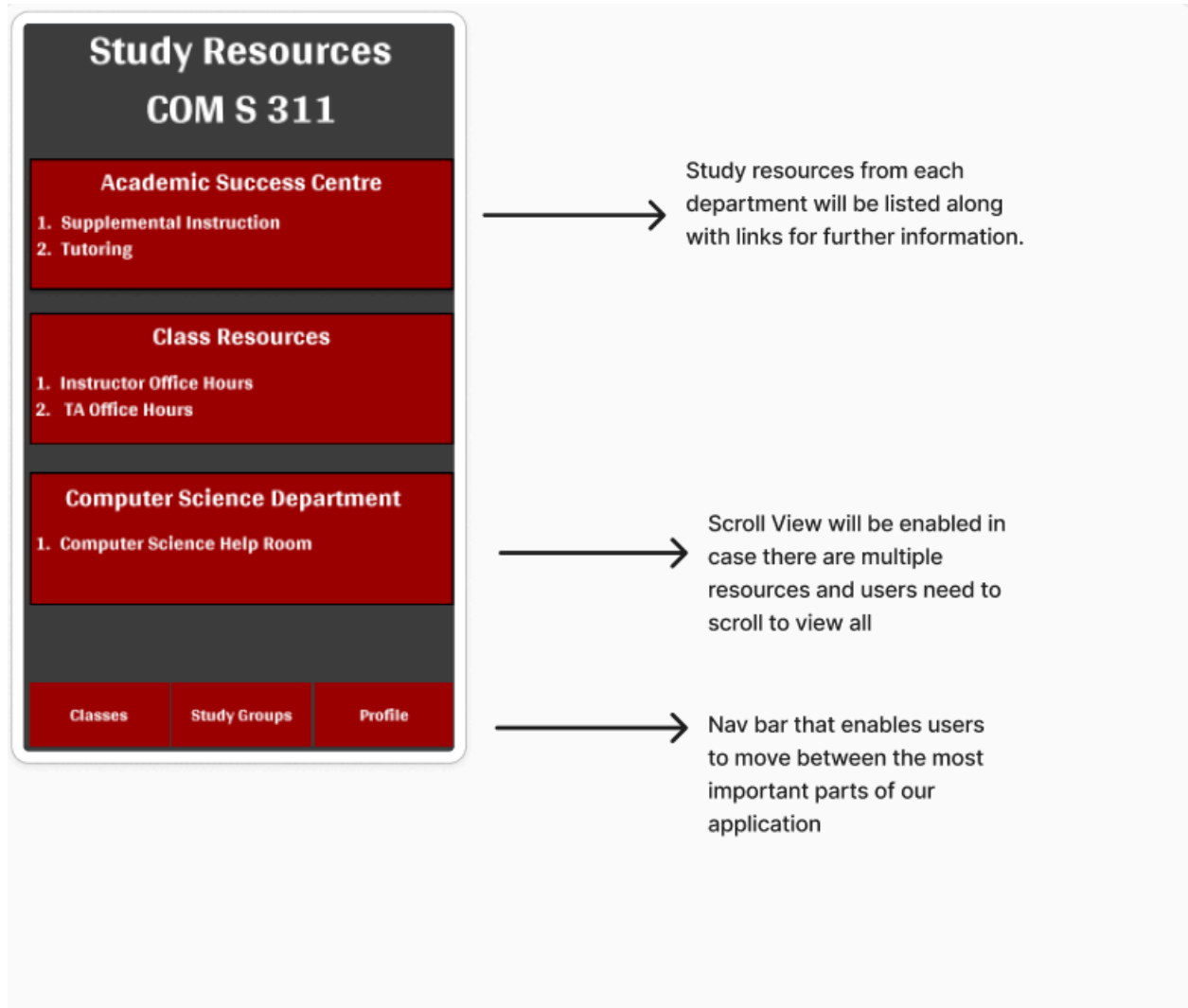
### Profile - CyStudy(Saeshu Karthika)

The profile screen provides users with the opportunity to customize both their contact information and public profile appearance. When accessing a user's profile picture within a study session chat, all information entered on this screen becomes visible. Users can easily update their contact details by selecting the relevant field, while also having the option to upload a photo from their camera roll to serve as their public profile picture, enhancing their online presence within the study group.



### Create study group(Saeshu Karthika)

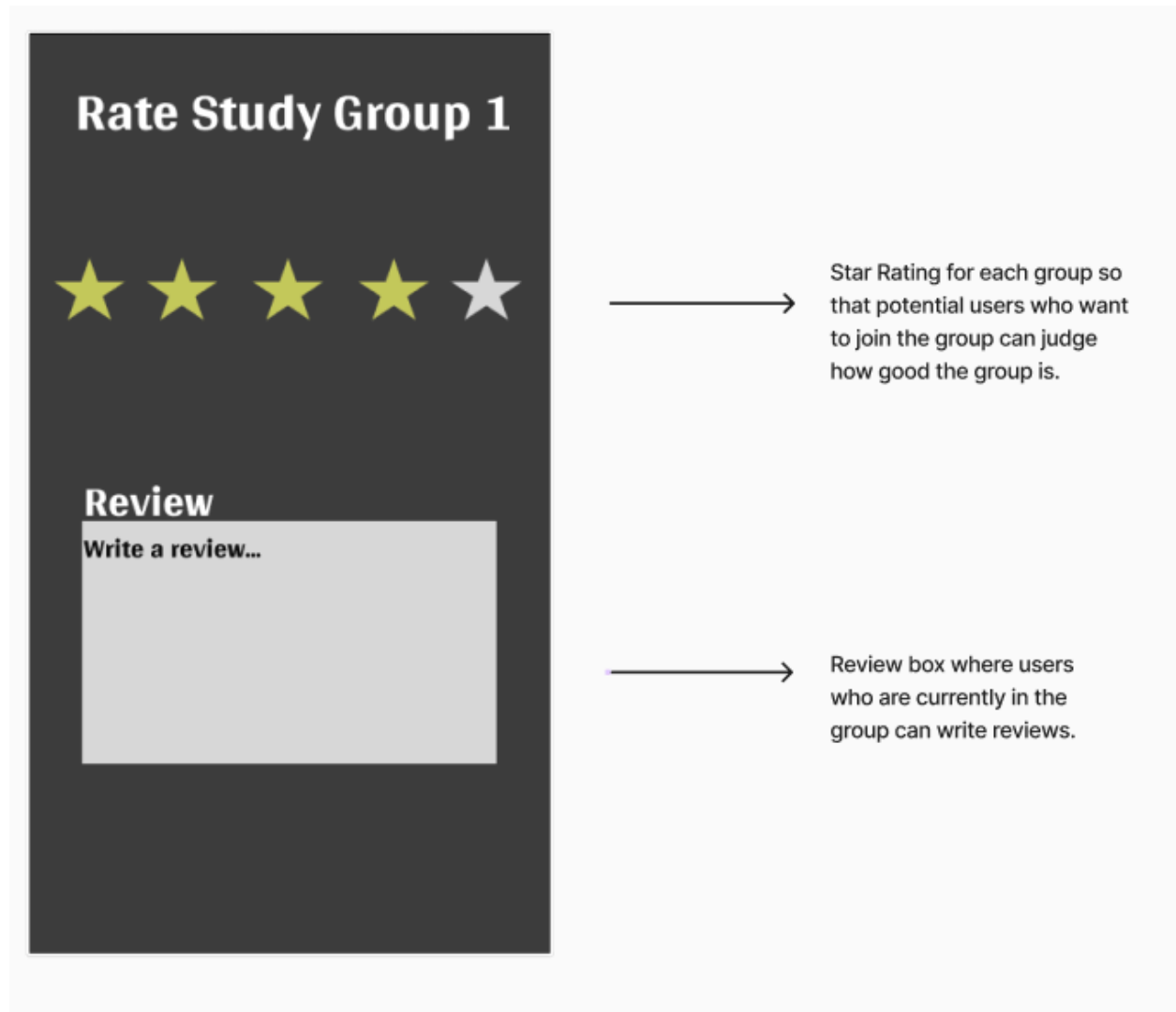
The study group creation screen offers a user-friendly interface to set up your study group seamlessly. You start by selecting the course you want the group for, then input a unique group name. Optionally, you can specify the number of users you desire or let the system automatically assign a default number. Additionally, a short description box allows you to outline the group's purpose, objectives, and any other relevant details. This comprehensive approach ensures that your study group is accurately represented and effectively communicates its goals to potential members. Once all details are provided, you can proceed to create the study group and begin collaborating with other members.



### Study Resources(Rahul Sudev)

The Study Resources tab serves as a comprehensive repository for students, offering easy access to all available resources relevant to their enrolled courses. Each resource will be accompanied by a direct link to its respective website, enabling students to explore further details and benefits. Additionally, the tab will provide pertinent information about each resource, such as the number of Supplemental Instruction (SI) leaders facilitating the course. By incorporating this feature into our application, students will have access to a wealth of support to enhance their academic success. This feature seamlessly complements the existing Study Groups feature, collectively providing students with the necessary tools and assistance to excel in their coursework. Whether seeking additional study materials, guidance from SI leaders, or other support

resources, students will find everything they need conveniently consolidated within the Study Resources tab, fostering a conducive learning environment.



### Study Group Reviews(Rahul Sudev)

In the study group, current participants can contribute by giving a star rating and writing a review to share their experiences. These reviews are valuable resources for individuals contemplating joining the group, as they offer insights into the group's dynamics, effectiveness, and overall atmosphere. By reading the reviews, potential members can gauge whether the study group aligns with their learning style and objectives. This system empowers individuals to make informed decisions about participating in the group, ensuring that they are well-suited to the environment and can derive maximum benefit from their involvement. Additionally, it fosters transparency and accountability within the study group, as members can openly express their opinions and provide constructive feedback. Overall, the ability for current participants to post reviews enhances the group's functionality and facilitates a supportive learning community where members can thrive.



