



Project Coordinator: Jonathan Grider
Team 10 - Sprint 1 Planning Document

Sprint Overview

For our first sprint, we hope to set-up the GUI for our application and set up the account system for the user along with certain facilities such as course look-up. The front-end team will be creating the user interface for the iOS application while the backend team will setup the database and server for communication between client and database for the account system and the course lookup. By the end of this sprint a user should be able to completely setup his profile (including the user type, profile picture, list of classes and current status) and have access to the courses.

Scrum Master: Simona Virga

Meeting Schedule: Monday & Wednesday 8 p.m.

Risks and Challenges: A lot of us are not familiar with the workings of JSON, Firebase and the complete workings of application creation through swift. This sprint will be more educational and getting used to the workings of the following while setting up basic foundations for the application. This sprint is also particularly important as the user stories implemented in this sprint will serve to become the foundation upon which our application will stand.

Current Sprint Detail

User Story #1

As a user, I would like to be able to create a *graduatR* account using Google and/or Facebook credentials or a custom account system.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Setting up the databases	5	Back	Simona, Harika
2.	Setting up the back end server	6	Back	Swaraj
3.	Setting up Google/Facebook authentication system	3	Back	Simona, Harika
4.	Setting up the custom graduatR account system	8	Back	Simona, Harika, Dhriti
5.	Setting up basic GUI for the login and sign up page	2	Front	Dhriti
6.	Setup client and server communication	5	Back	Swaraj
7.	Testing user account creation	2	Testing	Swaraj, Simona, Harika, Dhriti

Total Time: 31 hours

Acceptance Criteria:

- Given that the Google/Facebook authentication system is implemented correctly, when a user tries to create an account using Google/Facebook authentication, then they should be able to create it and see their account.
- Given that the custom graduatR account system is implemented correctly, when a user tries to create an account using this system, then they should be able to create it and see their account.
- Given that the client and server communication system and the server and database communication is setup correctly, when a user tries to create an account, then the changes to the database should be seen correctly.

User Story #2

As a user, I would like to login and manage my *graduatR* account.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Implement GUI communication with the client	3	Front	Dhriti
2.	Implement server parser	3	Back	Swaraj
3.	Implement database query creation	6	Back	Simona, Swaraj, Harika
4.	Setup database response system	4	Back	Simona, Harika
5.	Implement client parser to parse response from server	4	Back,Front	Dhriti, Swaraj
6.	Update GUI depending on response from server	2	Front	Dhriti
7.	Allow user to reset password when forgotten	3	Back	Harika
8.	Testing	1.5	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 26.5 hours

Acceptance Criteria:

- Given that the database query creation and response system and parsers are set up correctly, when a user tries to re-login, then they should be able to successfully do so using the same credentials.
- Given that the reset password when forgotten feature is implemented correctly, when a user forgets his password, then they should be able to answer a series of security questions to be able to do so.
- Given that the GUI communication with the client is implemented correctly, when a user attempts to interact with the GUI to manage profile, then they should be able to see an appropriate response from the GUI and client.

User Story #3

As a user, I would like to customize my *graduatR* profile.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Implement GUI to have an edit profile tab	3	Front	Dhriti
2.	Implement GUI so that clicking profile picture allows user to change or view profile picture	3	Front, Back	Dhriti
3.	Delete courses taken by mistake and remove subsequent changes from user database	6	Front, Back	Dhriti, Swaraj, Simona, Harika
4.	Update database according to changes made to user profile	6	Back	Simona, Harika
5.	Testing	1	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 19 hours

Acceptance Criteria:

- Given that the edit profile tab is implemented correctly, when a user wants to change profile settings, then the information should be accurately updated.
- Given that clicking a user profile picture is implemented, when a user wishes to change their profile picture, then they should be taken to their camera roll to choose a new picture.
- Given that the deletion of courses taken is correct, when a user accidentally adds a class that they did not take, then the appropriate class should be deleted from the “courses taken” list.

User Story #4

As a user, I would like to be able to set my current status as an undergraduate student, parent or tutor.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Update database according to the user role	4	Back	Simona, Harika
2.	Manage access based on role	4	Back	Swaraj, Simona, Harika
3.	Testing	1	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 9 hours

Acceptance Criteria:

- Given that the user role system is implemented, when a tutor is logged into their account, then they should not be able to access course look-up features.
- Given that the user role system is implemented, when an undergraduate student is logged into their account, then they should be able to have access to course lookup, announcement board, etc.
- Given that the user role system is implemented, when a parent is logged into their account, then they should not be able to access chat rooms or announcement board.
- Given that the user role system is implemented, when a parent and student are connected via the parent key, the parent will have access to the student courses and grades unless hidden by student.

User Story #5

As a developer, I would like to protect the information that my users provide.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Implement GUI appropriately to keep information hidden	2	Front	Dhriti
2.	Implement secure connection to allow safe transfer of data	8	Back	Swaraj, Harika, Simona
3.	Implement safety features for the database	5	Back	Swaraj, Simona, Harika
4.	Testing	1	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 16 hours

Acceptance Criteria:

- Given that the secure, encryption system is setup correctly, when a user provides information to the application, then it should ensure that the information is protected and private.
- Given that the GUI is implemented appropriately to keep information hidden, when a user types in the password, then the application should secure the text entry.
- Given that the safety features for the database are implemented, when a user stores data in the database, then this data will only be reachable upon the appropriate query created by the same user.

User Story #6

As a user, I would like to provide a profile picture and a short biography for my profile.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Allow user to provide a profile picture from the camera roll	2	Back	Dhriti
2.	Allow the GUI to access the camera to take pictures through the application	2	Front, Back	Dhriti
3.	Communicate the profile picture data for a user to the database	4	Back	Swaraj, Simona, Harika
4.	Update GUI when profile picture is set	2	Front	Dhriti
5.	Update user bio to database and reflect changes to the GUI	3	Back	Dhriti, Swaraj, Simona, Harika
6.	Testing	1	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 14 hours

Acceptance Criteria:

- Given that the profile picture system is implemented correctly, when a user tries to update the profile picture, then they should be able to do so using both camera roll photos and the in-app camera.
- Given that the short biography system is implemented correctly, when a user tries to update their bio, then the database should be updated and reflect changes to the GUI.
- Given that the profile picture system is implemented correctly, when a user updates their profile picture, then the GUI will be updated.

User Story #7

As a student, I would like to be able to search for courses.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Implement search bar	3	Back, Front	Harika
2.	Filter search results to fit search bar input and display it to the user	3	Back, Front	Harika, Dhriti
3.	Communicate search bar requests to server and consequently to the database	3	Back	Swaraj, Simona, Harika
4.	Implement GUI for displaying all available courses at Purdue	2	Front	Dhriti
5.	Testing	1	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 12 hours

Acceptance Criteria:

- Given that the GUI for search bar is easily accessible, when a user wants to search for a course, then he/she should be able to do so with ease.
- Given that the search bar and filter system is implemented correctly, when a user tries to look-up a course, then they should be able to view courses sorted alphabetically.
- Given that the search bar and filter system is implemented efficiently, when a user tries to look-up a course, then the results should be displayed as he/she types.

User Story #8

As a student, I would like to be able to select previous courses that I have taken.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Connect the server to the Purdue.io database	5	Back	Simona, Harika, Swaraj
2.	Implement GUI for adding courses to profile	3	Front	Dhriti, Harika
3.	Communicate courses for the user to the database	3	Back	Swaraj, Simona
4.	Testing	1	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 12 hours

Acceptance Criteria:

- Given that the Purdue.io database is integrated correctly, when a user taps on the courses tab, then they should be able to see all available courses offered.
- Given that the GUI and communication system for the courses with the database is setup correctly, when a user tries to add courses he/she has taken, then the changes should be reflected in the database and on their profiles.
- Given that the GUI for adding courses to the profile is implemented correctly, when a user attempts to add courses, then he/she able to check multiple courses at once (i.e. a check mark appears next to the course)

User Story #9

As a developer, I would like this application to run on iOS devices.

#	Description	Estimated Time (hrs)	Team	Owner
1.	Make the layout transferable between different iOS devices	5	Front	Dhriti, Harika
2.	Keep a consistent and appealing theme throughout the app	4	Front	Dhriti, Harika, Simona, Swaraj
3.	Set up tab-bar for easy navigation between pages	3	Front	Simona
4.	Testing	1.5	Test	Swaraj, Simona, Harika, Dhriti

Total Time: 13.5 hours

Acceptance Criteria:

- Given that the layout is transferable between different iOS devices, when a user opens the app on another sized device, then the layout and format of the app should not change.
- Given that the theme of the user interface is consistent throughout, when a user views other tabs, then the design should be visually appealing to the user.
- Given that the tab-bar is set up for navigation between pages, when a user wants to maneuver to different tabs, then the GUI to allow them do so with ease.

Remaining Backlog

Functional:

1. ~~As a user, I would like to be able to create a *graduatR* account using Google and/or Facebook credentials.~~
2. ~~As a user, I would like to login and manage my *graduatR* account.~~
3. ~~As a user, I would like to customize my *graduatR* profile.~~
4. ~~As a user, I would like to provide a profile picture for my profile.~~
5. ~~As a user, I would like to be able to set my current status as an undergraduate student, graduate student or tutor.~~
6. As a user, I would like to be able to be able to sell books to other students.
7. As a user, I would like to be able to view on-campus events.
8. ~~As a user, I would like to be able to delete my account when I want.~~
9. ~~As a student, I would like to be able to search for courses and professors.~~
10. As a student, I would like to be able to buy books from other students/users.
11. ~~As a student, I would like to be able to select previous courses that I have taken.~~
12. As a student, I would like to be able to view the courses that other students have taken.
13. As a student, I would like to be able to look at all courses available at Purdue.
14. As a student, I would like to be able to rate professors on a five-star scale with respect to the specific class.
15. As a student, I would like to be able to rate courses on a five-star scale based on difficulty.
16. As a student, I would like to be able to give comments on classes I have taken and a professors I have had.
17. As a student, I would like to be able to give ratings anonymously.
18. As a student, I would like to view the ratings of a professor/course.
19. As a student, I would like to be able to see the average grades/GPA received in a class.
20. As a student, I would like to see the average exam difficulty of the exams in a class.
21. As a student, I would like to contact other students who have taken the class that I wish to take.
22. As a student, I would like to be able to look for tutors for a particular course that I need help with.
23. As a student, I would like to be able to create study groups for a specific course with other students who are enrolled.
24. As a student, I would like to be able to choose to keep my grades hidden from other users.

25. As a student, I would like to create group chats to reach multiple people at once.
26. As a tutor, I would like to provide my contact information to the students in need of help.
27. As a tutor, I would like other users to contact me directly through the application.
28. As a parent, I would like to be able to view course details for classes.
29. As a parent, I would like to be able to view the final grade averages for classes.
30. As a developer, I would like to expand the app for all courses offered at Purdue.
31. If time allows, I would like to be able to see course recommendations based on previous courses I have taken and my previous reviews of courses.
32. If time allows, I would like to view past exams for any class.
33. If time allows, I would like to be able to view any study material/notes for my classes.
34. If time allows, I would like to create my course calendar so that I can stay up to date with assignments.
35. If time allows, I would like to be able to make transactions so that I can buy and sell course textbooks.
36. If time allows, I would like to see a map of my campus.
37. If time allows, I would like to see a visual display of where my classes are located within each building.
38. If time allows, I would like to view the capacity of each study area and/or library (i.e. Reading Room, Hicks, Krach, etc.).
39. If time allows, I would like to expand and implement this app for other universities.
40. If time allows, I would like to receive notifications.

Nonfunctional:

- ~~1. As a developer, I would like this application to run on iOS devices.~~
2. As a developer, I would like to improve the user interface and make it easy to understand.
3. As a developer, I would initially like to handle 100 users using the app simultaneously.
- ~~4. As a developer, I would like to protect the information that my users provide.~~
5. As a user, I would like to access information through the cloud instead of updating the application periodically.
6. If time allows, I would like to scale this app to other platforms (iOS, web, etc).