

# Sprint 2 Plan

Team 6 -- *papaya*

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Members: Ben Maxfield, Christian Lock, Caleb Flynn, Scott Hanberg, Adam Johnston

Scrum Master: Ben Maxfield

Scrum Meetings: Tuesdays @ 7pm

## Sprint Overview:

### **Overview:**

During this sprint we will be tackling the majority of our core usability features. The last sprint we created the backbone of our app: login system, map view and session creation. Now we will be flushing out how users interact with our app with session management features. The front end system will focus on linking our activities, and updating our UI to work with the main functions of our app, whereas the backend will be following UI feature implementation and updating some outdated design to streamline flow and remove redundant data.

### **Risks and Challenges:**

We are again, due to the large nature of our project, assigning ourselves a large amount of work in order to complete our app on time. We will need to be careful that we do not fall behind on our workload. We are also going to implement the majority of our Lambda functions in this sprint. This combined with the implementation of the friends list may prove difficult. We also need to change our requirements slightly, as we have found a few changes we would like to make in order to make our app more usable. Lastly, we are allowing our team to get more familiar with the platforms they have not worked with yet. Some of us will be getting more familiar with android, while others will be getting more familiar with Lambda. This will require good communication to help each other get familiar with the different sections of our project.

## Sprint Detail:

### User Stories:

#### User Story #1:

*4. As a user, I would like to join a study session.*

| Description  | Time   | Person    |
|--|--------|-----------|
| Create UI activity that calls the backend to add a user to the specified study session.    | 6 hrs  | Scott     |
| Debug/Testing UI activity for calling back-end for adding user to study session            | 2 hrs  | Scott     |
| Test that front end function calls the backend correctly and makes the correct adjustments | 2 hrs  | Scott     |
| Create function to join study session (back-end).  | 12 hrs | Christian |
| Implement a notification to show a new user has joined my current study session            | 1 hr   | Scott     |
| Debug and test "join study session" Lambda function  | 2 hrs  | Christian |

#### Acceptance Criteria:

- Given there are study sessions, when you click the UI to join a study session, it will add you to the list of people in that study session in the backend which will by extension add your name to session UI.
- Given there are study sessions, upon joining a study session, a user will be notified that they have joined a study session.

## User Story #2:

*7. As a user, I want to end study sessions when the host has left the nearby area*

| Description   | Time   | Person    |
|---|--------|-----------|
| Test that leave study session method calls the lambda function in a timely manner.        | 2 hrs  | Adam      |
| Enter row in database to log user out of a session (individual Lambda function).          | 8 hrs  | Ben       |
| Check user location relative to study session and ensure user is within bounds on client. | 10 hrs | Christian |
| Create UI popup to notify user is leaving study session                                   | 8 hrs  | Caleb     |
| Remove the user from the study session (back-end)   | 12 hrs | Adam      |
| Completely remove study session if no users are present (back-end)                        | 12 hrs | Christian |
| Test changing of hosts.   | 2 hrs  | Ben       |

## Acceptance Criteria:

- Given the student has joined a study session, when the student reaches a certain distance away from the study session, it removes them from the study session.
- Given the student has left a study session and the study session has no remaining students, the study session will end and be removed.

## User Story #3:

*16. As a user, I want to transfer ownership (transfer host) of a study session to another user in the study session.*

| Description  | Time   | Person |
|--|--------|--------|
| Update all Lambda functions that retrieve user-session links to new user-session database format and flow. | 8 hrs  | Ben    |
| Debug Lambda function for linking to new user-session  | 1 hr   | Ben    |
| Ensure session always has a host   | 10 hrs | Ben    |

|   |       |       |
|---|-------|-------|
| Create UI check on distance from study session                | 5 hrs | Caleb |
| Call lambda function to transfer host or remove study session | 6 hrs | Caleb |
| Debug connection between UI and lambda function               | 3 hrs | Caleb |

**Acceptance Criteria:**

- Given the student has left a study session, the study session will be transferred to another student in the study session if the study session is not empty.

**User Story #4:**

*27. As a TA, I can create sponsored study sessions without having to be located nearby.*

| Description  | Time  | Person           |
|--|-------|------------------|
| Allow registered TAs for a class use the hold press to create new sponsored study sessions.                  | 8 hrs | Christian        |
| Make sponsored study sessions appear differently than normal ones.   | 2 hrs | Caleb            |
| Debug roles for this function, making sure non-TA's cannot create study sessions where they are not located. | 2 hrs | Caleb, Christian |

**Acceptance Criteria:**

- When a TA creates a study session, they can leave the location and the session will continue for the allotted time, they will not be shown as being at the session, but the session will persist.

**User Story #5:**

*19. As a user, I want to see students that are attending active study sessions.*

| Description | Time | Person |
|-------------|------|--------|
|-------------|------|--------|

|  |        |       |
|--|--------|-------|
| Implement a class list and UI for each user that stores all user session attendance.   | 5 hrs  | Scott |
| Implement Lambda function to return all current students in a study session (back-end) | 10 hrs | Scott |
| Debug Lambda function for returning current users of sessions.                         | 30 min | Scott |

#### Acceptance Criteria

- Given that there is a study session, the user will be able to see who is in attendance by of each active study session.

#### User Story #6:

*17. As a user, I want to add friends to a friends list*

| Description   | Time   | Person |
|---|--------|--------|
| UI View to see current friends on friend list (UI-Only)   | 10 hrs | Caleb  |
| Create UI option to add current users in study session to friend list                                 | 4 hrs  | Caleb  |
| Write Lambda function to return list of friends   | 8 hrs  | Caleb  |
| Debug Lambda function for returning friend list   | 30 min | Caleb  |
| Keep local/client side friends list and check all new study sessions pulled from database for friends | 8 hrs  | Caleb  |
| Create a RDS Table for managing a friend's list   | 4 hrs  | Adam   |
| Proof RDS Table and testing   | 1 hr   | Adam   |
| Write lambda function to add friend.  | 8 hrs  | Ben    |
| Debug, make sure friends lists are updated when you add them.   | 3 hrs  | Scott  |

#### Acceptance Criteria:

- Given a user is in a current study session, the user will be able to add other users in a study session to their friends list.

- Given a user has added other users to their friend list, they will be able to see who is on their friend list.

### User Story #7:

*18. As a user, I want to have friends appear differently on maps*

| Description   | Time  | Person |
|---|-------|--------|
| Check during search through sessions for friends from our friends list  | 4 hrs | Adam   |
| Change color of markers if a friend is in a study session               | 2 hrs | Adam   |
| Debug the UI so that changes on the map reflect changes in the database | 1 hr  | Adam   |

### Acceptance Criteria:

- Given a user is friends with a second user, any study session that second user is in will be marked in a different color on the map.

## PRODUCT BACKLOG

(Working Progress: 22/38, Functional Progress: 14/22)

*Only 31 stories are required, and 7 of the stories are "if time allows".*

### Functional

- **As a User, I would like to:**
  1. Log in to the app
  2. Create a study session
  3. Display to other users what topics will be studied at the study session and other session-specific data (a session description)
  4. **Show I joined a study session**
  5. Set a time frame that the study session will be active
  6. Have my study session's location displayed
  7. **End study sessions when the host has left the nearby area**
  8. Filter what study sessions appear on the map based on class
  9. Invite people to a study session

10. Post to an active study session to communicate with those who are a part of it
11. Remove my post from public view at an active study session
12. Share files (if time allows)
- ~~13. View active study sessions that are near me on a map~~
14. Create a study session for the future (if time allows)
15. Filter study sessions viewable by time frame (if time allows)
- 16. Transfer ownership (transfer host) of a study session**
- 17. Add friends to a friends list**
- 18. Have friends appear differently on maps**
- 19. See which other users are at which active study sessions**
- **As a professor, I would like to:**
  20. See who has been to a study session
  21. See the dates of the past study sessions
  22. View the topics discussed from past study sessions
  23. Post and view comments to an active study session
  24. Create professor sponsored study sessions without having to be located nearby
  25. Remove any post on any active study session
- **As a Teaching Assistant, I would like to (all if time allows):**
  26. Post and view comments with role to an active study session
  - 27. Create TA sponsored study sessions without having to be located nearby**
  28. Remove any student post on any active study session

## Non-functional

- ~~29. We must be able to use the app on an android device.~~
- ~~30. We must be able to use the app on an apple device (if time allows).~~
- ~~31. The app must implement location (and GPS) services.~~
- ~~32. The app will integrate a back-end web service using AWS, to manage all user data.~~
- ~~33. Interface will be simple and user friendly.~~
- ~~34. The app will have fast response times, with no back-end call delay above a second.~~
- ~~35. Our app will prevent security and privacy breaches. All data will be encrypted during transit between our service and our client (HTTPS). And all necessary client encryption keys and passwords will be stored as securely as possible on the client devices (Android Keystore System on Android devices).~~
- ~~36. Our app will enforce user roles (student, professor, teaching assistant) and their associated permitted actions.~~
- ~~37. The app will be accessible on all screen sizes and resolutions but will be built primarily for late generation Android, iPhone and large browser screens.~~
- ~~38. The app and backend service should support at least 100 concurrent users during this development phase.~~