

#### Team 4 - Sprint 1 Planning Document

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# **Sprint Overview**

During this sprint, we hope to get a good feel for the technologies we're working with as well as get the setup entirely out of the way. By "setup," we mean account creation, logging in, project creation, task creation within projects, and so on. Basically, we hope to establish the core functionality features that we want Amora to have. We will lay the groundwork for future sprints by building the framework components and GUI elements that future components will layer into/on top of. We will aim to write robust and well-documented code so it is easier to implement new features in the future.

**Scrum master:** Benjamin Kahlert

**Meeting times:** 7:00 PM Wednesdays, 4:00 PM Sundays

**Risks and challenges:** The main challenge we face this sprint is understanding a new web technology that a majority of our group has never used (React). The majority of our group has little to no web development experience. Learning this new technology while simultaneously learning how to efficiently work together and combine our code will prove to be the biggest hurdles. We are taking a risk by basing our project on unfamiliar technologies which may delay the initial setup of the project and may force us to push work to later sprints. It is critical that we learn solid web development/React practices as well as learn to work together efficiently so we can move towards Sprint 2 with the core functionality complete and functioning with minimal bugs.

# **Sprint Overview**

## User Story #1

As a user, I would like to be able to register and log into an account for Amora with Google authentication.

#	Description	Time	Owner
1	Set up the Firebase account and database/Google authentication	2	lan
2	Create a user template/structure in Firebase/model	3	Ben
3	Create login/register GUI	2	Zach
4	Link react application to Firebase using Rebase	2	Ben
5	Code controller logic for registering	2	Ben
6	Code controller logic for logging in	2	Ben
7	Code logic to retrieve data and display it once successfully logged in	2	Ben

# Acceptance Criteria

- Given that I have not previously signed into this instance of Amora, when I open the application, I am presented with the option to sign in with Google.
- Given that I am registering for Amora, when I click "register", I should be smoothly routed from Amora to Google sign-in, and back to Amora.
- Given that I have not previously registered for Amora, when I sign in with Google, I am taken to a fresh personal dashboard with no previous tasks.
- Given that I have previously registered for Amora, when I sign in with Google, I am presented with my projects, tasks, and data synced to the current GUI.

## User Story #2

As a user, I would like a clean, easy-to-use interface.

#	Description	Time	Owner
1	Build divisions to represent columns of the screen	3	Zach

2	Code project selector panel	2	Zach
3	Code project panel	2	Zach
4	Test for window resizing adjustments	3	Zach
5	Refine CSS and design of created components	4	Zach

- Given that the basic GUI is complete, when I login to Amora website, I am presented with my personal dashboard, tasks, and space for a future 'My Day' view.
- Given that the GUI is effectively implemented, when I view my dashboard, I will not see any graphical glitches or overlapping of elements.
- Given that I have multiple projects, when I click a new project, the project dashboard updates with the appropriate tasks and users listed.
- Given that I do not take my window to the size of a mobile browser, when I resize my window, the components change size appropriately.

## User Story #3

As a user, I would like to be able to create tasks for myself.

#	Description	Time	Owner
1	Refine task JSX/CSS	3	Zach
2	Write controller code to create a task	3	lan
3	Sync created task with database	3	lan
4	Create Task component and provide methods for User class for access	3	lan
5	Test for properly synced task in database, associated with proper user and project	2	lan

- Given that I am in my personal dashboard, when I click the "+" button, I am presented with a new, blank-slate task.
- Given that I am presented with a new, blank task, when I begin typing, the name field for the task is automatically updated.

- Given that the priority and deadline functionality are implemented, when I create a task, it is automatically given the lowest priority and no deadline.
- Given that the priority and deadline functionality are implemented, when I click on a created task, I can change these fields.
- Given that tasks are properly implemented, when I edit tasks and later return to view them, their information will be as I left it.

## User Story #4

As a user, I would like to be able to create tasks for my project.

#	Description	Time	Owner
1	Add task creation to project in GUI	2	Zach
2	Code controller logic for adding tasks to project	3	Alex
3	Create a task structure in our database	2	Ben

## **Acceptance Criteria**

- Given I am in a project, when I click the "+" button, a new, blank-slate task is created.
- Given that I return to my personal dashboard after creating a project task, the task is displayed among my tasks to complete with the appropriate color.
- Given that I am another user in the project, when I go to the project, the task is automatically updated into my view.
- Given that the priority, deadline, and estimated completion functionality are implemented, when I create a task, it is automatically given the lowest priority, no deadline, and no time to complete.
- Given that the priority, deadline, and estimated completion functionality are implemented, when I click on a created task, I can change these fields.

## User Story #5

As a user, I would like to assign an estimated time to tasks.

#	Description	Time	Owner
1	Design expanding task view that can display information about expected time	4	David

2	Provide method to take user input for estimate time	3	David
3	Update GUI to display estimated time and allow for editing of this value	3	David
4	Implement error message/alert for invalid input	2	David
5	Test for proper syncing of estimated user time with database	1	David

- Given that the task GUI is complete, when I click on a task, it expands to show me more information on the task.
- Given that a task is expanded, when I click on the 'time estimate' field, I am presented with the ability to type in the estimated time, in hours.
- Given that I edit the estimated time for a task, when I view that task in a project dashboard or personal dashboard, regardless of user, I can see the estimated time remaining.
- Given that the "estimate time" feature is complete, when I try to input an invalid time, I will see an error message/alert.

## User Story #6

As a user, I would like to set deadlines for tasks.

#	Description	Time	Owner
1	Allow users to select a date for deadline	3	lan
2	Modify model to accept deadlines for tasks and calculate days left	2	lan
3	Update dashboard GUI to show number of days until tasks are due	2	lan
4	Update expanded task GUI to show exact date of when tasks are due	1	lan
5	Test for syncing of deadline date with database	1	lan

- Given that the deadline GUI is complete, when I view a task I can see how many days are left until it is due.
- Given that the task is expanded, when I view the deadline I can also see the exact date it is due.
- Given that the task is expanded, when on the 'deadline' field, I am presented with the ability to type in a due date.
- Given that I have already added a deadline, when I view additional information about the task, I can edit the deadline.
- Given that I edited the due date for a task, when I view the task in a project dashboard or personal dashboard, regardless of user, I can see the number of days until it is due.

User Story #7
As a user, I would like to mark a task as complete.

#	Description	Time	Owner
1	Create checkbox for tasks to set if each task is completed	4	Eric
2	Add button to submit completion	2	Eric
3	Send data to Firebase to mark task as completed	2	Eric
4	Update GUI to show each task as finished, accurately synced with Firebase in real time	5	Eric
5	Create GUI to ask user how much time the task took them	3	Eric
6	Add error message in GUI for when user inputs an invalid amount of time	1	Eric
7	Add completed task to log GUI	2	Alex
8	Add log/archive of tasks to GUI	2	Zach
9	Test for syncing of "completed" status with database	1	Eric

- Given that the task GUI is complete, when I click on the box next to a task, it shows a check-mark, the task fades, and is no longer in the list.
- Given that the project archive is complete, when the task disappears from the current to-do list, the task appears in the archive marked as complete.
- Given that the task appears in the archive, when I click on the task, it displays the priority, estimated time to complete, due date, and other task characteristics, as well as who completed it.
- Given that a task appears in the archive, when I view it I can unarchive it and it will move back to my active list of tasks.

## User Story #8

As a user, I would like to view a dashboard of upcoming tasks.

#	Description	Time	Owner
1	Create GUI skeleton for dashboard to view	3	Zach
2	Refine GUI of dashboard components	3	Zach
2	Add tasks from Firebase on to the GUI	4	Alex
3	Continually update dashboard based on time, completed tasks, and newly added tasks.	4	Alex
4	Expand and adjust dashboard visual elements as large numbers of tasks are added/removed	3	Alex
5	Test for proper updating of task list information with updates in database	2	Alex

- Given that the personal dashboard is complete, when I click on the icon, the GUI updates to the appropriate page.
- Given that I have personal tasks, when I view my dashboard, my tasks are presented in a personal color.
- Given that I have team projects, when I view my dashboard, project tasks are presented in the appropriate color.
- Given that the GUI is properly synced with Firebase, when I update project information and tasks, my team members will see these changes reflected on their devices.

#### User Story #9

As a user, I would like to see my personal suggested tasks sorted based on due date and priority levels.

#	Description	Time	Owner
1	Develop relevance scoring system to prioritize tasks based on priority, deadline and number of expected hours	2,2	lan, Eric
2	Integrate scoring with other components so scores are recalculated when a task's deadline, priority, etc. are updated	2	lan
3	Add functionality to account for edge cases, such as new/smaller tasks not always appearing lowest in the list despite their low importance	2	lan
4	Code efficient sorting algorithm that rearranges tasks according to their relevance score	1	lan
5	Update GUI to rearrange tasks to reflect changes in database lists	1	lan
6	Test for proper task selection based on priority and due date	1	lan

- Given that the dashboard GUI is complete, when I click on the dashboard, I am presented with my dashboard and all of my tasks sorted according to their characteristics.
- Given that tasks include due dates, when tasks are sorted, tasks with the nearest due date are higher up.
- Given that tasks include priority, when tasks are sorted, tasks with the highest priority are higher up.
- Given that tasks have existed for long amounts of time, when tasks are sorted, time since created is a factor, so that small tasks don't always stay at the bottom of the list.

• Given that tasks involve both priorities and due dates, when tasks are sorted, due date is the most important factor, followed by priority, then time since creation.

## User Story #10

As a user, I would like to create a project and become the manager of that project.

#	Description	Time	Owner
1	Code controller logic for project creation	3	Ben
2	Create unique ID for project and associate it in database structure	1	David
3	Alter model to accept a project list for any user	2	Ben
4	Create database structure for storing projects	1	Ben
5	Update User data to manager level	2	David
6	Test for valid project creation logic, including denying invalid projects	1	Ben

## Acceptance Criteria

- Given that the project GUI is complete, when I click the "+" button in the project sidebar, a new project dashboard is created with no tasks and a random color.
- Given that I was just presented with a blank project, when I being typing, the name field updates with my text.
- Given that project settings are implemented, when I click on the settings icon, I can change the color and name of the project.

## User Story #11

As a user, I would like to join/be invited to projects.

#	Description	Time	Owner
1	Create GUI for inviting other users	3	Eric
2	Create invite controller for project manager	4	Eric

3	Send message to Firebase to add user to project	3	Eric
4	Update appropriate GUI for users in project and newly joined user	3	David
5	Test for edge cases, such as user invited twice, invite invalid user, etc	3	David

- Given that the invite system is complete, when a user clicks the invite button as a project manager, I will be prompted to send invites to other users
- Given that a user has received their invite, when they accept their invite Firebase will be updated
- Given that a user has received their invite, when they accept it every person involved with the project will be notified
- Given that a user has joined a new team, when they attempt to edit a part of a project that doesn't require manager permission they will be allowed to

## User Story #12

As a user, I would like to view the profiles of my teammates.

#	Description	Time	Owner
1	Make profile names clickable and expand/popup into user profile view	3	David
2	Add relevant user information to profile view, such as name and description	2	David
3	Ensure proper syncing of profile data with database	1	David
4	Test for retrieval of profile information from database	1	David

## Acceptance Criteria

• Given that the user profiles are implemented, when I click on a profile name, the GUI will expand/adjust to show their profile.

- Given that the profile expansion is implemented, when I view a profile I will see the user's name and description.
- Given that the profile system is properly developed, when I view a profile the information will be up-to-date with what is stored in the database.

#### User Story #13

As a user, I would like to view a dashboard with tasks assigned for my project.

#	Description	Time	Owner
1	Create visual elements for GUI dashboard	2	Zach
2	Create dashboard controller for navigation	1	Ben
3	Have model store all information displayed in the dashboard	2	Ben
4	Test that the dashboard looks correct and all appropriate information is present	1	Ben

## **Acceptance Criteria**

- Given that the dashboard is complete, when a user accesses their dashboard they will be able to see upcoming tasks.
- Given that other pages are complete as well, when a user tries to navigate to a different page from the dashboard they are rerouted to that page.
- Given that the the manager has other users in the project, when a user clicks on the profile of another, they will be rerouted to that user's profile.
- Given that the dashboard view is complete, users will see a visually pleasing interface that is simple to navigate.

## User Story #14

As a user, I would like the ability to edit the names of tasks.

#	Description	Time	Owner
1	Code controller logic to accept new names for tasks	2	Ben
2	Alter model to allow for changes in names for tasks	1	Ben

3	Sync new name in Firebase	1	Ben
4	Test that the user's view and Firebase is updated with the new name	1	Ben

- Given that the task GUI is complete, when I click on a task, it expands and displays more information, including the task name.
- Given that I view a task in the expanded mode, when I click on the name, it highlights and gives me the ability to edit it.
- Given that I type in a new name, when I press enter, the name is saved and updated in the database.
- Given that I view the project on any member's screen, the task name is updated with my edits.

## User Story #15

As a user, I would like the ability to delete tasks from my project.

#	Description	Time	Owner
1	Code controller logic to remove tasks from a project	4	Alex
2	Remove task from database	1	Alex
3	Ensure project task list is updated for all users	2	Alex
4	Create GUI to confirm deletion	4	Alex
5	Test that tasks are actually deleted from user view and database	1	Alex

- Given that that the user clicks on the delete button, a dialogue will pop up to confirm the deletion.
- Given that deletion is properly implemented, when a user removes a task, it removes the task for all members of the project.
- Given that the user removes a task, it is removed from the database permanently.

- Given that the GUI is complete, when a user views a task they will clearly see a delete button.
- Given that the deletion is confirmed, when the user deletes a task, it will also delete it from the archive.

# Remaining Backlog (33/47 left)

- 1. As a user, I would like to be able to register and log into an account for Amora with Google authentication.
- 2. As a user, I would like to access Amora from desktop and mobile browsers.
- 3. As a user, I would like a clean, easy-to-use interface.
- 4. As a user, I would like to be able to create tasks for myself.
- 5. As a user, I would like to be able to create tasks for my team.
- 6. As a user, I would like to assign an estimated time to tasks.
- 7. As a user, I would like to set deadlines for my tasks.
- 8. As a user, I would like to mark a task as complete.
- 9. As a user, I would like to be able to compare time estimates and actual time taken for tasks.
- 10. As a user, I would like to customize my profile with a profile photo and description.
- 11. As a user, I would like to view statistics on the accuracy of my time estimates.
- 12. As a user, I would like to filter all project tasks by priority, type, time, and deadline.
- 13. As a user, I would like to view a dashboard of upcoming tasks.
- 14. As a user, I would like to see my personal suggested tasks based on due date and priority levels.
- 15. As a user, I would like to add tasks to my 'Today' view.
- 16. As a user, I would like to assign tasks to the hours of my day.
- 17. As a user, I would like to be notified when it is time to start a new task.
- 18. As a user, I would like to set what hours of my day are public 'working hours' for teammates to view.
- 19. As a user, I would like to see the estimated time left in my day.
- 20. As a user, I would like to create a team and become the manager of that team.
- 21. As a user, I would like to join teams.
- 22. As a user, I would like to view a dashboard with tasks assigned for my team.
- 23. As a user, I would like to view the profiles of my teammates.
- 24. As a user, I would like to see my teammates' 'Today' view.
- 25. As a user, I would like to comment on tasks.
- 26. As a user, I would like to see a log of tasks and comments.
- 27. As a user, I would like the ability to edit the names of tasks.

- 28. As a user, I would like the ability to edit comments left on a task.
- 29. As a user, I would like to be suggested meeting times based on everyone's schedules for the day/week.
- 30. As a manager, I would like to view a manager-specific dashboard and updated options on each task.
- 31. As a manager, I would like to assign priority levels to tasks.
- 32. As a manager, I would like to create projects.
- 33. As a manager, I would like to assign tasks to projects
- 34. As a manager, I would like to give tasks specific categories (bug fixes, new feature, etc).
- 35. As a manager, I would like to add project details that will be visible to all team members.
- 36. As a manager, I would like to invite users to join my team.
- 37. As a manager, I would like to make other teammates managers for my team.
- 38. As a developer, I would like to have clean, fluid code.
- 39. As a developer, I would like to have well-documented code.
- 40. As a developer, I would like to have a list of bugs and bug fixes.
- 41. As a developer, I would like to have descriptive commit comments that accurately describe alterations.
- 42. As a user, I would like to be given a productivity score to compare my performance with co-workers, if time allows.
- 43. As a user, I would like to see events in my Google calendar for each day, if time allows.
- 44. As a user, I would like to create events for my Google calendar for each day, if time allows.
- 45. As a manager, I would like suggestions on which categories my team members appear to excel at, if time allows.
- 46. As a manager, I would like suggestions on which team member to assign a specific task to, if time allows.
- 47. As a user, I would like an entirely offline version of Amora for independent use, if time allows.