PLANORAMA

Sprint 1 Planning Document

Team 22: Sruthi Bhamidipati, Yana Sheoran, Vihaan Khajanchi, Jack Kenny, Sejun Her

Sprint Overview

This sprint will focus on implementing core task management functionalities, including task creation, editing, deletion, and organization features. The team will develop a user-friendly task page where users can view, update, and categorize their tasks efficiently. By incorporating features like drag-and-drop reordering, filtering, and task prioritization, the sprint aims to enhance usability and create a more dynamic and interactive task management experience. These features will ensure that users can not only manage their to-do lists effectively but also customize their workspace to suit their needs.

In addition to task management, this sprint will introduce profile management capabilities, allowing users to personalize their accounts by uploading profile pictures, managing achievements, and adjusting settings such as font size, spacing, and color themes. The settings menu will provide further customization options, including task view preferences and accessibility features. The implementation of account-related features, such as user authentication, login, and deletion, will also be prioritized to establish a secure and seamless user experience.

Key efforts will be directed toward ensuring data persistence and synchronization across sessions, allowing users to maintain their preferences and task data even after logging out. A significant focus will be on implementing robust UI interactions that provide real-time feedback, ensuring smooth task reordering and modifications. Debugging functionalities through unit testing will play a crucial role in identifying and resolving potential issues early in development. The project scope balances frontend UI development with backend logic, ensuring an intuitive experience while maintaining reliable data handling. Challenges such as real-time updates, database consistency, and intuitive design elements will be addressed through structured testing and iterative development, ensuring a stable and well-functioning application by the end of the sprint.

Scrum Master: Sruthi Bhamidipati

Meeting Plan: T/Th 3:30-4:00 pm

Risks and Challenges:
- Data Persistence & Synchronization: Ensuring that user actions persist after logout and across multiple sessions may require careful database handling.
- UI/UX Complexity: Features like drag-and-drop, color coding, and real-time status updates must be visually clear and responsive to avoid confusing interactions.
- Undo & Archival Functionality: Implementing an efficient undo system for task deletions and ensuring seamless archiving of completed tasks without performance issues.
- Task Categorization & Filtering: Developing a flexible filtering system that allows multiple simultaneous criteria (e.g., priority, tags, color) without slowing down performance.
- Security & Account Management: Handling user authentication, ensuring password security, and properly deleting user data upon account removal while maintaining database integrity.
- Testing & Debugging: With multiple interdependent features, extensive unit testing will be necessary to ensure smooth performance and prevent UI or data-related errors.
- Time Constraints: Given the scope of the sprint, balancing feature completion with debugging and optimization may pose a challenge, requiring prioritization of core functionalities.

Current Sprint Detail

User Story #1

As a user, I would like a task page so I can view all my tasks.

#	Description	Estimated Time	Owner
1	Create a background that will hold the tasks.	1 Hr	Vihaan
2	Tasks that are created or removed will show up or disappear from this page, and be updated when edited.	3 Hrs	Vihaan
3	Each task should have sections for its description, priority, and deadline.	2 Hrs	Vihaan
4	Should be buttons that will be used to complete, edit, delete, or create tasks (just UI, not functionality).	1 Hr	Vihaan
5	Debug and test with unit tests.	2 Hrs	Vihaan

Acceptance Criteria:
- Given the background UI is implemented, when the user enters the task list page, they should see labels for where their tasks and task information will be.
- Given the task list is updated, when tasks are created, edited, or deleted, then they should appear on this page.
- Given the buttons UI is implemented, when the user has tasks on their task page, then they should see buttons with appropriate labels.

User Story #2

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

#	Description	Estimated Time	Owner
1	Make UI for the main task board that allows for easy task creation.	4 Hrs	Sruthi
2	Implement task creation logic and ensure tasks can be added dynamically.	3 Hrs	Sruthi
3	Ensure task UI design is intuitive and responsive.	2 hrs	Sruthi
4	Debug and test task creation functionality with unit tests.	2 Hrs	Sruthi

Acceptance Criteria:
- Given that the UI is functional, when a user presses the "Create Task" button, then another UI should appear with information fields for the task.
- Given that the task creation logic is implemented correctly, when a user submits a new task, then it should be saved and displayed immediately.
- Given that the task creation UI appears, when a user begins to update the new tasks information, then the user will be able to scroll down to reach fields that are below the UI box.

User Story #3

As a user, I would like to be able to edit tasks.

#	Description	Estimated Time	Owner
1	Implement task editing functionality, allowing users to update task details.	4 Hrs	Sruthi
2	Ensure tasks within the database update once edits are submitted.	1 Hrs	Sejun
3	Debug and test task editing and organization features with unit tests.	2 Hrs	Sejun

Acceptance Criteria:
- Given that the editing functionality is implemented, when a user selects a task, then they should be able to modify its title, description, and priority.
- Given that a user is editing a task, when a user submits the edits, then all changes should show up in the task list.
- Given that task persistence is ensured, when a user logs out and logs back in, then the edited task should retain its updated details.

User Story #4

As a user, I would like to be able to delete tasks.

#	Description	Estimated Time	Owner
1	Implement task deletion functionality, allowing users to remove tasks.	4 Hrs	Sruthi
2	Ensure task data is stored in a database and persists across sessions.	3 Hrs	Sruthi
3	Implement undo functionality for accidental deletions.	2 Hrs	Jack
4	Debug and test task deletion and persistence with unit tests.	1 Hr	Jack

Acceptance Criteria:
- Given that task deletion is implemented, when a user deletes a task, then it should be permanently removed from the UI.
- Given that data persistence is ensured, when a user logs out and back in, then all tasks should remain in the same state.
- Given that the undo functionality is working properly, when a user undos a deletion, then the task will appear in the task list in its former state.
- Given that the undo button is available, when a user deletes a task, then they should be presented with a temporary undo option before the deletion becomes permanent.

User Story #5

As a user, I would like to drag and drop tasks so that I can easily visualize my task order.

#	Description	Estimated Time	Owner
1	Implement drag-and-drop functionality for task reordering.	4 Hrs	Sejun
2	Implement real-time visual feedback when a task is dragged.	2 Hrs	Sejun

#	Description	Estimated Time	Owner
3	Implement database logic to save the updated task order.	2 Hrs	Sejun
4	Debug and test with unit tests.	2 Hrs	Sejun

Acceptance Criteria:
- Given that the drag and drop capabilities are functioning, when a user drags or drops, then it should visually appear to have been "picked up."
- Given that drag-and-drop reordering is functional, when a user rearranges their tasks, then the new order should persist across sessions.
- Given that tasks being "picked up" has been implemented properly, when a user drags it across other tasks, then the tasks should move out of the way to show the user what it would look like before they drop it there.
- Given that the updated task order is stored correctly, when a user refreshes the page or logs back in, then the task order should remain as they last set it.

User Story #6

As a user, I would like to categorize tasks by priority, tags, or deadlines so that I can make decisions on which order to take the tasks.

#	Description	Estimated Time	Owner
1	Implement a tagging system for tasks, allowing users to assign priorities and deadlines.	4 Hrs	Jack
2	Add filtering and sorting options to the UI to allow users to view tasks by category.	4 Hrs	Jack
3	Ensure task properties persist correctly in the database.	4 Hrs	Jack
4	Debug and test with unit tests.	2 Hrs	Jack

Acceptance Criteria:
- Given that the task categorization system is implemented correctly, when a user assigns a priority or tag, then it should be reflected in the UI.
- Given that filtering and sorting options exist, when a user applies a filter, then only the matching tasks should be displayed.
- Given that task categorization persists in the database, when a user refreshes the page or logs back in, then all assigned priorities, tags, and deadlines should remain as they were.
- Given that multiple filters can be applied, when a user selects more than one filter (e.g., high priority and due this week), then only tasks matching both criteria should be shown.
- Given that task properties are editable, when a user modifies a task's priority, tag, or deadline, then the changes should be immediately reflected in the UI and saved in the database.

User Story #7

As a user, I would like to color code tasks based on categories so that I can quickly identify them.

#	Description	Estimated Time	Owner
1	Add button to task UI that shows a popup to choose task color.	1 Hr	Sruthi
2	Add UI for choosing the color of a task from a predefined set of options.	1 Hr	Sruthi

#	Description	Estimated Time	Owner
3	Have task information be updated accordingly and saved to the database.	2 Hrs	Sruthi
4	Allow filtering of tasks based on their color.	2 Hrs	Sruthi
5	Debugging and unit tests.	1 Hrs	Sruthi

Acceptance Criteria:
- Given that the choose color button is added, when the user presses the button, then a popup should appear, allowing the user to choose a color for the task from a predefined set of options.
- Given that the user chose a color for the task, when the user views the task page, then the task should be set to the color the user chose.
- Given that filtering by color is added, when the user filters tasks to a certain color, then only tasks that are set to that color should appear.

User Story #8

As a user, I would like to set different statuses for tasks (in-progress, blocked, waiting for review).

#	Description	Estimated Time	Owner
1	Add a button to task UI to allow the user to change the status of the task.	2 Hr	Sruthi
2	Add UI for setting/changing status of a task.	3 Hrs	Jack
3	Have task information be updated accordingly and the information saved to the database.	2 Hrs	Jack
4	Debugging and unit tests.	2 Hrs	Jack

Acceptance Criteria:
- Given the set-status button is added, when the user clicks the button, then a popup should appear allowing the user to set the status of a task.
- Given that the real-time visual update is implemented, when a user changes a task status, then it should be reflected dynamically in the UI, such as through a Gantt chart or status labels.
- Given that task statuses are properly stored, when a user refreshes the page or logs back in, then the task should maintain its previously set status.

User Story #9

As a user, I would like to be able to filter tasks by completion status.

#	Description	Estimated Time	Owner
1	Implement the filter button above tasks.	1 Hr	Sejun
2	Save filter status even after the app has been closed or the user has logged out.	1 Hrs	Sejun
3	Implement sorting of tasks based on what the user has picked.	3 Hrs	Sejun
4	Debugging and unit tests.	2 Hrs	Sejun

Acceptance Criteria:

- Given that the filter button is added, when the user clicks the button, then a scrollable UI will appear where the user can pick their preferred method of filtering their tasks.
- Given that the filter state saves, when the user closes the app or logs out, then it should stay filtered to what the user left it as.
- Given that a task has a set status, when the user filters their task page by status, then all tasks with the corresponding status should appear first.

User Story #10

As a user, I would like to archive completed tasks so that I can keep my workspace clutter-free.

#	Description	Estimated Time	Owner
1	Implement a "Mark as Complete" button for tasks.	2 Hrs	Sejun
2	Add an "Archive" section where completed tasks can be stored and accessed later.	3 Hrs	Sejun
3	Implement an auto-archive function that moves completed tasks after a set time.	3 Hrs	Sejun
4	Ensure that archived tasks are retrievable but do not clutter the active task board.	2 Hrs	Sejun
5	Debug and test with unit tests.	2 Hrs	Sejun

Acceptance Criteria:

- Given that a task has been completed, when the user clicks "Mark as Complete," then the task should be visually indicated as completed.
- Given that the archive feature is functional, when a user archives a completed task, then it should move to the archive section.
- Given that automatic archival is enabled, when a task remains completed for a set period, then it should automatically move to the archive.

User Story #11

As a user, I would like to access a settings option that allows me to customize my experience, including enabling dark mode or adjusting the app theme, so that I can work in my preferred visual setting.

#	Description	Estimated Time	Owner
1	Create a general UI for the settings menu with placeholder options.	2 Hrs	Yana
2	Create a settings button on the main task page.	1 Hrs	Yana
3	Sync settings button with UI so that clicking it opens the settings menu.	1 Hrs	Yana
4	Implement at least one functional setting (e.g., toggle dark mode or change task view).	2 Hrs	Yana
5	Ensure user settings persist after closing or logging out.	2 Hrs	Yana
6	Debug and test with unit tests.	2 Hr	Yana

Acceptance Criteria:

- Given that the settings interface is implemented, when the settings button is pressed, then a scrollable menu with various settings should appear.
- Given that functional settings are added, when a user updates a setting (e.g., toggles dark mode), then the UI should reflect the change immediately.
- Given that settings persistence is implemented, when a user logs out and logs back in, then their previously selected settings should remain saved.
- Given that a settings structure is in place, when new options need to be added later, then they should be easily extendable without major modifications.

User Story #12

As a user, I would like to change the font size and spacing so that I can improve readability based on my preference.

#	Description	Estimated Time	Owner
1	Create a button for the font in the settings menu.	1 Hrs	Jack
2	Create font options that when selected change all text within the app.	2 Hrs	Jack
3	Create spacing options that space text according to selection across the whole app	2 Hrs	Jack
4	Create a button for the spacing in the settings menu.	1 Hrs	Jack
5	Debug and test with unit tests.	1 Hr	Jack

Acceptance Criteria:

- Given the font button works, when the font is pressed, then a scrollable menu with the various fonts will appear.
- Given the spacing button works , when the spacing is pressed, then a scrollable menu with the various spacings will appear.
- Given that the font and spacing is updated properly, when the user selects their preferred setting, the entire app's text will be updated accordingly.

User Story #13

As a user, I would like to be able to change my profile picture so that I can customize my account.

#	Description	Estimated Time	Owner
1	Add a generic profile icon.	1 Hrs	Yana
2	Add a profile page UI	2 Hrs	Yana
3	Create a button to change the generic profile icon.	1 Hrs	Yana
4	Implement the ability to upload photo from your device and save that photo as the profile picture.	2 Hrs	Yana
5	Debug and test with unit tests.	2 Hr	Yana

Acceptance Criteria:

- Given that the profile button is added, when clicking the icon, then the user will be navigated to the profile page.

- Given that uploading a photo works, when a user selects a photo from their device, then they will be presented with an option to choose what part of the photo will be their profile icon.
- Given that the profile picture is saved correctly, when a user logs out and logs back in, then their selected profile picture should persist.

User Story #14

As a user, I'd like to be able to navigate to a profile tab where I can see relevant information about my account.

#	Description	Estimated Time	Owner
1	Implement basic profile page structure and navigation.	2 Hrs	Yana
2	Display username and profile photo on profile page.	3 Hrs	Yana
3	Display user achievements such as badges and streaks.	2 Hrs	Yana
4	Add buttons to edit profile information (UI, not functionality).	1 Hr	Yana
4	Add buttons to change what badges or streaks you display (UI, not functionality).	2 Hrs	Yana
6	Debug and unit tests.	2 Hrs	Yana

Acceptance Criteria:
- Given that user information is displayed on the profile page, when a user navigates to their profile, then they should see their username, profile photo, and achievement slots.
- Given that UI elements for editing are in place, when a user views the profile page, then they should see buttons to edit their profile information.
- Given that profile photo functionality is implemented, when a user uploads a profile picture, then the image should update and be displayed on their profile page.
- Given that achievement customization is available, when a user selects which badges or streaks to display, then their profile should update accordingly.
- Given that profile data persists, when a user logs out and logs back in, then their selected profile settings should remain unchanged.

User Story #15

As a user, I would like to create an account with unique log in credentials.

#	Description	Estimated Time	Owner
1	Create general UI that has an account creation button.	5 Hrs	Vihaan
2	Make sure all credentials are unique and link them to each user.	3 Hrs	Vihaan
3	Basic password check to ensure security during password creation.	2 Hrs	Vihaan
4	Create unit tests to debug features and ensure uniqueness.	2 Hrs	Vihaan

Acceptance Criteria:

- Given the creation UI is implemented correctly, when a user creates a new account, then they will be prompted with another UI to put in their account creation details.
- Given the password check is working, when a user inputs a password, then they will be prompted with text that tells them what their password is lacking or that their password is good.
- Given the repeated password confirmation is required, when a user inputs a mismatching repeated password, then they should receive an error message prompting them to enter matching passwords.

User Story #16

As a user, I would like to log in to my account when I return.

#	Description	Estimated Time	Owner
1	Create general login button on the same general UI as the creation button.	1 Hrs	Vihaan
2	Allow for data to be connected to unique credentials so users can log into multiple devices.	4 Hrs	Vihaan
3	Create unit tests to debug features and ensure uniqueness.	2 Hrs	Vihaan

Acceptance Criteria:

- Given the login UI is implemented correctly, when a user logs in, then they will be prompted with another UI to put in their login credentials.
- Given that the data is synced properly, when a user inputs a wrong username or password, then they will be shown text that indicates that the wrong info was input.

User Story #17

As a user, I would like to be able to delete my account if I no longer want to use the app.

#	Description	Estimated Time	Owner
1	Delete account button within user settings.	1 Hrs	Vihaan
2	Manage data that is removed from the database after account deletion properly.	3 Hrs	Vihaan
3	Create unit tests to debug features and ensure uniqueness.	2 Hrs	Vihaan

Acceptance Criteria:

- Given that the account deletion button is correctly implemented, when the deletion button is pressed, then a warning UI will appear to ensure it is what they want.
- Given that the account deletion warning button is correctly implemented, when the deletion warning button is pressed, then the user's account and data will be deleted and those user credentials will be allowed for use by other users.
- Given that the account was properly deleted, when a user tries to log back into said account, then text will appear telling the user that the account does not exist/info is wrong.

Backlog

Functional

Task Management

1. ~~As a user, I would like a task page so I can view all my tasks.~~
2. ~~As a user, I would like to be able to create tasks.~~
3. ~~As a user, I would like to be able to edit tasks.~~
4. ~~As a user, I would like to be able to delete tasks.~~
5. As a user, I would like to be able to create subtasks within a task.
6. ~~As a user, I would like to drag and drop tasks so that I can easily visualize my task order.~~
7. ~~As a user, I would like to categorize tasks by priority, tags, or deadlines so that I can make decisions on which order to take the tasks.~~
8. ~~As a user, I would like to color code tasks based on categories so that I can quickly identify them.~~
9. As a user, I would like to set default task templates so that I can quickly create repetitive tasks.
10. ~~As a user, I would like to set different statuses for tasks (in-progress, blocked, waiting for review).~~
11. ~~As a user, I would like to be able to filter tasks by completion status.~~
12. ~~As a user, I would like to archive completed tasks so that I can keep my workspace clutter-free.~~
13. As a user, I would like to be able to roll over incomplete tasks to the following day, either automatically or manually.
14. As a user, I would like to be able to set task dependencies to organize connected tasks better.
15. As a user, I would like to schedule tasks for a future start date so that I can plan ahead without cluttering my current task list.
16. As a user, I would like to receive smart suggestions for breaking up long tasks into smaller subtasks

Goal-Setting & Progress Tracking

17. As a user, I would like to jot notes down about tasks that I have or have not completed so that I can reference thoughts for later.
18. As a user, I would like to track undesirable habits/tasks so that I can check progress on if I'm lowering how unproductive I am (if time allows).

Time-Tracking & Productivity Insights

19. As a user, I would like to log time spent on tasks so that I can keep track of progress.
20. As a user, I would like to be able to visualize how my time is spent across different categories (if time allows).
21. As a user, I would like to set an estimated time and an actual time for each of my tasks, and see the difference between the two.
22. As a user, I would like to receive a weekly summary of my most and least productive days so that I can adjust my workflow.
23. As a user, I would like to compare my productivity across different weeks/months to track my long-term progress.
24. As a user, I would like to check time spent on breaks so that I can maintain a healthy balance.
25. As a user, I would like to be given gentle reminders through pop-ups or alerts suggesting I take breaks after long periods of continuous work.
26. As a user, I would like to receive productivity tips based on my task history (if time allows).

Gamification & Team Features

27. As a user, I would like to see a streak tracker to visualize my consistent task completion.
28. ~~As a user, I'd like to be able to navigate to a profile tab where I can see relevant information about my account.~~
29. As a user, I would like to be able to share or display my streak or other object on my profile.
30. As a team member, I would like to view a productivity leaderboard to foster a sense of competition and teamwork.
31. As a team member, I would like to send and receive kudos for completed tasks to encourage engagement.
32. As a team leader, I would like to assign weighted points to tasks to reflect their complexity.
33. As a user, I would like to be able to search for other users so that I can use other functionality like teams.
34. As a user, I would like to be able to be a contributor (leader or member) for multiple unique teams.

35. As a user, I would like to be able to access a unique team page for each of the teams that I am a part of to see team tasks and contributors.
36. As a team leader, I would like to create a "team" so that I can manage group tasks.
37. As a team leader, I would like to be able to add users to a team.
38. As a team leader, I would like to be able to assign tasks.
39. As a team leader, I would like to set permissions for different team members so that I can control who edits tasks.
40. As a team leader, I would like to be able to view team members' activity.
41. As a team leader, I would like to track the time my members are spending on tasks.
42. As a team member, I would like to be able to add tasks.
43. As a team member, I would like to be able to claim tasks.
44. As a team member, I would like to mark team tasks as completed.
45. As a team member, I would like to leave comments on tasks so that I can communicate updates.
46. As a team member, I would like to tag people so that they can be notified when a task needs their attention.

User Preferences & Accessibility

47. ~~As a user, I would like to create an account with unique log in credentials.~~
48. ~~As a user, I would like to log in to my account when I return.~~
49. As a user, I'd like my data to be synced to my account so that signing in somewhere new shows me my tasks.
50. As a user, I would like to be able to use multiple devices so that I can be productive and check my tasks no matter my situation.
51. ~~As a user, I would like to access a settings option that allows me to customize my experience, including enabling dark mode or adjusting the app theme, so that I can work in my preferred visual setting.~~
52. ~~As a user, I would like to change the font size and spacing so that I can improve readability based on my preference.~~
53. As a user, I would like to choose what view I am in (calendar, timeline, etc.) so that it can be in my most preferred state.
54. As a user, I would like to set focus mode where notifications are muted for deep working sessions.
55. As a user, I would like to receive notifications so that I can be reminded of important tasks and stay productive.
56. As a user, I would like to be able to change my display name for different teams to best suit each team.
57. As a user, I would like to be able to change my profile picture so that I can customize my account.
58. ~~As a user, I would like to be able to delete my account if I no longer want to use the app.~~

Integrations & Data Export

59. As a user, I would like to integrate Planorama with third-party tools like Google Calendar or Slack for streamlined workflow (if time allows).
60. As a user, I would like to export my task data in CSV or PDF format for external analysis (if time allows).

Non-Functional

1. The platform must ensure tasks and insights load within 500ms for an optimal user experience while supporting up to 10,000 simultaneous users with minimal latency.
2. The architecture should be scalable with cloud-based solutions to accommodate a growing user base and new features.
3. A responsive design must ensure compatibility across desktop and mobile devices, while an intuitive and consistent user interface minimizes the learning curve.
4. To ensure data security, sensitive user information must be protected with end-to-end encryption, preventing unauthorized access. Additionally, all user actions should be authenticated using OAuth 2.0 standards.
5. The platform must maintain 99.9% uptime, ensuring high availability and reliability for users. Any downtime should be limited to scheduled maintenance periods, minimizing disruptions and optimizing system performance.