ITEMBNB

Sprint 1 Planning Document
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Sprint Overview

In this sprint, we hope to set up a skeleton for the website that we can work with in the future. We want to successfully create a homepage and signup/login features for users with all the relevant functionality. Additionally, we want users to be able to create request and item posts which would be displayed on their homepage, as well as favorite item posts that interest them. We would also like users to be able to view and modify their profiles.

Scrum Master: Jun Shern Lim

Meeting Plan: Tuesdays 11 a.m. and Saturdays at 2 p.m.

Risk and Challenges:

This is the first sprint and we don't have an established foundation to build upon. We are creating the project from scratch using React and MongoDB, technologies we are not fully familiar with. This presents challenges in terms of time constraints and has the potential to lead to us having to devote extra time to learning about this new technology. The work we do in this sprint will serve as a starting point for further development in subsequent sprints, so we must ensure that the foundation of our code base is well built. It is important for us to successfully implement our user stories so we can build upon them in future sprints.

User Story #1

As a user, I would like to register for an Itembnb account.

No.	Description	Estimated Time	Owner
1	Create a sign-up page with all the necessary fields (such as email, name, and password) with the submit button.	3 hours	Ali
2	Create a function in the frontend to automatically validate all the inputs in the sign-up fields on the client side.	2 hours	Ali
3	Create a profile picture section where users can upload images from their local file system.	1 hour	Ali
4	Create an API function in the backend to send the create query to the database.	2 hours	Jun
5	Create an API function to check if the email has been registered before and send a success/failure alert message to the user indicating if the sign up was successful from the backend.	2 hours	Jun

Acceptance criteria:
1. Given the user inputs are all valid, when the user clicks on the submit button, the user will be able to see a success alert message and be redirected to the homepage.
2. Given the user has successfully submitted user data, the database should be updated with the new user data.
3. Given that not all user inputs are valid (i.e. invalid email format or empty field), when the user clicks on the submit button, the user will receive an error message for those fields.
4. Given that a user's email is already in the database, when the user clicks submit, the user will receive an error message to note that the email has already been taken.
5. Given the profile picture section is set up correctly, when the user wants to upload a picture, the user will be able to select an image from their file system to be uploaded.

User Story #2

As a user, I would like to log in and log out of my account.

No.	Description	Estimated Time	Owner
1	Create a sign-in page with all the necessary fields (such as email and password) with the submit button and a sign up button (if the user wants to register for an account instead).	2 hours	Ali
2	Validate the user login credentials in the front end after getting the stored details in the database	2 hours	Ali
3	Create an API function in the server-end to send the read query to the database to get the user data and validate.	2 hours	Jun
4	Create a success/failure alert message to tell the user if the sign-in is successful.	1 hour	Ali

Acceptance criteria:
1. Given the user's credentials (email and password) are correct, when the user clicks on the submit button, the user will be able to see a success alert message and be redirected to the homepage.
2. Given the user's credentials (email and password) are not correct, when the user clicks on the submit button, the user will receive an error message.
3. Given the user inputs are not all filled in (i.e there are empty fields), when the user clicks submit, the user will not be able to submit at all and receives an error message to fill in all the messages.
4. Given the sign-in page is successfully loaded, if the user wants to sign-up instead, when the user clicks on the sign-up button, it will redirect the user to the sign-up page.

User Story #3

As a user, I would like to view/edit/delete my own profile.

No.	Description	Estimated Time	Owner

1	Create a clickable avatar profile in the homepage that redirects to my user profile.	1 hour	Ali
2	Create a user profile page with all the user data displayed.	3 hours	Sara
3	Create a function to get the necessary data via HTTP request to the server on the client side.	2 hours	Sara
4	Create an edit button that allows users to toggle to edit mode in their profile.	1 hour	Sara
5	Create a save button to save changes made to user profile	1 hour	Sara
6	Add a profile picture section where users can upload images from their local file system.	0.5 hour	Sara
7	Create a function in the front end that automatically validates all the inputs in the fields on the client side.	1 hour	Sara
8	Create a delete feature that asks for a confirmation before deleting a user's profile.	2 hours	Sara
9	Create functions in the backend to send queries and changes to the database, as well as retrieve data from the database to be sent to the front end.	3 hours	Jun

Acceptance criteria:
1. Given the home page is successfully loaded, when the user clicks on their avatar image, the user will be redirected to their profile page containing their details.
2. Given that the user's profile page is implemented correctly, when the user clicks on the edit button, the user's profile will enter edit mode.
3. Given that the edit feature is working correctly, when the user edits a field and clicks save, the modified fields will be updated to the latest values.
4. Given that the input validation feature is working correctly, when the user incorrectly edits a field (i.e. invalid or no input), the user will receive an error message for that field.
5. Given the profile picture section is set up correctly, when the user wants to upload a picture, the user will be able to select an image from their file system to be uploaded.

6. Given that the delete feature is implemented correctly, when a user clicks on the delete button, and then clicks on the confirmation, the user's profile will be deleted and the user will be logged out automatically.

User Story #21

As a borrower, I would like to create an item request for an item I want to borrow that is not listed on the site.

No.	Description	Estimated Time	Owner
1	Create a "Create Request Post" page with all the necessary fields to create a request post.	4 hours	Sara
2	Create an API function in the server-end to send the "create request post" query to the database.	1 hour	Jun
3	Create a function in the front end to validate user input.	1 hour	Sara
4	Create a success/failure alert message to tell the user if the request posting is successful.	1 hour	Sara

Acceptance criteria:
1. Given the "Create Request Post" page is implemented correctly, when the user clicks on the create request button in the navigation panel, the user will be directed to the "Create Request Post" page with all the necessary fields and a submit button.
2. Given the "Create Request Post" page is implemented correctly, when the user fills in all fields with valid inputs and clicks the submit button, a success message will pop up and the user will be redirected to their homepage.
3. Given the "Create Request Post" page is implemented correctly, when the user fills in all fields with valid inputs and clicks the submit button, the request post will be created in the database and will appear in the homepage feed.
4. Given the validation feature is implemented correctly, when the user inputs invalid value in any of the fields, the user will be able to see an error message for those fields.

User Story #22

As a borrower, I would like to edit/delete my request post.

No.	Description	Estimated Time	Owner
1	Create the "Modify Request Post" page with all the necessary fields populated with the existing values from the request.	4 hours	Sara
2	Create a function in the front end that automatically validates all input fields on the client side.	2 hours	Sara
3	Create a success/failure alert message to tell the user if the item request edit is successful.	1 hour	Sara
4	Create a delete feature that asks for a second confirmation for the item request deletion.	2 hours	Sara
5	Create functions in the backend to send queries and changes to the database, as well as retrieve data from the database to be sent to the front end.	2 hours	Jun

Acceptance criteria:
1. Given the "Modify Request Post" page is implemented correctly, when the user clicks on a request post in their profile page, the user will be redirected to the specific item request page with all the details populated in their respective fields.
2. Given the edit feature is implemented correctly, when the user toggles the edit button, the fields become editable and the user can edit the values in those fields.
3. Given that the save feature is implemented correctly, when the user is done with the edits and the user clicks the save button, the changes are reflected in the database (updated in the UI as well), and the user will see a success message.
4. Given the delete feature is implemented correctly, when a user clicks on the delete button, and then clicks on the confirmation, the request post will be deleted.
5. Given the function to validate inputs is implemented correctly, when there is an invalid input in any of the fields when the user tries to save, the user will see an error message.

User Story #25

As a lender, I would like to post an item with a price and assign it to predefined categories.

No.	Description	Estimated Time	Owner
1	Create a "Create Item Post" page with all the necessary fields with a submit button.	4 hours	Ming
2	Create a function in the front end that automatically validates all the inputs in the fields on the client side.	2 hours	Sara
3	Create a multi-select feature for items categories to allow users to easily select them.	2 hours	Ming
4	Create an API function in the backend to send the "create item post" query to the database.	1 hours	Jun
5	Create a success/failure alert message to tell the user if the item posting is successful.	1 hour	Ming

Acceptance criteria:
1. Given the "Create Item Post" page is implemented correctly, when the user clicks on the create item post button in the navigation panel, the user will be directed to the "Create Item Post" page with all the necessary fields and a submit button.
2. Given that the multi-select category system is implemented correctly, when the user is selecting categories, they should be able to select anywhere between one to three predefined categories for their item (no selection will result in an error during submission), and the item will be categorized as such in the database.
3. Given the "Create Item Post" page is implemented correctly, when the user fills in all fields with valid inputs and clicks the submit button, a success message will pop up and the user will be redirected to their homepage.
4. Given the "Create Item Post" page is implemented correctly, when the user fills in all fields with valid inputs and clicks the submit button, the item post will be created in the database and will appear in the homepage feed.
5. Given the validation feature is implemented correctly, when the user inputs invalid value in any of the fields, the user will be able to see an error message for those fields.

User Story #26

As a lender, I would like to add a thumbnail image and multiple preview images to my posted item.

No.	Description	Estimated Time	Owner
1	Create an item picture section where users can upload multiple images from their local file system.	3 hours	Ming
2	Make a scrolling feature to move between images.	3 hours	Ming
3	Create a feature that lets users delete or replace images they've uploaded.	3 hours	Ming
4	Create a feature that lets users select the order in which the images will be displayed.	3 hours	Ming
5	Implement validation to check if the input image has a valid file type.	1 hour	Ming

Acceptance criteria:
1. Given that the image upload feature is correctly implemented, when the user clicks the upload button, they should be able to upload local images from their computer.
2. Given that the image deletion feature is correctly implemented, when the user clicks the delete button, they should be able to delete the image.
3. Given that the image scrolling feature is correctly implemented, when the user views all their uploaded preview images, they should be able to scroll through them.
4. Given that the image reordering feature is correctly implemented, when the user views all their uploaded preview images, they should be able to reorder them.
5. Given that the validation function is working correctly, when the user does not upload a valid JPEG or PNG file, they will receive an error message.

User Story #27

As a lender, I would like to edit/delete my posted item.

No.	Description	Estimated Time	Owner
1	Create a "Modify Item Post" page where all the relevant fields/tags can be edited.	3 hours	Ming
2	Add a multi-select feature for item categories to allow users to easily modify them.	0.5 hours	Ming
3	Create a delete feature that asks for a second confirmation for the item deletion.	2 hours	Ming
4	Create a function in the front end that automatically validates all the inputs in the fields on the client side.	2 hours	Sara
5	Create an API function in the backend to send the update/delete item post query to the database.	2 hours	Ming
6	Create a success/failure alert message to tell the user if the item posting edit is successful.	1 hour	Ming

Acceptance Criteria:
1. Given that the "Modify Item Post" page is implemented correctly, when the user clicks on the item post in their profile page, the user will be redirected to the specific "Modify Item Post" page with all the details populated in their respective fields.
2. Given the edit button is implemented correctly, when the user toggles the edit button, the fields become editable and the user can edit the values in those fields.
3. Given the save feature implemented correctly, when the user is done with the edits in the page and the user clicks the save button, the changes are reflected in the database (updated in the UI as well), and the user will see a success message.
4. Given that the multi-select category system is implemented correctly, when the user is selecting categories, they should be able to select anywhere between one to three predefined categories for their item (no selection will result in an error during submission), and the item will be categorized as such in the database.

5. Given that the function to validate inputs is implemented correctly, when there is an invalid input in any of the fields when the user tries to save, the user will see an error message.
6. Given that the delete feature is implemented correctly, when a user clicks on the delete button, and then clicks on the confirmation, the item post will be deleted.

User Story #8

As a user, I would like to see a homepage with a feed for items up for borrowing and items that people have requested.

No.	Description	Estimated Time	Owner
1	Create an API function on the backend to get recent item posts and requests from the database to be sent to the client.	2 hours	Jun
2	Create two sections to display item posts and request posts, so users can view either.	2 hours	Ali
3	Create a scrollable responsive homepage with item posts and item requests formatted with some details and clickable buttons.	4 hours	Ali
4	Create a navigation panel that redirects the user to different pages.	2 hours	Ali

Acceptance criteria:
1. Given the home page is implemented correctly, when the user first views the home page, the user will be able to automatically view all recent item posts with the necessary details.
2. Given the home page is implemented correctly, item posts and item requests will be displayed correctly in their respective sections.
3. Given the home page is implemented correctly, when the user is viewing the home page, the user will be able to scroll through item posts and request posts.
4. Given the home page is implemented correctly, when the user is viewing the home page, the user will see a navigation panel on the top with his/her avatar image and different buttons to navigate to different pages.
5. GIven that the navigation panel is implemented correctly, when the user clicks on the app's logo/icon, the user will be redirected back to the homepage.

User Story #11

As a borrower, I would like to view a posted item's details - description, lender info, date, etc.

No.	Description	Estimated Time	Owner
1	Create an item post page that contains pertinent information about the item.	4 hours	Ali
2	Create a function to get the necessary item and lender data via HTTP request to the server on the client side.	1 hours	Ali
3	Create a preview image UI that lets the user click through all an item's preview images with an image carousel.	3 hours	Ali
4	Create a lender preview section in the page that has a preview of information about the lender.	2 hours	Ali

Acceptance criteria:
1. Given that the item post's page is implemented correctly, when the user clicks on an item post, they should be redirected to the item's full page.
2. Given that item details are implemented correctly, when the user is viewing an item post's full page, they should be able to see all details associated with the item.
3. Given that lender previews are implemented correctly, when the user is viewing an item's full page, they should be able to see a preview of the lender's profile.
4. Given that the item's full page is implemented correctly, the user should be able to scroll through the preview images displayed on the page.

User Story #12

As a borrower, I would like to favorite a posted item to save it for later.

No.	Description	Estimated Time	Owner
1	Create an appropriate favorite icon for each item post that can be toggled.	2 hours	Jun
2	Make the favorite icon a visual indicator of	2 hours	Jun

	whether the item is favorited or not.		
3	Send a request to the server to update the item's favorite status for a user when the user clicks the favorite icon.	2 hours	Jun

Acceptance criteria:
1. Given that the favorite item system is implemented correctly, when the user clicks the favorite icon, they should see it change color to indicate the favorite has been toggled.
2. Given that the favorite item system is implemented correctly, when the user clicks the favorite icon, the favorite status of the item for that user should be updated in the database.
3. Given that the favorite item system is implemented correctly, when the user favorites an item and then the user visits their list of favorite items, the user will see the newly favorite item there.
4. Given that the favorite item system is implemented correctly, when the user views any list of posted items, the "favorite" status will be retrieved from the database and shown in the UI.

User Story #13

As a borrower, I would like to see a list of all my favorite items.

No.	Description	Estimated Time	Owner
1	Create UI of favorite items list accessible from user profile.	3 hours	Jun
2	Create a feature that lets a user switch between different view modes for the list, for ease of view.	3 hours	Jun
3	Create a feature that lets a user unfavorite an item while viewing the favorite list.	2 hours	Jun
4	Create an API function in the backend to send the select/update/delete favorite item queries to the database.	2 hours	Jun

Acceptance criteria:
1. Given that the favorite items list is implemented correctly, when the user accesses their profile, they should be able to click on a button that redirects

them to their favorite items list.

2. Given that different view modes for the list are implemented correctly, when the user accesses their favorite list, they should be able to switch between different view modes that change how much detail is shown for each item.

3. Given that the favorite icon is implemented correctly, when the user clicks the favorite icon on an item in their favorite list, they should see the item unfavorited and therefore removed from the list.

4. Given that the favorite list is implemented correctly, when the user views their favorite list without having any favorited items, they should see a message indicating they have no favorite items yet.

5. Given that the favorite list is implemented correctly, when the user clicks on an item in the list, they will be redirected to the item post's full page.

Remaining Backlog

Functional Requirements

1. As a user, I would like to register for an Itembnb account.
2. As a user, I would like to log in and log out of my account.
3. As a user, I would like to view/edit/delete my profile.
4. As a user, I would like to rate and review a lender or borrower after they've completed a transaction with me.
5. As a user, I would like to be able to act as a borrower and lender using the same account.
6. I would like to be able to view a simple chat interface between myself and other users.
7. I would like to send and receive chat messages with another user for in-progress lending activities (items I have borrowed but have yet to return) in real time, as well as get notified if someone messages me.
8.   As a user, I would like to see a homepage with a feed for items up for borrowing and items that people have requested.
9.   As a borrower, I would like to search for available items.
10. As a borrower, I would like to filter search items by category, tags, price range, etc.
11.   As a borrower, I would like to view a posted item's details - description, lender info, date, etc.
12. As a borrower, I would like to favorite a posted item to save it for later.
13. As a borrower, I would like to see a list of all my favorited items.
14. As a borrower, I would like to view a posted item's availability calendar.
15. As a borrower, I would like to add a borrowing request to the calendar.
16. As a borrower, I would like to view my borrowing history.
17. As a borrower, I would like to receive a notification one hour prior to my borrowing deadline.
18. As a borrower, I would like to confirm that I have received the item from the lender.
19. As a borrower, I would like to rate and review an item I have borrowed.

20. As a borrower, I would like to see a map view of items up for borrowing near me (if time allows).
21. As a borrower, I would like to create an item request for an item I want to borrow that is not listed on the site.
22. As a borrower, I would like to edit/delete my item request.
23. As a borrower, I would like to be notified when a lender has linked one of their posted items to my item request.
24. As a lender, I would like to link one of my posted items to an existing item request.
25. As a lender, I would like to post an item with a price and assign it to predefined categories.
26. As a lender, I would like to add a thumbnail image and multiple preview images to my posted item.
27. As a lender, I would like to edit/delete my posted item.
28. As a lender, I would like to set up my posted item's calendar.
29. As a lender, I would like to edit my posted item's calendar.
30. As a lender, I would like my calendar to be automatically updated when an item is booked.
31. As a lender, I would like to view the list of borrowing requests for my posted items.
32. As a lender, I would like to be notified when a borrower has requested to borrow my item.
33. As a lender, I would like to be able to accept or deny a borrower's request.
34. As a lender, I would like to view my lending history.
35. As a lender, I would like to update the posted item's status.
36. As a lender, I would like to confirm that I have received the item back from the borrower.
37. As a lender, I would like to receive payment from a borrower for lending my item to them (if time allows).
38. As a lender, I would like to reimburse a borrower for returning my item to me (if time allows).