

CS3704 - PM4

Team Octo

Process Deliverable III

Retrospective

This sprint was all about testing, specifically designing and enacting black box tests. Our plan is detailed below in the next section.

What went well:

Something we did well was our frame of reference when brainstorming and designing our tests. At times, we took a user-specific approach and imagined the steps a new user would take when approaching our app. For example, everyday actions like creating an account, viewing/creating a task board, and writing/editing tasks have to be streamlined for the average user, and we believe we captured that requirement.

What did not go well:

Our program is deceptively simple: it has a lot more complexity behind what meets the eye. As a result, we overlooked the sheer amount of edge cases when trying to map out all the interactions that a user could encounter, and we ended up having to make up for it along the way. Just when we thought we were done writing test cases, something else popped up and made us start the process all over again.

What should we do differently next time:

It would be beneficial to fully map out all edge cases before delving into proper test writing, that way we do not have to play catch-up with ourselves. Additionally, getting a fresh pair of eyes could prove useful in the future: sometimes you stare at something for so long that you can overlook obvious things, and that's almost surely the case with our test writing.

Sprint Planning

Our next step from here would be to actually implement our design and gather real user data. Currently, we have the tests written but no way of getting actual results and data. We would go by our high level architectures and low level design patterns that we listed off during design.

Once we have an initial implementation of our design, we'd start gathering data from user testing. With each iteration of testing, we'd collect data on what worked, what didn't, and what else would be good to have. Then, we'd restart the implementation with the new data from testing. At that point, we'd simply repeat the process of

implementing, testing, and reviewing until we got to a point that was satisfactory for a final design.

Black Box Test Plan

Test ID	Description	Expected Results	Actual Results
Create a board	<p>Preconditions: The user has created an account and is on the default landing page dashboard.</p> <p>Steps:</p> <ul style="list-style-type: none">• Click the "New board" button• Fill in the title of the board• Optionally include a description and team member email addresses. <p>Test Inputs:</p> <ul style="list-style-type: none">• Board Name: "Team # Kanban Board"• Description: "The Kanban board for team # for project #"• Collaborators: teamMember1@gmail.com, teamMember12@gmail.com	<p>New board titled "Team # Kanban Board" is created with a description of "The Kanban board for team # for project #" and is inserted into the board.</p> <p>An email is also sent to teamMember1@gmail.com and teamMember12@gmail.com to notify them that the user has added them as collaborators for the Kanban board and granted them access.</p>	
Create a card	<p>Preconditions: The user has created an account, has editing access to a board, and is currently viewing the board.</p> <p>Steps:</p> <ul style="list-style-type: none">• Click the "New card" button• Fill in the title of the card• Assign a priority value• Optionally include a due date and a description	<p>A new card titled "Test card" with priority Urgent is created and appended to the board's To-do list. This change immediately affects all other users viewing the board.</p> <p>The card can now be manipulated by anyone with edit access, e.g. have its status changed or its metadata altered.</p>	

	<ul style="list-style-type: none"> Click the "Create" button to confirm <p>Test Inputs:</p> <ul style="list-style-type: none"> Card title: "Test card" Priority value: Urgent Due Date: 12/9/2024 Description: "This is a test!" 		
Message Team Members	<p>Preconditions: The user has created an account and is a member in a board containing at least one more user.</p> <p>Steps:</p> <ul style="list-style-type: none"> The user clicks on the "Messaging" tab in the lower right of the board view. The user clicks a board member's name. The user types in a message. then either presses the Enter key or clicks the send button. <p>Test Inputs:</p> <ul style="list-style-type: none"> The user selects teamMember1. The user writes "Hello, testing 123." The user hits enter. 	teamMember1 receives a message through the internal messaging system. If they are viewing the board, their messaging tab becomes highlighted: upon opening the messaging tab, they're met with the sender's message on top of the stack. If the application is open but not in focus, teamMember1 receives a push notification on desktop.	
Switch to a different view mode	<p>Preconditions: The user is already in a created Kanban board</p> <p>Steps:</p> <ul style="list-style-type: none"> Click the "more options" button on the top left Click on either "Time Table" or "List" under "View Mode" <p>Test Inputs:</p> <ul style="list-style-type: none"> Click on "more options" 	Starting from Kanban, the user will change the view mode to "Time Table," organizing tasks by either the due date or the determined time frame to complete the task. The user then changes the view mode to "List," ordering the list of cards based on sort type. Then the user changes back to "Kanban" mode	

	<ul style="list-style-type: none"> • Click on "Time Table" • Click on "more options" • Click on "List" • Click on "more options" • Click on "Kanban" 		
Changing Task Completion Level	<p>Preconditions: The user is already in a created Kanban board with at least 1 pre existing card on the board</p> <p>Steps:</p> <ul style="list-style-type: none"> • Hold click on Card • Drag it to one of the other sections <p>Test Inputs:</p> <ul style="list-style-type: none"> • Hold click on card • Drag it to "In Progress" • Drag it to "Completed" • Drag it to "To Do" 	The card from where it's stored changes it's completion level to "In progress" and will remain there if no further action is taken. It then changes it's completion level to "Completed" and will remain there if no further action is taken. Finally it changes it's completion level to "To Do" and will remain there if no further action is taken.	
Assigning a card	<p>Preconditions: The user is already in a created Kanban board with at least 1 pre existing card on the board</p> <p>Steps:</p> <ul style="list-style-type: none"> • Click on card • Click on the "Assigned To:" Drop Down Menu • Choose an existing collaborator to assign the task to <p>Test Inputs:</p> <ul style="list-style-type: none"> • Click on card • Click on "Assign To" • Click on "teamMember1@gmail.com" • Click on "myself@gmail.com" • Click on "unassigned" 	The card should be tied to teamMember1@gmail.com, and will be reflected via a small label on the card and in the list view mode when sorted by "Users". Then the card should be tied to myself@gmail.com, and will be reflected via a small label on the card and in the list view mode when sorted by "Users". Finally the card is not assigned to any specific user, which will push it to the top of the list.	
Editing time table length	<p>Preconditions: The user is already in a created Kanban board in "Time Table" view mode and</p>	After click-dragging a card to the left, both the start date and end date of the card is pushed to an earlier	

	<p>has atleast one card already created</p> <p>Steps:</p> <ul style="list-style-type: none"> • Hold click on a card and drag it to change the time frame • Extend the card by extending sides to change start date or due date <p>Test Inputs:</p> <ul style="list-style-type: none"> • Hold click on a card and drag it to the left of it's original position • Hold click on a card and drag it to the right of it's original position • Extend the card by increasing it's length towards the left • Extend the card by increasing it's length towards the right • Shorten the card by decreasing its length from the right • Shorten the card by decreasing its length from the left 	<p>date but its duration stays the same. After hold click-dragging a card to the right, both the start date and end date of the card is pushed to a latter date but its duration stays the same</p> <p>After Extending the card by increasing its length towards the left, the start date should be pushed to an earlier date and the duration of the task is increased. After Extending the card by increasing its length towards the right, the due date should be pushed to a later date and the duration of the task is increased.</p> <p>After decreasing the card length by dragging the left side rightwards, the start date is pushed to a later date with the overall time frame reduced. After decreasing card length by dragging the right side leftwards, the end date is pushed to an earlier date with the overall time frame reduced</p>	
Change sort mode in the checklist view	<p>Preconditions: The user is already in a created Kanban board in the "List" view mode and has at least 2 cards already created</p> <p>Steps:</p> <ul style="list-style-type: none"> • Click on "Sort By" • Click on on of the sort options <p>Test Inputs:</p> <ul style="list-style-type: none"> • Click on "Sort By" • Click on "Priority" • Click on "Alphabetical" 	<p>The list is sorted by priority by default, which will sort the cards by the assigned priority level from highest to lowest. The list is then sorted alphabetically by name from A-Z. In "Users" the list is grouped by who the cards have been assigned to, with unassigned cards appearing at the top followed by Users listed in alphabetical order. In "Due Date" the list is sorted by</p>	

	<ul style="list-style-type: none"> Click on "Users" Click on "Due Date" 	when the card is due or the end time of the time frame provided to it.	
Change card name/description	<p>Preconditions: The user is already in a created Kanban board with Cards stored on the board in any view mode</p> <p>Steps:</p> <ul style="list-style-type: none"> Click on Card Edit text either in the "Name" text box or "Description" text box <p>Test Inputs:</p> <ul style="list-style-type: none"> Click on Card Edit Title Text to "Intergration (Team Member 2 Please Finish!)" Edit Description Text to "GUI intergration via react, must be completed first for backend implementation" 	The text on the card when in any mode should properly reflect the new title text, adding a "..." if the title is too long for the card to display. While hovering over the card, the description of the card must be updated to the associated description text.	
Remove card	<p>Preconditions: The user is already in a created Kanban board with Cards stored on the board in any view mode</p> <p>Steps:</p> <ul style="list-style-type: none"> Click on Card in any view mode Click on the button on the bottom left of the edit screen Click on "Confirm" when prompted "Are you sure?" <p>Test Inputs:</p> <ul style="list-style-type: none"> Clicking on the bottom left red button on the edit screen, then clicking on "Confirm" 	The card subject to deletion is removed from the board entirely, but still obtainable by going back to previous versions of the board or the undo button	

	on the confirmation screen		
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