



Sprint 2 Materials

5B_Bulbasaur



Aidan Thomas
Brianna Bach
Brady O'Connor
Daniel Lam He
Zach Assad

Retrospective Summary

The current sprint went quite smooth, accompanied by strong organization and great communication that drove our progress. Meetings were structured, productive, which helped to be on target regarding task completion. The team worked collaboratively, and most backlog goals were achieved, which maintained the project in good shape.

However, high-contrast mode and integrating the weather API could not be done because Daniel was sick, and the team was already busy with their tasks. These will be pushed to the next sprint, and Daniel will make sure that these are done.



One point of improvement is estimation. The time taken to finish certain tasks ran a bit longer than estimated; thus, re-evaluation of the complexity of tasks with appropriate workload distribution in successive sprints is planned. Also, while individual components have been well-developed, greater integration of these parts will be a key focus in the future.

We will focus on feature polishing, integration, and completing the deferred tasks in the next sprint. Overall, the team has maintained its momentum and is on track to complete all tasks by the end of the semester. With continued focus and hard work, we believe in strong final product delivery.

GitHub Release Link

<https://github.com/CSCE331-Fall2024/project-3-team-5b/releases/tag/final-sprint-2>

Product Backlog

Task	Status	Priority	Sprint Points	Time Estimate	Dependencies
Executive Summary	Completed	High	1	1 hour	System Diagram,
System Diagram	Completed	High	2	2 hour	None
Personas and User Stories	Completed	High	3	3 hour	None
Interface Diagram	Completed	High	4	4 hours	Personas and User Stories
Team Roles and Qualifications	Completed	High	0.5	0.5 hours	None
Development Methodology	Completed	High	1	1 hour	None
Planned Scope	Completed	High	1	1 hour	Product Backlog
Task Breakdown and Scheduling	Completed	High	4	4 hours	Product Backlog
References	Completed	High	0.2	0.2 hours	Design Doc sections
Product Backlog	Completed	High	5	5 hours	Personas and User Stories, system diagram, interface diagram
Initial Product Burn-down chart	Completed	High	0.5	0.5 hours	Product Backlog
Set up the starter front end code and Github repository	Completed	High	1	1 hour	Finalized Design Doc
Set up the starter back end code and Github repository	Completed	High	1	1 hour	Finalized Design Doc



Design the Landing Page for Self-Service Order	Completed	High	2	1-2 hours	Interface Diagram
Create the menu page	Completed	Medium	5	3 days	Interface Diagram
Create a Reusable Menu Item React Component	Completed	Medium	2	1-2 hours	Create the menu page
Fetch Menu Item Information from the Backend	Not Started	Medium	2	1-2 hours	Set up the starter back end code and Github repository
Add a Navigation Bar for Customers	Completed	Medium	2	1-2 hours	Design the Landing Page for Self-Service Order
Backend Should Process Menu Item Requests	Completed	Medium	2	1-2 hours	Fetch Menu Item Information from the Backend
Create a Reusable Button Component for the Manager Interface	Completed	Medium	2	1-2 hours	Create the manager landing page
Add Role-Specific Navigation Bar for Managers	Not Started	Medium	2	1-2 hours	None
Create the manager landing page	Completed	Medium	2	1-2 hours	Add a Navigation Bar for Customers
Reuse the Customer Menu Item Component	Completed	Medium	2	1-2 hours	Set up the starter back end code and Github repository
Create a Cashier-Specific Layout	Completed	Medium	2	1-2 hours	Set up the starter back end code and Github repository
Add Role-Specific Navigation Bar for Cashiers	Completed	Medium	2	1-2 hours	Set up the starter back end code and Github repository
Implement Checkout Button (Non-Functional)	Completed	Medium	2	1-2 hours	Set up the starter back end code and Github repository



Deploy the website	Completed	Medium	1	1-2 hours	Set up the starter back end code and Github repository
Deploy the backend API	Completed	High	1	3 hours	Set up the starter back end code and Github repository
Implement Google OAuth for Authentication (Backend)	Completed	High	8	1-3 days	Set up the starter back end code and Github repository
Add Role-Based Redirect After Login (Backend)	Completed	High	2	1-2 hours	Set up the starter back end code and Github repository
Add Role-Based Navigation Bar Visibility (Frontend)	Completed	High	2	1-2 hours	Set up the starter back end code and Github repository, Backend Login
Implement Logout Functionality (Frontend)	In Progress	High	2	1-2 hours	Set up the starter back end code and Github repository, Backend Login
Implement Login Page (Frontend)	Completed	High	2	1-2 hours	Set up the starter back end code and Github repository, Backend Login
Implement fetch request for the login (Frontend)	Completed	High	2	1-2 hours	Set up the starter back end code and Github repository, Backend Login
Add Allergen and Nutritional Information to Menu Items	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository, Backend Login



Display Allergen Alerts When Selecting Items	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository, Create an API endpoint that returns the menu item components with its ingredients
Create an API endpoint that returns the menu item components with its ingredients	Not Started	High	3	3 hours	Set up the starter back end code and Github repository
Implement Cart Functionality	Completed	High	5	2 days	Set up the starter back end code and Github repository
Complete ordering functionality	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Create a Sales Reports Page	Completed	High	4	3-4 hours	Set up the starter back end code and Github repository
Create Inventory Usage Report	Completed	High	4	3-4 hours	Set up the starter back end code and Github repository, Create Get Inventory API Endpoint
Integrate Weather API for Manager Landing Page	In progress	High	2	2 hours	Set up the starter back end code and Github repository
Create Get Inventory API Endpoint	Not Started	High	4	4-5 hours	Set up the starter back end code and Github repository



Create an inventory page that displays all the information of the ingredients	Not Started	Medium	2	1-2 hours	Set up the starter back end code and Github repository, Create Get Inventory API Endpoint, Create Add Inventory API Endpoint, Create Edit Inventory API Endpoint
Create Add Inventory API Endpoint	Not Started	High	2	2 hours	Set up the starter back end code and Github repository
Create Edit Inventory API Endpoint	Not Started	High	2	2 hours	Set up the starter back end code and Github repository
Create Frontend Form for Adding/Editing ingredients	Not Started	Medium	2	1-2 hours	Set up the starter back end code and Github repository
Validation and error handling for Add/Edit Inventory	Not Started	High	8	1-3 days	Set up the starter back end code and Github repository
Create Delete Inventory API Endpoint	Not Started	High	3	3 hours	Set up the starter back end code and Github repository
Create Frontend Button for Deleting Ingredients	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Create Delete Inventory API Endpoint
Error Handling for Ingredient Delete Operation	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository



Create Admin Page Layout	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Add Buttons to Trigger Add or Edit Mode
Add Navigation Link to Admin Page in Manager Landing Page	Not Started	High	1	1 hours	Set up the starter back end code and Github repository
Create Add Employee API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Create Edit Employee API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Add Buttons to Trigger Add or Edit Mode	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Create Add Employee API Endpoint, Create Edit Employee API Endpoint
Design Unified Edit/Add Employee Form	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Handle Validation and Error Messaging in the Unified Form	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Create a landing page for the menu page	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository



Design the Menu Items Page Layout	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Create Add Menu Item API Endpoint, Create Edit Menu Item API Endpoint
Create Add Menu Item API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Create Edit Menu Item API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Create Delete Menu Item API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Implement Menu Item Add/Edit Form with Conditional Logic	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Add Buttons to Navigate to Menu Item Components	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Design the Menu Item Components Page Layout	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Create Add Item Component API Endpoint, Create Edit Item Component API Endpoint
Create Add Item Component API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository



Create Edit Item Component API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Create Delete Item Component API Endpoint	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Implement Item Component Add/Edit Form with Conditional Logic	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Create Add Item Component API Endpoint, Create Edit Item Component API Endpoint
Manage Ingredients within Components	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Create a Reviews Section in the Menu Item Component	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Set Up Backend API to Retrieve Reviews	Not Started	High	5	5-4 hours	Set up the starter back end code and Github repository
Create Reviews database table	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Display Average Rating and Number of Reviews	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Add a 'Leave a Review' Button to the Menu Item Component	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository



Build a Review Submission Form	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Implement Backend API for Review Submission
Implement Backend API for Review Submission	Not Started	High	3	1-3 hours	Set up the starter back end code and Github repository
Validate and Display Customer Reviews in Real Time	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Create a Review Summary Report for Managers	Not Started	High	5	5 hours	Set up the starter back end code and Github repository
Display the Review summary report under Reports Page	Completed	High	4	4 hours	Set up the starter back end code and Github repository
Implement Frontend Form Validation	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Set Up Backend Error Handling	In Progress	Low	2	1-2 hours	Set up the starter back end code and Github repository
Integrate Frontend Error Boundaries	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Automated Testing Suite	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Create Order History Page	Not Started	High	8	1 day	Set up the starter back end code and Github repository



Develop Backend API to Fetch Order History	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Design Order Summary Cards or Table	Not Started	High	4	3-4 hours	Set up the starter back end code and Github repository
Implement Search and Filter Functionality	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Error Handling and Loading States	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Integrate Google Translate API into the kiosk interface	Completed	High	4	3-4 hours	Set up the starter back end code and Github repository
Create a dropdown menu on the landing pages and navigation bar for language selection	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Ensure all menu text, buttons, and labels dynamically update when a language is selected	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Design icons and buttons with a larger-than-standard size	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Use universally recognized symbols for actions	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Develop a toggle switch on the main screen to enable high-contrast mode	In Progress	Low	2	1-2 hours	Set up the starter back end code and Github repository
Create a separate high-contrast color scheme	In Progress	Low	2	1-2 hours	Set up the starter back end code and Github repository



Ensure that all images, text, and icons adjust to the high-contrast setting	In Progress	Low	2	1-2 hours	Set up the starter back end code and Github repository
Add a text resizing feature on the main screen	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Ensure that resized text adapts fluidly across all layouts	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Test functionality with screen magnifiers	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository, Add a text resizing feature on the main screen
Provide a 'Text Size' button directly on each page	Completed	Medium	5	4-6 hours	Set up the starter back end code and Github repository
Implement large, readable text settings	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Add descriptive alt text to each image and icon	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Verify screen reader compatibility	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Integrate a text-to-speech (TTS) option	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Add a 'Read Aloud' button next to each main section	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository



Ensure universal icons and symbols are easily understood	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Design a streamlined layout with minimal elements per page	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Group related items for clarity	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Design Display-Only Interface Layout for Multi-Display	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Develop a Responsive Layout to Adapt to Large Screens	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Implement Auto-Scroll or Slide Features	Not Started	Low	2	1-2 hours	Set up the starter back end code and Github repository
Configure Backend for Real-Time Updates	Completed	Low	2	1-2 hours	Set up the starter back end code and Github repository
Ensure Consistency of Displayed Menu and Promotional Information	Not Started	Low	2	1-2 hours	Website completed

291.2

Sprint Backlog

Summary	Assignee	Collaborators	Resolution	Resolved	Status	Story point estimate	Time Spent



As a customer, I would like to receive allergen and nutritional alerts, so I can order safely.					To Do		
Fetch Menu Item Information from the Backend	Daniel Lam He		Done	13/Nov/2024	Done	2	6.00
Implement Cart Functionality	Brady O'Connor		Done	19/Nov/2024	Done	2	7.50
Add a Navigation Bar for Customers		[Brianna Bach]	Done	06/Nov/2024	Done	1	
Add Role-Specific Navigation Bar for Managers	Aidan Thomas	[Brianna Bach, Daniel Lam He]	Done	13/Nov/2024	Done	2	
As a user, I would like to log in as either a manager or cashier, so I can access the Panda Express POS system.					To Do		



Implement Google OAuth for Authentication (Backend)	Aidan Thomas		Done	13/Nov/2024	Done	5	
Add Role-Based Redirect After Login (Backend)	Aidan Thomas		Done	14/Nov/2024	Done	2	3.00
Add Role-Based Page Visibility (Frontend)	Brady O'Connor	[Aidan Thomas]	Done	19/Nov/2024	Done	3	2.00
Implement Logout Functionality (Frontend)	Aidan Thomas				In Progress	2	
Create a Cashier-Specific Layout		[Aidan Thomas, Zach Assaad]	Done	06/Nov/2024	Done	5	
Add Role-Specific Navigation Bar for Cashiers		[Brianna Bach]	Done	06/Nov/2024	Done	1	
Complete ordering functionality	Brady O'Connor		Done	19/Nov/2024	Done	3	4.00
Add Allergen and Nutritional Information to Menu Items	Brianna Bach	[Daniel Lam He]			In Progress	5	



As a customer, I would like to add the items to the cart, so I can checkout					To Do		
Display Allergen Alerts When Selecting Items	Brianna Bach				In Progress	3	
As a manager, I would like to view real-time sales reports, so I can track revenue and performance.					To Do		
Create a Sales Reports Page	Zach Assaad		Done	13/Nov/2024	Done	3	3.00
Create Inventory Usage Report	Zach Assaad		Done	19/Nov/2024	Done	2	2.00
Integrate Weather API for Manager Landing Page	Daniel Lam He				To Do	5	



Create an API endpoint that returns the menu item components with its ingredients.	Daniel Lam He	[Brianna Bach]			To Do	3	
Implement Login Page (Frontend)	Brady O'Connor	[Aidan Thomas]			In Progress	2	
Implement fetch request for the login (Frontend)	Aidan Thomas	[Brady O'Connor]	Done	14/Nov/2024	Done	3	
As a user, I would like to see the screen in high contrast, so I can see the website properly					To Do		
Ensure that all images, text, and icons adjust to the high-contrast setting	Daniel Lam He				In Progress	5	



Develop a toggle switch on the landing pages and navigation bar to enable high-contrast mode	Daniel Lam He				In Progress	2	
As a user, I would like to have the option to translate the page, so I can understand the website.					To Do		
Integrate Google Translate API into the customer interface	Brianna Bach		Done	19/Nov/2024	Done	5	
Create a dropdown menu on the landing pages and navigation bar for language selection	Brianna Bach		Done	19/Nov/2024	Done	2	



Ensure all menu text, buttons, and labels dynamically update when a language is selected	Daniel Lam He		Done	19/Nov/2024	Done	3	
Integrate Google Translate API into the cashier interface	Brianna Bach		Done	19/Nov/2024	Done	5	
Integrate Google Translate API into the manager interface	Brianna Bach		Done	19/Nov/2024	Done	5	
As a user, I would like to have the option to enlarge the text in the page, so I can see clearly each word					To Do		
Design icons and buttons with a larger-than-standard size	Zach Assaad				In Progress	1	



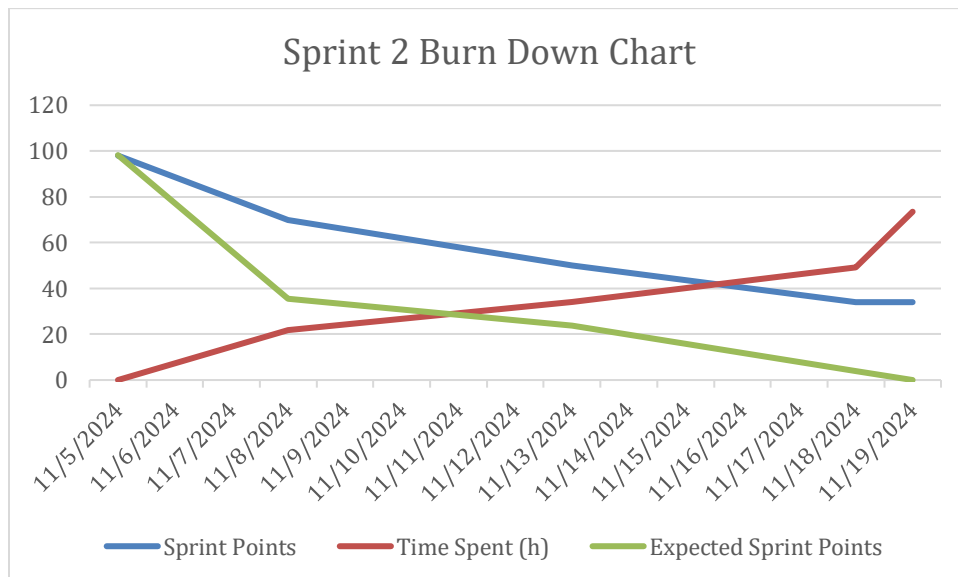
Add a toggle switch to enable bigger text	Zach Assaad		Done	19/Nov/2024	Done	3	2.00
Create code to update the size of every text in the screen	Zach Assaad				In Progress	3	
Implement backend API endpoint to create an order	Brady O'Connor				To Do	3	
Reformat database menu item table to allow description, maxEntrees, maxSides, hasDrink, and image	Daniel Lam He		Done	10/Nov/2024	Done	2	
Create cloud storage for the images	Daniel Lam He		Done	13/Nov/2024	Done	3	
Refactor the menu board with images and information taken from the API	Daniel Lam He		Done	17/Nov/2024	Done	2	2.00

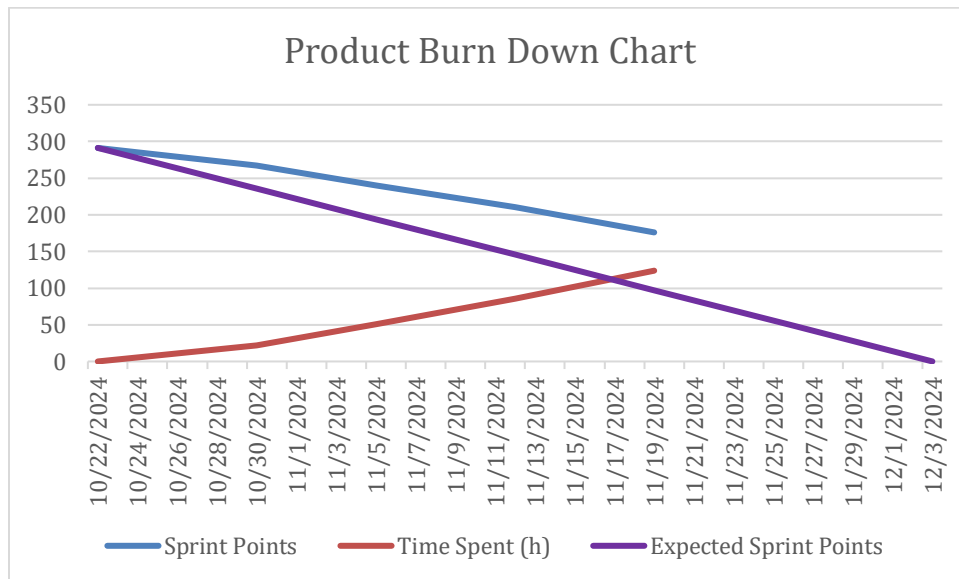


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Team member	Points
Daniel Lam He	14
Aidan Thomas	20
Brady O'Connor	11
Brianna Bach	21
Zach Assaad	13

Burn-down Charts





Next Sprint's SCRUM Meeting Schedule

1. Friday November 22nd
2. Monday November 25th
3. Sunday December 1st



Appendix 1: SCRUM Meeting Agendas and Minutes

SCRUM Meeting 1 for Project 3

Prepared by: Daniel Lam He

Meeting Date: 11/08/2024

Meeting Attendees

1. Aidan Thomas
2. Brianna Bach
3. Brady OConnor
4. Zach Assad
5. Daniel Lam He

Meeting Agenda Items

- Task needed to start and get done before next scrum meeting.
- Goal for the MVP

Status Update Since Last Meeting

Accomplishments:

- Daniel started working on fetching menu item information from the backend.

Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Fetch Menu Item Information from the Backend	Daniel Lam	No, half way done.

Before The Next Meeting

Plans:

- Having an MVP Completed
- User Study

Task Assignments:

Task Description	Assigned to
Added images to cloud storage	Daniel Lam He



Sales Report Page	Zach Assad
Implement buttons for the manager homepage	Zach Assad
Allergens and nutritional information to menu items	Brianna
Google Translate	Brianna
Cart functionality	Brady
Login page, navbar for manager page, and login functionality	Aidan

Minutes from Previous Meeting

In our previous meeting we discussed the items that needed to be completed before the end of sprint 1 and documentation needed to be done before the end of sprint 1. We also discussed our meetings scheduled for Sprint 2.



SCRUM Meeting 2 for Project 3

Prepared by: Daniel Lam He

Meeting Date: 11/13/2024

Meeting Attendees

1. Aidan Thomas
2. Brianna Bach
3. Brady OConnor
4. Zach Assad
5. Daniel Lam He

Meeting Agenda Items

- Completed items before GitHub release
- Items needed to be completed before GitHub release

Status Update Since Last Meeting

Accomplishments:

- There are images in the menu choices
- The cart can be cleared
- The manager can visualize the sales report
- Manager can login with google auth

Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Fetch the menu items from the database	Daniel Lam He	Yes
Added images to cloud storage	Daniel Lam He	Yes
Sales Report Page	Zach Assad	Yes
Implement buttons for the manager homepage	Zach Assad	Yes
Allergens and nutritional information to menu items	Brianna	Will complete by tonight
Google Translate	Brianna	Will complete by



		tonight
Cart functionality	Brady	Will complete by tonight
Login page, navbar for manager page, and login functionality	Aidan	Tomorrow

Before The Next Meeting

Plans:

- Have a fully working Github release before the end of sprint 2

Task Assignments:

Task Description	Assigned to
Logout Functionality	Aidan Thomas
Create an API endpoint that returns the menu item components with its ingredients.	Daniel Lam
Implement backend API endpoint to create an order	Brady O'Connor
High Contrast Functionality	Daniel Lam
Google Translate Functionality	Brianna Bach
Resize functionality	Zach Assad

Minutes from Previous Meeting

In our previous meeting we talked about tasks needed to be completed before the end of this meeting and which tasks were started. We assigned ourselves tasks that we were aiming to complete before this meeting. Daniel started working on fetching menu items from the database before the previous meeting. Aidan aimed to complete login functionality, Brady the cart functionality, Daniel fetching menu items from the database and storing images in the cloud storage, Zach the sales report, and Brianna the allergens.



SCRUM Meeting 3 for Project 3

Prepared by: Daniel Lam He

Meeting Date: 11/18/2024

Meeting Attendees

1. Aidan Thomas
2. Brianna Bach
3. Brady OConnor
4. Zach Assad
5. Daniel Lam He

Meeting Agenda Items

- Go through the tasks completed
- Planning to finish by the end of the sprint

Status Update Since Last Meeting

Accomplishments:

- Menu board is dynamically displayed from the backend
- Zooming in and zoom out working.

Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Menu items fetched from the database to menu board	Daniel Lam	yes
Created the inventory usage report	Zach Assad	Yes
Zoom in and out	Zach Assad	Almost Done
Implementing google translate function	Brianna Bach	Yes
Allergens alert	Brianna	Yes
Login working	Aidan	Yes
Cart Functionality and the ordering/checkout process	Brady	Pushing tonight



Before The Next Meeting

Plans:

- Finish accessibility tools in the page before the end of the sprint
- Having working logout and login redirection for cashier and manager

Task Assignments:

Task Description	Assigned to
Role View Permissions	Brady
Proper login page	Brady
High contrast mode	Daniel
Weather API	Daniel
Allergen alerts	Brianna
Nutritional information	Brianna
Small bug with text magnifier	Zach
Making Icons and text bigger for some items	Zach
Logout functionality	Aidan

Minutes from Previous Meeting

In the previous meeting, we discussed tasks that were completed before the end of the GitHub release for the MVP such as being able to see images in the menu choices, cart can be cleared, manager can visualize the sales report, and manager can login. We also aimed for tasks that would result in a working GitHub release.