



# Sprint 3 Materials

331-902 Team 3 or Group 9

Rushil Jayant  
Riley Wenckens  
Rahul Rajendran  
Elvis Chen  
Diego Martinez  
Laith Bohsali

## Retrospective Summary

The sprint three retrospective meeting opened with a reflection of the tasks that were completed in the sprint. Although there were substantially more tasks to complete compared to any previous sprint, we were able to successfully complete almost all of them. This can be attributed to a change in procedure, specifically the creation of more descriptive and quality task tickets. After the Sunday release, we showcased the MVP on Monday. In the meeting, we discussed the feedback received from the sprint three MVP demonstration, and gathered the set of final touches to make before the final demonstration. This includes fixing a few minor bugs, such as the manager page not loading on refresh. Making these changes will be of utmost priority before the final demonstration. Additionally, a few accessibility features and UI fixes will need to be implemented. These have been added to the product backlog. Following this discussion, we considered what went right and wrong during the sprint. It was noted that communication as a team improved significantly. All members of the group were active and available throughout the day. To avoid conflicting tasks, members clearly communicated what they were working on and asked for clarification frequently. One thing that caused conflict was late refactoring of the database. This is because we had not implemented item images until late in the sprint. Additionally, we did not realize the overhead associated with the ORM and back-end hosting, which caused our queries to hang the application. We decided to cut the order history, which led to logical bugs across various pages, which took some time to resolve. Despite this being the last sprint of the project, we will take this as an opportunity to improve in future projects outside of the course. We learned a lot about the agile methodology.

## GitHub Release Link

<https://github.com/csce-315-331-2024a/project-3-full-stack-agile-web-902-team-3/releases/tag/Sprint-3>



## Product Backlog

Sprint 1 Tasks	Task No	Priority (1-5)	Dependencies	Story Points	Status
Initial repo setup and access confirmation	0	1		1	Completed
Setup folder structure and add readme	1	1		1	Completed
Update wireframe/mockups	2	2		1	Not started
Redesign/simplify database schema	3	1		1	Completed
Add description component to menu_item table	4	1	6	2	Completed
Refactor Dates and times to become timestamps	5	1	6	4	Completed
Initialize the new database that richy set up for project 3	6	1		2	Completed
Create SQL functions-list	7	2	3	1	Completed
Find and add constants for styling	8	3		1	Completed
Frontend: page navigation	9	4	1	1	Completed
Frontend: base welcome page ui	10	3	1	2	Completed
Frontend: base clock-in and clock-out page ui	11	3	1	2	Completed
Frontend: base user menu page ui	12	3	1	4	Completed
Backend: CRUD for singular user/customer	13	3	1, 4	2	Completed
Backend: CRUD for singular menu item and R for all menu-items	14	3	1, 4	2	Completed
Partial special functions	15	3	1, 4	2	Not started
Unit tests for user CRUD	16	4	10	2	Not started



Sprint 2 Tasks	Task No	Priority (1-5)	Dependencies	Story Points	Status
Google OAuth2 setup	0	2		1	Completed
Google OAuth2 implementation/connection	1	2	0	1	Completed
Authentication using Google OAuth2 for Cashiers.	2	2	1	1	Completed
Authentication using Google OAuth2 for managers	3	2	1	1	Completed
Authentication using Google OAuth2 for customers	4	2	1	1	Completed
Google OAuth2 testing	5	2	0 1	4	Not started
Google Translate API Setup	6	2		1	Completed
Google Translate Implementation	7	2	0	2	Completed
Translate to native price (us, peso, canadian)?	8	3	7	4	In progress
OpenWeather setup	9	2		1	Completed
OpenWeather implementation/connection	10	2	9	2	Completed
Open Weather Price adjustment? Aka surge pricing.	11	2	10	6	Completed
Surge Pricing testing	12	2	10,11	4	In progress
Connection of SQL queries to Managers/analytics pages	13	1	13, 20	4	In progress
Button validation with manager page	14	3	14	2	In progress
Unit testing for proper use of SQL queries being used for the manager page.	15	1	14	2	Not started
Front End: Base design of menu board	16	1		8	Completed
Button placement for menu board in the welcome screen	17	1		1	Completed
Dynamic updates of the menu board. Aka make it populate based on data stored in the database, not stored locally.	18	1	17	4	In progress
Sql queries to pull information for the menu board.	19	1		4	In progress



Make sure new description is being used in menu board population	20	1		1	In progress
Front End: Managers/analytics pages to be redesigned in python	21	1		8	Completed

<b>Sprint 3 Tasks</b>	<b>Task No</b>	<b>Priority (1-5)</b>	<b>Dependencies</b>	<b>Estimate Time (hr)</b>	<b>Status</b>
Front end: Design Cashier menu screen in python	0	1		8	Completed
Front end: Make a clear ticket and submit buttons	1	1	1	1	Completed
Front end: populate pages with menu items	2	1	1	1	Completed
Front end: make ticket component	3	1	1	2	Completed
Implement surge pricing with button clicks	4	1		2	Completed
Implement already-made queries to populate cashier menu	5	1	0, 1	2	Completed
Implement / connect already made queries to buttons	6	1	0,1,2,	4	Completed
Button validates the cashier page.	7	1	0-6	1	Completed
Make button connection on welcome screen for cashier menu page	8	1		1	Completed
Implement Google Translate API to cashier page	9	1		2	Completed
Unit test manager screen	10	2		1	Not started
Unit test cashier screen	11	2	0-6	1	Not started
Unit test menu board	12	2		1	Not started
Unit test customer's screen	13	2		1	Not started
Button validation for all screens	14	2		2	Completed

## Sprint Backlog



Sprint 3 Backlog	Story Points	Assigned To	Time Spent	Status
Front end: Make a clear ticket and submit buttons	1	Rahul Rajendran	2	Completed
Front end: populate pages with menu items	1	Diego Martinez	2	completed
Front end: make ticket component and quantity	1	Elvis Chen	1	completed
Implement surge pricing with button clicks	1	Diego Martinez	2	completed
Button validate cashier page.	1	Elvis Chen	1	Completed
Selenium test manager screen	2	Rushil Jayant	n/a	Completed
Selenium test cashier screen.	2	Rushil Jayant	n/a	Completed
Selenium test menu board	2	Rushil Jayant	n/a	In progress
Selenium tests customers' screen	2	Rushil Jayant	n/a	In progress
Analysis page	4	Diego Martinez	6	Complete
Analysis queries	2	Diego Martinez	4	Complete
Analysis Styling	2	Diego Martinez	2	Complete
Kitchen Page	4	Rahul Rajendran	4	Complete
Kitchen Styling	2	Rahul Rajendran	2	Complete
Kitchen API calls	2	Rahul Rajendran	2	Complete
Customer Checkout	2	Rahul Rajendran	2	Complete
Customer Payment	4	Rahul Rajendran	4	Complete
Restyling of the Customer Order page	2	Rahul Rajendran	4	Complete
Manger tables API calls	2	Riley Wenckens	1	Complete

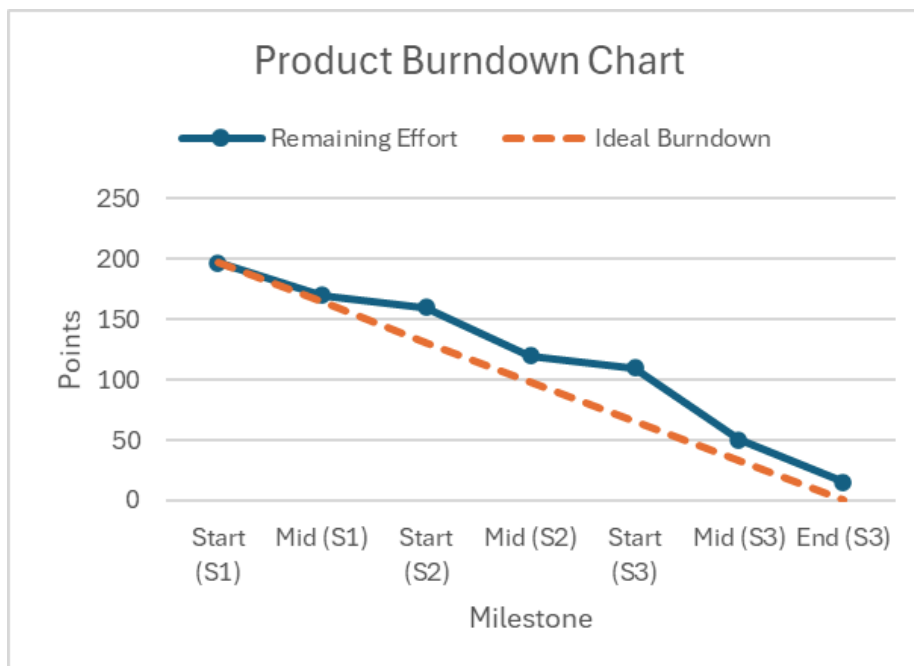
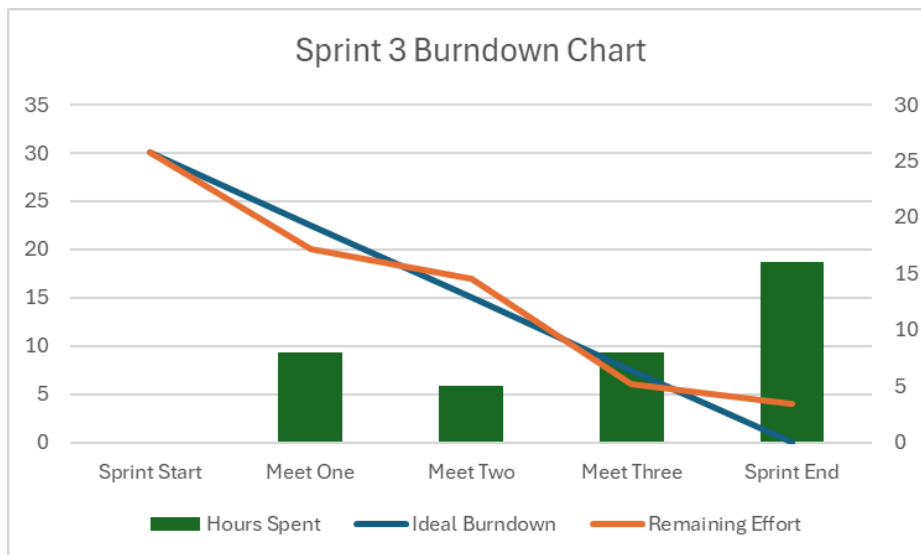


Manager tables pages Users - CRUD	4	Riley Wenckens	3	Complete
Manager tables pages Menu - CRUD	4	Riley Wenckens	2	Complete
Manager tables pages inventory- CRUD	4	Riley Wenckens	3	Complete
Manager tables pages Order - CRUD	4	Riley Wenckens	n/a	In progress
Weather GUI	2	Rushil Jayant	n/a	In progress
Surge Charge Pricing	2	Diego Martinez	2	Complete
Edit Order Functionality	4	Elvis Chen	4	Complete
Log Order Functionality	4	Elvis Chen	4	Complete
Inventory reduction when the order is complete	2	Rahul Rajendran	2	Complete
Manager page: Overview stats	2	Laith Bohsali	3	Complete
Manager page: General stat cards	2	Laith Bohsali	3	Complete

Summary Table	Rushil Jayant	Riley Wenckens	Rahul Rajendran	Elvis Chen	Diego Martinez	Laith Bohsali
Sprint 1	4	10	8	4	8	1
Sprint 2	13	8	8	5	15	4
Sprint 3	10	18	19	10	12	4



## Burn-down Charts





## Appendix 1: SCRUM Meeting Agendas and Minutes

SCRUM Meeting 11 for Project 3 (Planning)

Prepared by: Rushil Jayant

Meeting Date: 4/17/2024 10:30 AM Zachry Engineering Building

### Meeting Attendees

1. Rushil Jayant
2. Riley Wenckens
3. Rahul Rajendran
4. Elvis Chen
5. Diego Martinez
6. Laith Bohsali

### Meeting Agenda Items

- Understanding of remainder tasks and deliverables to be completed
- Discussion of activities that are needed to be completed to maintain proper pace of progress
- Plan Written Documentation for Sprint 2 and tasks for User Study assignment

### Status Update Since Last Meeting

Accomplishments:

- Completion of Sprint 2 Goal and Understanding of Project Requirements
- Finding Render.com to be a plausible solution for the backend only deployment
- Understanding of accessibility needs of the website and final assignments

Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Sprint 2 Demo	Diego	Yes
Research Plausible Alternatives to Vercel backend	Rahul	Yes
Django Connection to Open Weather API	Diego	Yes
Issues with Documentation	Rushil	Yes





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## Before The Next Meeting

### Plans:

- Look more at sprint goals and add as much as possible to product/sprint backlog
- Work on each person's collectively assigned tasks and figure out how to do testing/accessibility/quality checks for all of them

### Task Assignments:

Task Description	Assigned to
Customer Order Page	Rahul
Kitchen Page	Rahul
Accessibility Checks	Rahul
Weather API Integration to Frontend	Rushil
Code Documentation Generation	Rushil
Fix Authentication Issues	Elvis
Cashier Order Page	Elvis
Manager Page Tables	Riley
Front End Database Operations	Riley
Analysis Page	Diego
Manager Overview Page	Laith
Caching	Laith
Database Management	Laith

## Minutes from Previous Meeting

In this meeting, team 902-3 of CSCE 331 reviewed what we should do better from the Sprint 2. We have decided as a team that we did good on some things and could improve in many places in the project.

We thought that we made several technical improvements since the last iteration of the project, but as a team, our project completion velocity could have been improved significantly. Ideally in this



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sprint we wanted the backend and the frontend to be connected so that changes on the front end would be reflected in the backend. Even though we made a working version of this, where the backend was local, we would have wanted it to have been hosted online through Vercel if we had not run into technical issues at the last minute. We still finished over 70% of the tasks that we set out for this sprint.

As a group, we could have improved significantly if we had figured out that Vercel is not the best platform to deploy both the frontend and backend, and that we could have explored other solutions in this regard. We could have done the backend parts earlier and reached out to instructional staff earlier in the process. Our team could have also assigned not only stories relating to specific features, but also explorative tasks that involve finding the right backend, how a feature should work, or requirements gathering.



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## SCRUM Meeting 12 for Project 3 (Standup)

Prepared by: Rushil Jayant

Meeting Date: 4/23/2024 Time: 9:00 AM Place: Zachry Engineering Building

## Meeting Attendees

7. Rushil Jayant
8. Rahul Rajendran
9. Laith Bohsali
10. Riley Wenckens
11. Diego Martinez
12. Elvis Chen

## Meeting Agenda Items

- Read aloud scrum goal of finishing project requirements (see Sprint 3 PLAN)
- Took vote on how likely we are to meet our Sprint goal
- Discuss successes and blockers

## Status Update Since Last Meeting

### Accomplishments:

- We understand the last remaining project requirements and have planned what everyone needs to do in detail
- Render.com works but it needs to be manually tested

### Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Customer Order Page	Rahul	No
Kitchen Page	Rahul	No
Accessibility Checks	Rahul	No
Weather API Integration to Frontend	Rushil	No
Code Documentation Generation	Rushil	No
Fix Authentication Issues	Elvis	No
Cashier Order Page	Elvis	No



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Manager Page Tables	Riley	No
Front End Database Operations	Riley	No
Analysis Page	Diego	No
Manager Overview Page	Laith	No
Caching	Laith	No
Database Management	Laith	Yes

## Before The Next Meeting

### Plans:

- Fix authentication issues, while implementing the user types and rendering components based on the user types
- Manually test backend render links to see if everything is working correctly

### Task Assignments:

Task Description	Assigned to
Customer Order Page	Rahul
Kitchen Page	Rahul
Accessibility Checks	Rahul
Weather API Integration to Frontend	Rushil
Code Documentation Generation	Rushil
Fix Authentication Issues	Elvis
Cashier Order Page	Elvis
Manager Page Tables	Riley
Front End Database Operations	Riley
Analysis Page	Diego
Manager Overview Page	Laith
Caching	Laith



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## Minutes from Previous Meeting

In this meeting, team 902-3 of CSCE 331 understood the shortfalls of the last sprint and successes and wanted to move forward to completion of the project in its entirety. As Sprint 3 is the last sprint, we wanted to near completion as much as physically possible. Specifically, with the instruction of the teaching assistant, we looked at the requirements from the canvas final project completion assignment, and crafted our tasks to make sure we hit all of them, include backlog activities, and add above and beyonds as necessary.

We also are making shorter and nuanced stories so that tasks are more compartmentalized and we understand what we need to do as a group, as we were confused in previous sprints due to large and vague sprints. Specifically, this sprint we want to implement a complete menu for customers, cashiers, and managers, as well as complete the manager view analytics.

The Scrum masters' specific goals are to complete the assigned tasks that are not coding related, like note taking, and the documentation of the code.



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## SCRUM Meeting 13 for Project 3 (Standup)

Prepared by: Rushil Jayant

Meeting Date: 4/24/2024 Time: 11:00 AM Place: Zachry Engineering Building

## Meeting Attendees

13. Rushil Jayant
14. Rahul Rajendran
15. Diego Martinez
16. Elvis Chen
17. Laith Bohsali

## Meeting Agenda Items

- Read aloud scrum goal of finishing project requirements (see Sprint 3 PLAN)
- Took vote on how likely we are to meet our Sprint goal
- Discuss successes and blockers

## Status Update Since Last Meeting

### Accomplishments:

- Backend was updated and now can be used for more longer functions for downstream tasks
- Authentication issues have been fixed

### Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Customer Order Page	Rahul	No
Kitchen Page	Rahul	No
Accessibility Checks	Rahul	No
Weather API Integration to Frontend	Rushil	No
Code Documentation Generation	Rushil	No
Fix Authentication Issues	Elvis	Yes
Cashier Order Page	Elvis	Yes
Manager Page Tables	Riley	No



Front End Database Operations	Riley	Yes
Analysis Page	Diego	No
Manager Overview Page	Laith	No
Caching	Laith	No
Database Management	Laith	Yes

## Before The Next Meeting

Plans:

- Complete the customer order page, and the manager backend functions (that sets us up for further tasks)
- Plan how to implement caching to improve performance

Task Assignments:

Task Description	Assigned to
Customer Order Page	Rahul
Kitchen Page	Rahul
Accessibility Checks	Rahul
Weather API Integration to Frontend	Rushil
Code Documentation Generation	Rushil
Analysis Page	Diego
Manager Overview Page	Laith
Caching	Laith

## Minutes from Previous Meeting

During this meeting we discussed the pending tasks because we needed to make sure everything was working for the TA demo the week after, specifically we discussed how to make the UI work with the backend. The backend was updated to render.com by Rahul, and this will be used by the other developers in the team. Riley is working on the manager's view. Rahul is updating the



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customer layouts. Diego is helping connect the backend using Axios, but is struggling to implement the refresh functionality.





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## SCRUM Meeting 14 for Project 3 (Standup)

Prepared by: Rushil Jayant

Meeting Date: 4/25/2024 Time: 9:15 AM Place: Zachry Engineering Building

## Meeting Attendees

18. Rushil Jayant
19. Riley Wenckens
20. Laith Bohsali
21. Diego Martinez
22. Rahul Rajendran

## Meeting Agenda Items

- Read aloud scrum goal of finishing project requirements (see Sprint 3 PLAN)
- Took vote on how likely we are to meet our Sprint goal
- Discuss successes and blockers

## Status Update Since Last Meeting

### Accomplishments:

- Completion of the Customer order page
- Get the links working for the manager order page frontend and backend connection

### Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Customer Order Page	Rahul	Yes
Kitchen Page	Rahul	No
Accessibility Checks	Rahul	No
Weather API Integration to Frontend	Rushil	No
Code Documentation Generation	Rushil	No
Fix Authentication Issues	Elvis	Yes
Cashier Order Page	Elvis	Yes
Manager Page Tables	Riley	Yes



Front End Database Operations	Riley	Yes
Analysis Page	Diego	No
Manager Overview Page	Laith	No
Caching	Laith	No
Database Management	Laith	Yes

## Before The Next Meeting

### Plans:

- Complete all pending tasks before the TA demo
- Make sure to double check listed and hidden requirements

### Task Assignments:

Task Description	Assigned to
Analysis Page	Diego
Manager Overview Page	Laith
Caching	Laith
Kitchen Page	Rahul
Accessibility Checks	Rahul
Weather API Integration to Frontend	Rushil
Code Documentation Generation	Rushil

## Minutes from Previous Meeting

There was progress made towards the project requirements, specifically the Kitchen functionality that was a requirement made known to us by the TA. Rahul and Elvis are working on the frontend functionality of the Kitchen screen. Diego is helping other team members figure out how to interact with the API but is struggling with the auto-refresh function. Scrum master Rushil helped other team members fix the auto-refresh function by using an inbuilt function that handles refreshing APIs every 30 seconds. We also discussed how to improve the performance of the website as Riley's front end was taking a long time to render.



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## SCRUM Meeting 15 for Project 3 (Retrospective)

Prepared by: Rushil Jayant

Meeting Date: 5/1/2024 7:00 PM on Zoom

## Meeting Attendees

- 23. Rushil Jayant
- 24. Riley Wenckens
- 25. Laith Bohsali
- 26. Rahul Rajendran
- 27. Elvis Chen
- 28. Diego Martinez

## Meeting Agenda Items

- What went wrong in the past sprint/project journey
- What are the key takeaways from past sprint and this class
- What adjustments that we need to make to be better, and do well for the celebration of learning

## Status Update Since Last Meeting

### Accomplishments:

- Completing the sprint goal of getting almost all features done and good feedback from the TA in lab
- Have a confident path to success during the celebration of learning (demo day) with the Professor

### Tasks Completed:

Task Description	Assigned to	Completed? (yes/no)
Customer Order Page	Rahul	Yes
Kitchen Page	Rahul	Yes
Accessibility Checks	Rahul	Yes
Weather API Integration to Frontend	Rushil	Yes
Code Documentation Generation	Rushil	Yes
Fix Authentication Issues	Elvis	Yes



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Cashier Order Page	Elvis	Yes
Manager Page Tables	Riley	Yes
Front End Database Operations	Riley	Yes
Analysis Page	Diego	Yes
Manager Overview Page	Laith	Yes
Caching	Laith	Yes
Database Management	Laith	Yes

## Minutes from Previous Meeting

We planned what we are going to do for the rest of the weekend and to solve some blockers. Specifically we planned to solve the blocker of the long rendering times by loading some data temporarily and then only asking the backend when necessary, or troubleshooting the problem by using developer tools to see where the hang ups are really happening. Rushil will be working on the documentation, and the weather API. Riley is still working on the manager's view and needs help from Diego on how to call the backend, which will be their future task. Rahul is working on customer view and kitchen view.