Sprint 1 Materials

CSCE 331 907-30

Aaron Mathews
Adam Teo
Akshay Belhe
Chris Avila
Gabriel Floreslovo
Margo Gongora

Retrospective Summary

When analyzing the first sprint of our project, we found many areas for improvement and had a lot of ideas to implement for the coming sprints. We began by reflecting on the best features of our website, and we were all very happy with how the overall package of the app came together and implemented our various features. Overall, we were very happy with our collective work ethic and commitment to making a functioning and well-designed deployment without trying to cut corners or push work back. We felt like the biggest challenges we faced were adapting to the new framework we were using, Next.js, and adapting to the new workflow that we were learning (SCRUM). We found that the last sprint had some unclear wording in the tasks and that we were assigning overlapping tasks to different team members that ended up being finished by different people. Additionally, the tracking of task completion was difficult, which compounded the overlapping problem. To fix this, we came up with a new workflow: when done with code for a task, the commit should include an updated sprint 2 plan document with the finished task marked off. As scrum master, every day I will update the GitHub SCRUM board with completed tasks based off of commits. We will address overlapping and clarity issues directly in our sprint 2 planning meeting. Finally, we added chores (0 point tasks) to our product backlog to take care of optimization opportunities we found and to tweak our design based on what we found in our user studies.

GitHub Release Link

https://github.com/csce-315-331-2024a/project-3-full-stack-agile-web-project-3-907-30/releases/tag/1.0.0

Product Backlog

Legend: E(n) = Estimated time (n) in hours, corresponds to n points; P(n) = Priority level n, determines dependency level; S(x) = Status x, 0 is incomplete, 1 is complete

Dependencies: All items marked with priority 1 (P1) create the foundation for our project.

All items marked with priority 2 (P2) are tasks that create a more robust product, and are foundation adjacent, but do not act as building blocks for later tasks. They are most likely built on P1 tasks.

All items marked with priority 3 (P3) do not build any foundational elements of our app. They are all dependent on previous tasks. These tasks are to add finishing touches to the product.

P1
Stories 1, 6, & some tasks in 13 and 14: Login functionality

Story 5: Manager trend functionality (data retrieval and analysis)

Stories 7, 8, 9, 10, 11, & 12: Employee POS functionality

Story 18: Customer POS ordering functionality

Stories 19, 20, & 21: Accessibility features

P2 - Needs all users to be logged in, Needs basic POS framework, Needs data retrieval/trends
Stories 2 & 3: Manager advanced trends and restaurant actions (Needs login, Needs data retrieval/trends)

Story 10: Extra item information for employee at POS (Needs basic POS framework)

Stories 15, 16, & some tasks in 14: Customer account information and interaction (Needs login, data retrieval/trends, basic POS framework)

P3 - Needs login, POS framework, and data retrieval/trends
Stories 17, & dome tasks in 13 and 14: Customer and employee statistics and account information (Needs login, data retrieval/trends, basic POS framework)

Manager stories:

- [ ] 1. As a manager I want to be able to securely login to my Manager view so that I can make managerial adjustments without allowing any other people to view the sensitive information that I have access to.
    - [ ] 1. Make Manager GUI login view that prompts a username and password and uses google oauth to make a secure login E3 P1 S1
    - [ ] 1. Modify schema to hold google Oauth necessary information E2 P1 S1
    - [ ] 1. Implement login and logout routes and corresponding hooks E1 P1 S1
- [ ] 2. As a manager, I want to be able to view past orders and see what is selling the least, so we can advertise it more.
    - [ ] 2. Make function that queries the menu items that have sold the least and the amounts that they have sold in ascending order (least sales first); have 10 item cutoff (bottom 10 sellers) E1 P2 S0
    - [ ] 2. Add functionality to the function that queries the menu items that contribute the smallest percentage to the total revenue as well, for a more accurate view of the weak links E1 P2 S0
    - [ ] 2. Make GUI panel/page that shows these items in order with their categories E2 P2 S1
    - [ ] 2. Have GUI make the items that pop up interactable; eg if you click corn dogs because they're selling poorly, it should take you to the menu items view where you can edit the corndog item or add a promotion to it E3 P2 S0
- [ ] 3. As a manager, I want to make any item on sale to increase orders. 3
    - [ ] 3. Make GUI edit menu item view have an option to put the item on sale E1 P2 S0
    - [ ] 3. Have a function that updates menu item's prices when they go on sale E1 P2 S0
    - [ ] 3. Make GUI menu item sale view have a date range option using a calendar date selection to determine how long the sale will last E1 P2 S0
    - [ ] 3. Make menu item return to default price when sale window passes E2 P2 S0
- [ ] 4. As a manager, I want to be able to see what employees have made the most orders so I can see which employee is most valuable.
    - [ ] 4. Make Manager GUI page that shows employee performance E2 P1 S0
    - [ ] 4. Make function that queries the employees with the most total orders made E1 P1 S0
- [ ] 5. As a manager I want to be able to see trends in sales data so I can estimate inventory purchasing and present to business owners.
    - [ ] 5. Make Manager GUI page that has a menu of available trend reports E3 P1 S0
    - [ ] Make functions for the following trend reports:
        - [ ] 5. What sells together E2 P1 S0
        - [ ] 5. Product Usage Chart E2 P1 S0
        - [ ] 5. Sales Report E2 P1 S0
        - [ ] 5. Excess Report E2 P1 S0

☐ 5. Restock Report E2 P1 S0

☐ 5. Days with the most sales in a given month E2 P1 S0

☐ 6. As a manager, I want to be able to give new employees the ability to make orders but not access the manager view.

    ☐ 6. Managers can view all employee accounts that have logged into the POS system E2 P1 S1

    ☐ 6. Managers can make accounts "employees" through a button click in the manager view E1 P1 S1

    ☐ 6. Restrict access of manager page from employees E1 P1 S1

Employee stories:

☐ 7. As an employee, I want to be able to make orders so I can translate a customer's desires to the kitchen.

    ☐ 7. Make Employee GUI POS system that allows employees to create, delete, customize, and see the information contained within an order E1 P1 S0

    ☐ 7. Make functions that can create, delete, view, and modify the orders in the database E1 P1 S0

    ☐ 7. Make function that queries all of a menu item's relevant information E2 P1 S1

    ☐ 7. Have GUI call and display the results of that function when a customer is selecting a given item E1 P1 S0

☐ 8. As an employee, I want to be able to clear an order so that I can respond to a customer changing their mind.

    ☐ 8. Make POS system have a clear order button that removes all of the items in the order list E1 P1 S1

☐ 9. As an employee, I want to receive instant notifications on insufficient stock levels before placing orders.

    ☐ 9. Make a function that quickly queries the stock information of the inventory items that make up a menu item and alerts if there is low / no stock E1 P1 S1

    ☐ 9. Have GUI call this function when an employee selects a menu item for an order E1 P1 S1

☐ 10. As an employee, I want to be able to view product information so I can inform the customer without leaving.

    ☐ 10. Make a function that queries all of the relevant characteristics of a menu item like allergen information. E1 P2 S0

    ☐ 10. Have GUI show this information to the employee when they click on a menu item at POS. E1 P2 S0

☐ 11. As an employee, I want to be able to quickly add extra quantities for one item so I can respond to customer wants.

  ☐ 11. Have GUI at POS give the option of selecting the number of items that will be added to an order when creating it E1 P1 S1

☐ 12. As an employee, I want to be able to see the order total so I can read it out and double check with the customer.

  ☐ 12. Have GUI at POS show the subtotal, tax, and final total for an order when as the order is being built E1 P1 S1

☐ 13. As an employee, I want to be able to see what items I have sold the least to tailor my sales strategy around it.

  ☐ 13. Make Employee GUI view that shows employee information E1 P3 S0
  ☐ 13. Make function that queries the information stored for a given, logged-in employee E1 P3 S0
  ☐ 13. Make Employee GUI login view using google OAuth E2 P1 S1
  ☐ 13. Implement login and logout routes and corresponding hooks E3 P1 S1
  ☐ 13. Store session information in cookies when logged in E1 P1 S1
  ☐ 13. Save current user's information during their session to be used in their tasks (making an order should assign the currently logged in employee to the order) E1 P1 S1

Customer stories:

☐ 14. As a customer, I want to be able to log in to see my past orders and points so that I can re-order or just see what I like.

  ☐ 14. Make Customer GUI "login" view that asks for relevant information (email) E2 P1 S0
  ☐ 14. Implement Google OAuth API functionality for customers to login E3 P1 S0
  ☐ 14. Implement login and logout routes and corresponding hooks E1 P1 S0
  ☐ 14. Make Customer GUI information view that shows all of the relevant information (general and rewards) on a customer's account E2 P3 S1
  ☐ 14. Create new tables and/or columns in the database holding the extra rewards information E2 P3 S1
  ☐ 14. Make function that queries a customer's general information E1 P2 S0
  ☐ 14. Make function that queries a customer's purchase history   E1 P2 S0
  ☐ 14. Make a function that queries a customer's rewards information E1 P3 S1

☐ 15. As a customer, I want to see items that are on promotion so that I could make an informed purchasing decision.

☐ 15. Make the Customer POS view highlight the items that are on sale in some way E1 P2 S0

☐ 15. Make function that queries all of the items that are on sale E1 P2 S0

☐ 16. As a customer I want to see allergy and dietary information so I can make an informed decision about what to eat.

☐ 16. Have GUI show allergy alerts when the customer selects an item E2 P2 S0

☐ 16. Make function that retrieves the allergy information for a menu item E1 P2 S0

☐ 17. As a customer, I want to gain points for previous transactions, so I can use that information to get discounted items.

☐ 17. Have GUI give feedback to logged-in customers showing how many points they have earned for an order E1 P3 S0

☐ 17. Have Customer GUI view that shows the rewards they can get with their point balance E2 P3 S0

☐ 17. Create new tables and columns in the database to hold the information on rewards and deals E1 P3 S1

☐ 17. Make function to query what rewards are available with the point total of the given customer E1 P3 S0

☐ 18. As a customer, I want to be able to see menu items and their respective prices clearly, so I can use that information to make my order.

☐ 18. Make sure GUI has obvious design that clearly shows what an item looks like, and shows the item's information obviously when selected E2 P1 S1

Accessibility stories:

☐ 19. As a user who is blind, I want to be able to use the website with the help of a screen reader, so that I know what is being displayed. 2

☐ 19. Add screen reader functionality to all GUI items in sprint 1 E1 P1 S1

☐ 19. Add screen reader functionality to all GUI items in sprint 2 E1 P1 S0

☐ 19. Add screen reader functionality to all GUI items in sprint 3 E1 P1 S0

☐ 20. As a user who has poor vision, I want to be able to see and use the website without any additional help, so I can order correctly. 2

☐ 20. Make sure that all views have high color contrast and easily legible font in sprint 1 E1 P1 S1

☐ 20. Make sure that all views have high color contrast and easily legible font in sprint 2 E1 P1 S0

☐ 20. Make sure that all views have high color contrast and easily legible font in sprint 3 E1 P1 S0

☐ 21. As a non-english speaking user, I want to be able to read the site in my native language so that I can order what I want without a substantial barrier. 2

    ☐ 21. Add google translate functionality to all GUI items in sprint 1 E2 P1 S0

    ☐ 21. Add google translate functionality to all GUI items in sprint 2 E2 P1 S0

    ☐ 21. Add google translate functionality to all GUI items in sprint 3 E2 P1 S0

Sprint Backlog

Legend: En = N hours estimated to complete, Sy = y status (0 not complete, 1 complete), Tn = N hours spent on the task

- ☐ Make Manager GUI login view that prompts a username and password and uses google Oauth to make a secure login E3 S0 T3 - Adam
- ☐ Modify schema to hold Google OAuth necessary information E2 S0 T3 - Adam
- ☐ Implement login and logout routes and corresponding hooks E1 S0 T2 - Adam
- ☐ Managers can view all employee accounts that have logged into the POS system E2 S0 T1 - Aaron
- ☐ Managers can make accounts "employees" through a button click in the manager view E1 S0 T1 - Adam
- ☐ Restrict access of manager page from employees E1 S0 T1 - Gabe
- ☐ Make an interactive Employee GUI POS system that allows employees to create an order E1 S0 T3 - Akshay
- ☐ Make functions that can create and view the orders in the database E1 S0 T1 - Akshay
- ☐ Have GUI at POS give the option of selecting the number of items that will be added to an order when creating it E1 S0 T1 - Aaron
- ☐ Make POS system have a clear order button that removes all of the items in the order list E1 S0 T1 - Akshay
- ☐ Have GUI at POS show the subtotal, tax, and final total for an order as the order is being built E1 S0 T1 - Aaron
- ☐ Make a function that quickly queries the stock information of the inventory items that make up a menu item and alerts if there is low / no stock E1 S0 T1 - Margo
- ☐ Have GUI call this function when an employee selects a menu item for an order E1 S0 T1 - Margo
- ☐ Make Employee GUI login view using Google OAuth E2 S0 T1 - Akshay
- ☐ Implement login and logout routes and corresponding hooks E3 S0 T1 - Akshay
- ☐ Store session information in cookies when logged in E1 S0 T5 - Gabe
- ☐ Save current user's information during their session to be used in their tasks (making an order should assign the currently logged in employee to the order) E1 S0 T1 - Margo
- ☐ Make function that queries all of a menu item's relevant information E2 S0 T1 - Margo
- ☐ Have GUI call and display the results of that function when a customer is selecting a given item E1 S0 T2 - Chris
- ☐ Make sure GUI has obvious design that clearly shows what an item looks like, and shows the item's information obviously when selected E2 S0 T7- Chris
- ☐ Add screen reader functionality to all GUI items in sprint 1 E1 S0 T1 - Chris

☐ Make sure that all views have high color contrast and easily legible font in sprint 1 E1 S0 T1 - Gabe
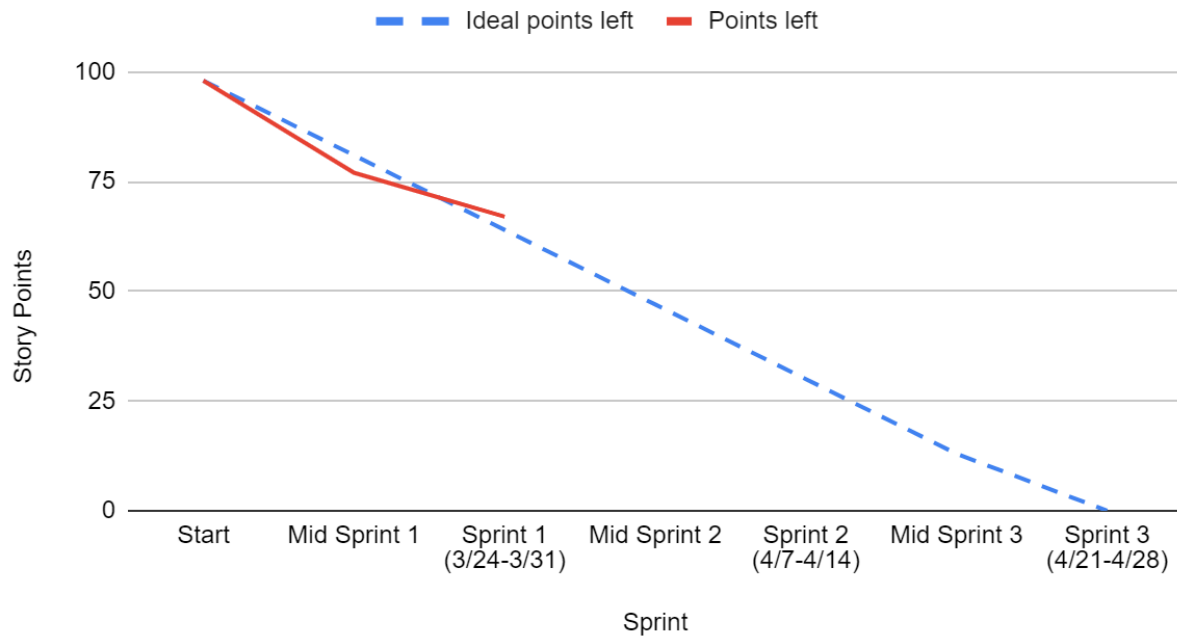
Summary Table:

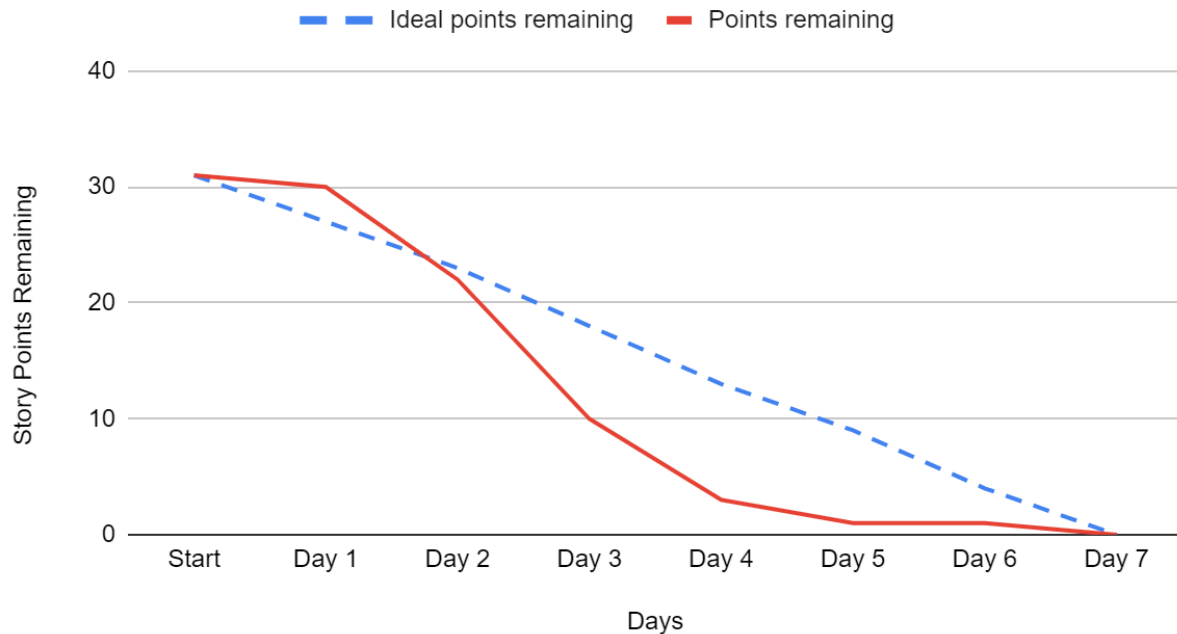| Member	Sprint 1 Points	Sprint 2 Points	Sprint 3 Points	
Aaron Mathews	4			
Adam Teo	7			
Akshay Belhe	8			
Chris Avila	4			
Gabriel Floreslovo	3			SCRUM MASTER
Margo Gongora	5			

Burn-down Charts

Product Burndown:

Sprint 1 Burndown:

SPRINT 1 BURNDOWN CHART

Next Sprint's SCRUM Meeting Schedule

Meeting 1 - Monday 4/8/24 15 minutes before lab

Meeting 2 - Tuesday 4/9/24 15 minutes before lab

Meeting 3 - Wednesday 4/10/24 15 minutes before lab

Meeting 4 - Thursday 4/11/24 25 minutes before lab

Appendix 1: SCRUM Meeting Agendas and Minutes

Sprint 1 Stand-up 1 for CSCE 331 Project 3

Prepared by: Gabriel Floreslovo

Meeting Date: 3/25/2024

Meeting Attendees

- Adam Teo
- Akshay Belhe
- Aaron Mathews
- Chris Avila
- Margo Gongora
- Gabriel Floreslovo

Agenda

- ☐ What we have finished, what we have left, and how we will do it
- ☐ Conduct "fist of five" vote on the confidence in achieving the sprint goal
- ☐ Share any roadblocks that are interrupting progress

What we have completed

- Implemented login and logout route and hooks - Adam
- Set up repository and have Next.js running - Margo
- Have deployable site using Vercel - Margo

Roadblocks

- Need to understand Next.js basics

The plan for the rest of the sprint

- Have everyone begin on their deliverables - All

- Investigate requirements and gather questions to ask Ritchey - Gabe

Fist of five result

- average of 3.5 -> decent confidence

Summary

Overall, we are getting started without too much issue. Of course, many of us are completely new to Next.js, and have not used either Node or React, so it will take a little bit of time to learn. However, we do have some expertise in the group and they are taking a leadership role in steering us in the right direction coding-wise. The group does believe that it is very possible to finish everything in a timely manner, but we do not have great confidence yet with this new framework.

NO PREVIOUS STAND-UP MEETING

Sprint 1 Stand-up 2 for CSCE 331 Project 3

Prepared by: Gabriel Floreslovo

Meeting Date: 3/26/2024

Meeting Attendees

- Adam Teo
- Akshay Belhe
- Aaron Mathews
- Chris Avila
- Margo Gongora
- Gabriel Floreslovo

Agenda

- ☐ What we have finished, what we have left, and how we will do it
- ☐ Conduct "fist of five" vote on the confidence in achieving the sprint goal
- ☐ Share any roadblocks that are interrupting progress

What we have completed

- Finished login system - Adam
    - Nobody else can access manager page - Gabe
    - Added admin permissions - Adam
- Everybody else is making progress on their materials - All

Roadblocks

- Heavy outside workload at the beginning of the week
- Need to modify schema to finish new feature implementations now that we are making progress

The plan for the rest of the sprint

- Modify schema and database population scripts - Gabe
- Finish the deliverables that are almost done before the next stand-up so that we will have more than half of the
points knocked out - All

Fist of five result

- average of 3.5 -> decent confidence

Summary

Overall, we have a solid foundation and are slowly but surely finishing work and building momentum. While we may only have one story really finished, it is a foundational one and will make other feature implementations much easier. We still are not supremely confident with using our new framework, and we don't have much to show for yet, so confidence is still moderate. However, the next day of work will provide great results.

Minutes from Previous Meeting

FoF - 3.5
Overall, we are getting started without too much issue. Of course, many of us are completely new to Next.js, and have not used either Node or React, so it will take a little bit of time to learn. However, we do have some expertise in the group and they are taking a leadership role in steering us in the right direction coding-wise. The group does believe that it is very possible to finish everything in a timely manner, but we do not have great confidence yet with this new framework.

Sprint 1 Stand-up 3 for CSCE 331 Project 3

Prepared by: Gabriel Floreslovo

Meeting Date: 3/27/2024

Meeting Attendees

- Adam Teo
- Akshay Belhe
- Aaron Mathews
- Chris Avila
- Margo Gongora
- Gabriel Floreslovo

Agenda

- ☐ What we have finished, what we have left, and how we will do it
- ☐ Conduct "fist of five" vote on the confidence in achieving the sprint goal
- ☐ Share any roadblocks that are interrupting progress

What we have completed

- Made functions to query stock information and menu item information - Margo
- Employee POS system almost done, missing create - Akshay
- Clear order button - Akshay
- Updated Oauth to match schema - Adam
- Updated schema and scripts - Gabe

Roadblocks

- Figuring out how to use state in React

The plan for the rest of the sprint

- Add customer managing view - Aaron

- Hold off on update and delete functionality on employee POS view, should probably push to next sprint, should be with order viewing story - Akshay
- For next sprints, assign stories rather than tasks, so there is less overlap - All
- Start writing tests for our completed features - All

Fist of five result

- average of ~4 -> high confidence

Summary

Overall, up to today, we are making good progress. Our main roadblocks are still just setup bottlenecks; we are waiting for each other while we all figure out basics. However, our communication is strong and everybody is on the same page. Aaron will be taking on some other team members' tasks to lighten their load because some of his tasks overlapped with others and were already completed. We are adding a new task to add a customer managing view to the manager page. Everyone will be completing their remaining tasks and begin adding tests as they develop.

Minutes from Previous Meeting

FoF - 3.5
Overall, we have a solid foundation and are slowly but surely finishing work and building momentum. While we may only have one story really finished, it is a foundational one and will make other feature implementations much easier. We still are not supremely confident with using our new framework, and we don't have much to show for yet, so confidence is still moderate. However, the next day of work will provide great results.

Sprint 1 Stand-up 4 for CSCE 331 Project 3

Prepared by: Gabriel Floreslovo

Meeting Date: 3/28/2024

Meeting Attendees

- Adam Teo
- Akshay Belhe
- Aaron Mathews
- Chris Avila
- Margo Gongora
- Gabriel Floreslovo

Agenda

What we have finished, what we have left, and how we will do it
Conduct "fist of five" vote on the confidence in achieving the sprint goal
Share any roadblocks that are interrupting progress

What we have completed

- API call for customer login - Adam
- Finished employee UI system - Akshay
- Made create order button, connected employee order to database - Aaron
- Finished customer UI functionality - Chris
- Finished low stock notification - Margo
- Finished and tweaked burndown chart system and scrum framework - Gabe

Roadblocks

- Still figuring out state and effect
- Making api to connect to database (not JDBC)
- Figuring out how to make tests

The plan for the rest of the sprint

- Fix employee permissions with Oauth - Adam
- Continue writing tests - All
- Re-format and clean up customer UI - Chris
- Making sure comments and javadoc is up to date - All
- Finish local storage - Gabe

Fist of five result

- average of 3.5 -> decent confidence

Summary

We have finished a very large portion of the tasks that needed to be completed. The remaining tasks are close to done, so we are very close to completing every sprint task. However, writing tests is next, and we do not have much experience with the testing framework we are using. We are going to have to figure out how to write a lot of tests, which is why our confidence has slightly wavered from the last meeting.

Minutes from Previous Meeting

FoF - 4
Overall, up to today, we are making good progress. Our main roadblocks are still just setup bottlenecks; we are waiting for each other while we all figure out basics. However, our communication is strong and everybody is on the same page. Aaron will be taking on some other team members' tasks to lighten their load because some of his tasks overlapped with others and were already completed. We are adding a new task to add a customer managing view to the manager page. Everyone will be completing their remaining tasks and begin adding tests as they develop.