

Lab 9

Illustrate your updated task board and your burndown chart.

Burn Down Chart

Velocity Calculation:

“Our team of 5 engineers are currently in Iteration 2, operating on 10 working-day cycles (2 weeks) at a velocity of 1.0, meaning we’re right on schedule and hitting all our goals without any issues.”

Overall Calculation : $5 \times 10 \times 0.85 = 42.5$ effective work days in total

Current Calculation: $\text{Work completed} / \text{Work Planned} = 8.5 \text{ days} / 10 \text{ days} = 0.85$

Show the project to update.

User Stories for Iteration 2

Login (Current Priority: 30)

“As an admin, I want a login feature so that users can have a secure account and be able to buy games or toys from my inventory.”

Inventory Purchasing (Current Priority: 50)

“As a store employee, I want to mark items as sold (Instead of completely removing the product) when processing transactions.”

Sort/Filter Function (Current Priority: 20)

“As a customer, I want to filter the products by relevance, category, price range, and rating so that I can easily find items that meet my preferences and budget.”

Overview Of Inventory (Current Priority: 10)

"As a store manager, I want to see an overview of the current inventory, including the quantity, cost, and status of each item, so that I can make informed decisions about restocking and pricing."

Iteration 3 User Stories

Adding to Cart (Priority 40)

"As a customer, I want to add multiple items to my shopping cart to purchase them all at once."

It is a fundamental feature for a store but is only needed when the franchise would like to implement a store feature.

Customer Reviews (Priority 50)

"As a customer, I want to be able to write reviews of products."

While reviews help build trust and influence purchasing decisions, they are not essential for the initial functionality of the system.

Receive Stock notifications (Priority 50)

"As a store owner, I want to receive notifications when a game's stock is below a threshold so I can restock in time."

Useful for inventory convenience but not essential in the early stages.

Sales Report (Priority 50)

"As a sales advisor, I want to track the best-selling products to optimize restocking decisions and recommend the most popular games."

Helps with business insights but does not impact the user's ability to browse items.

Updating inventory weekly (Priority 50)

"As a store employee, I want to be able to update the inventory weekly so inventory stays accurate"

Keeping inventory up to date is important for accuracy, but it does not directly impact the initial functionality of searching and browsing.

Unit Test Deliverables

What interesting bugs did you find?

An interesting bug that we found while developing was being able to edit a product that did not exist (wrong SKU). This was fixed by checking if the product existed before allowing it to be edited. Another bug we found was a case-sensitive search where lower and upper case mattered in the search. This was fixed by ignoring the case in the search input and product names.

What other observations do you have? Eg., was testing difficult, useful, et cetera?

We observed that we had some difficulty with our testing because we were under a time constraint. We did not expect some of our functions to take longer to develop than anticipated. Fortunately, all our core functions were implemented correctly, making the actual testing more straightforward and pretty simple. However, with such a short testing window, we didn't have much time to fine-tune our application, so a bit more testing could have helped us spot any potential bugs and issues.

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Agile Retrospectives

Iteration 2: Retrospective

This retrospective covers everything from the start to the end of iteration 2. During these iterations, we have completed 8 core functions with some additional non-key functions. Our goal by the end of this iteration was to develop and test these 8 functions efficiently while meeting project deadlines. We will reflect on what went well and what didn't during these 2 iterations, making sure we can improve our process moving forward.

General Team Observations about the Project

Our group has successfully completed 8 core functions and maintained a velocity of 1.0, staying on track with the goals we have set. Our collaboration and communication was quite strong as we would help each other when it was necessary. However, we all agree that time management and testing were challenging, this is due to the UI development taking longer than expected. Which then caused us to have less time to test and debug. Moving forward, we plan to schedule the more complex tasks earlier and as well as set a proper time for testing framework and set clearer deadlines to ensure smoother iterations.

Individual Reflections

| Group Members | What went well? | What didn't go well? | Suggestions for Improvement |
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| Vithunan | Everyone was able to work well with each other. Some helped others when they were falling behind | I think we could have done better with our time management and struggled a bit with our testing phases for our features | Scheduling more challenging tasks early into the iteration and completing them first |
| Tony | Coding went smoothly, with very minimal errors and the need for adjustments. | Implementing new tags for items meant that we would have to revise all the test cases of our methods. | We could create a more flexible testing framework so that we would not have to make corrections each time something new is added. |
| Tisha | Communication with the group was quite strong and everyone was ready to help when needed. | Some parts of the interface took longer than we had initially planned, which delayed integration with the other features. | Setting more clearer deadlines for UI development and deadlines for testing so it's not all rushed. |

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| Omar | Good efforts from the whole team tackling every issue that was faced with good attention to detail and documentation. | Some tricky bugs that needed time and attention to fix. | Need to consider more time for bugs and errors. |
| Abdullah | Our team collaborated effectively, with members supporting each other when someone needed help | We faced some challenges with merging code from different team members, sometimes pushing your code can override the code that someone else is working | Always pull the latest changes from the main branch before pushing your code. |