Team 16 - Sprint 1 Retrospective

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What Went Well?

In general, we were able to build the foundation of the project. We created a clickable prototype, so we know exactly where the user is going through each use case. We also had our database set up and started to created the REST calls such as search and user associated calls.

User Story 1: As a user, I would like to like to be able to access all the necessary pages.

Task Number	Description	Time (hours)	Task Owner
1	Header/Footer CSS	1	Ashwin
2	Homepage	2	Ashwin
3	Product Page	2	Spencer
4	Cart Page	2	Rohith
5	Checkout Page	2	Rohith
6	Confirmation Page	1	Rohith
7	Search Page	2	Spencer
8	Merchant Home	2	Kenny
9	Merchant Add/Edit Product Page	2	Raman
10	Create merchant login page	1	Kenny
11	Create user login page	2	Kenny

Completed:

Each of us took three pages and decided to create the UI for it. We met during week 1 of our sprint and discusses the header, footer, and color scheme of the pages to make sure all of our pages are consistent. All of us created a component in our Angular project, corresponding to each page we had to create. Then using only html

and css we would create the UI for the pages we were assigned it. Once we all completed the our pages, we held a meeting and made all the buttons active so that we had a working clickable prototype of our website.

User Story 2: As a congo merchant, I would like to add products/tags

Task Number	Description	Time	Task Owner
1	User inputs required information for new product	2	Raman
2	Information is validated	2	Raman
3	Information is added to the database	1	Raman
4	Success message to merchant user on UI	2	Raman
5	Unit Tests - display dummy product, incorrect input, fetching from database	2	Raman

Completed:

We were able to finish the functionality of adding products, without validation if the user was a merchant. The user is able to input their information, have their inputs validated to make sure it works with our system, and then adds their product to the database, and provides feedback to the client on the server response.

User Story 5: As an unregistered congo customer, I would like to browse via search bar.

Task Number	Description	Time	Task Owner
1	Setup frontend with the clickable prototype	1.5	Spencer
2	Fetch search data from database	2	Spencer
3	Display Products ordered correctly from database	3	Spencer
4	Setup search filters to filter the search results	2	Spencer
5	Unit Test - search valid and invalid products. Assert filters order correctly.	2	Spencer

Completed:

The frontend was set up with the clickable prototype to allow for easier implementation of the functionality of the page. The search bar grabs the string of what is searched on the front end and is passed through a service to the backend where the string is used to query the database(By name, description, and tags) for products. That product query is then returned to the frontend where the products are displayed with their price, name and an image of the product. On each product you are able to click a “Buy Now” button to be redirected to that specific product page.

User Story 6: As a user, I would like to see a product page

Task Number	Description	Time	Task Owner
1	Fetching product data from database	2.5	Spencer
2	Display data from database	2.5	Spencer

Completed:

When being redirected to this page the product's unique Id is passed to allow the frontend to make a service call to the backend. Once it is passed to the backend a query for that product in the database is sent and a response is returned. When the response is returned to the frontend the product's name, merchant, price, current views, and total views are displayed. Also, there is the ability to choose how many products would like to be purchased.

User Story 7: As a user, I would like to register for a Congo account

Task Number	Description	Time	Task Owner
1	Get user input	1	Kenny
2	Validate user input	1	Kenny
3	Encrypt password	1	Kenny
4	Add to database	1	Kenny

Completed:

For this component, I had to make the page dynamic and also listening to the submit button. Once the user entered all the correct information and clicked the submit button, we had to make sure that all the information is valid. Using the typescript file we simply just check the length of the first and last name, validated that it was a valid email and checked the strength of the password. After all this was valid, the typescript would then send a http service with the user input a parameter. Once we get a success response from the http service, we then redirect the user to the login page. If an error occurs, the user will be notified and be asked to try again.

User Story 9: As a user, I would like to login into my Congo account

Task Number	Description	Time	Task Owner
1	Validate login	1	Kenny
2	Store valid login in session	0.5	Kenny
3	Unit tests - incorrect password, attempt limits	1	Kenny

Completed:

Once the user enters the login, password and clicks submit, our typescript file will send this credentials as parameters to a http service that will check if these parameters are in the database as a registered user. If the response is successful, we then redirect them to the homepage, if not output an error message and have then try again.

What did not go well?

In general, for this sprint we weren't able to complete quite a bit of the our use cases. This is mostly because while creating the sprint planning document, the hours we entered we too low, Forcing us to put more use cases. We also did not take into account the amount of time for the learning curve, as that took more time than expected. However, next sprint we're going to be more careful with the use cases we put and the number of hours we enter to be sure that we are not over estimating. We also had to pivot what database we are using because it became apparent that firebases database was not robust enough for what we needed. The database that we pivoted to is MongoDB which added to the learning time as well as changing all of our existing queries.

User Story 3: As a congo merchant, I would like to edit products/tags

Task Number	Description	Time	Task Owner
1	User selects product to edit	2	Raman
2	User inputs the specific changes to product on UI	2	Raman
3	Input is updated to the database	1	Raman
4	Success message show on UI, that product information has been updated	2	Raman
5	Unit Tests - display dummy product, incorrect input, fetching from database	2	Raman

Not Completed:

We did not implement functionality for editing any aspect of an uploaded product yet. Since the merchant verification functionality has not yet been completed, this is something we will do in our next sprint. We will allow merchants to select products that they have uploaded, and use the UI to modify aspects of it, including the tags, and reflect these changes in the database.

User Story 4: As a congo merchant, I would like to remove products/tags

Task Number	Description	Time	Task Owner
1	Separate product and the tags associated to it	2	Raman
2	Delete product from database	2	Raman
3	Send confirmation message and email about product	2	Raman
4	Unit Tests	2	Raman

Not Completed:

We have not yet implemented functionality to remove tags on products, similar to editing. All of the tasks related to adding/editing/removing tags for merchant products will be implemented in the next sprint.

User Story 8: As a user, I would like to get licensed for a merchant account

Task Number	Description	Time	Task Owner
1	Get user input	1	Rohith
2	Validate user input	1	Rohith
3	Encrypt password and merchant license	1	Rohith
4	Admins approve of merchant registration on admin portal	2	Rohith
5	Add to database	1	Rohith

Not Completed:

We have not yet implemented any of the merchant verification functionality. Currently, there is no way for users to become registered as merchants. The merchant portal is open right now for all users to access in this test stage. This is something we will implement in the next sprint.

User Story 10: As a user, I would like to login into my merchant account

Task Number	Description	Time	Task Owner
1	Validate login	1	Rohith
2	Store merchant login in session	0.5	Rohith
3	Unit tests - incorrect password, attempt limits	1	Rohith

Not Completed:

We have not yet implemented any of the merchant verification functionality. Currently there is no way for users to become registered as merchants, so the merchant portal is available for all users to access in this test stage. We will implement all of this in the next sprint.

User Story 11: As a user, I would like to add products to my cart

Task Number	Description	Time	Task Owner
1	Product is added to the user's cart within database	2	Rohith
2	Products in cart appear in Cart Page by calling the database	2	Rohith
3	Unit Test - Test to see if products are correctly in the database and extracting it	2	Rohith

Not Completed:

Cart functionality has not been implemented yet. The UI for the cart page and the UI for the product page is complete, however, functionality to add a product from the page to the cart is not finished.

User Story 12: As a user, I would like a checkout my products in my cart.

Task Number	Description	Time	Task Owner
1	Getting user shipping information from form	1	Ashwin
2	Validating Information	1	Ashwin
3	Unit Test	1	Ashwin

Not Completed:

Due to the fact that cart functionality is not completed, we have not yet implemented checkout functionality. The UI is all there however to take in all necessary inputs from the user.

User Story 13: As a user, I would like to complete the payment necessary to the products in my cart.

Task Number	Description	Time	Task Owner
1	Get payment info from user	0.5	Ashwin
2	Send info to Stripe	1	Ashwin
3	If valid, complete and record transaction in database	1	Ashwin
4	Else, report error to user	0.5	Ashwin
5	Unit Test	0.5	Ashwin

Not Completed:

Since checkout and shipping functionality have not yet been implemented, we did not get to payment functionality. This will all get implemented in the next sprint.

User Story 14: As a user, I would like to browse via categories.

Task Number	Description	Time	Task Owner
1	Show dropdown of categories on click	0.5	Spencer
2	Display all product data based on selected category	1.5	Spencer
3	Allow user to filter category search	1	Spencer
4	Unit Test	1	Spencer

Not Completed:

We decided not to implement this feature because implementation of categories for the website needs to be defined in the new database. Since we had to pivot databases we were not able to implement the new categories functionality within this sprint. However, the UI and frontend are prepared to be implemented with the backend for this. If you click on the categories bar, a drop down appears with categories.

User Story 15: As a user, I would like to browse featured products

Task Number	Description	Time	Task Owner
1	Retrieve featured products from database	1	Ashwin
3	Display featured products on home page, in correct place	2	Ashwin
4	Unit Test	0.5	Ashwin

Not Completed:

We did not yet get around to allowing promotion of products. However, we are displaying dummy product banners on our homepage. That functionality is complete.

How Should We Improve?

For the first sprint, as a group, we worked well together in communicating and providing constructive input. We stuck to the original meeting plan of meeting twice a week for 2 hours each day. We were very productive during this time, however, we weren't able to complete all the tasks that we assigned ourselves. To address this issue, we will increase the frequency of our meetings that we would have per week since we do get a lot done during these meetings.

Another challenge that we had this sprint was that we underestimated the amount of time that it would take for us to get comfortable with the environment the new languages. We assumed that learning these languages and set up overhead for the platform would take no more than a week because we could rely on one of our members who is very familiar with this environment. To solve this problem, we should allocate more time to learning it on our own and coming to meetings ready with questions. This will also allow to finish up our components faster since we can bounce off ideas from each other.

During this sprint, we did not plan our workload properly. Underestimating the amount of time to get used to the environment disrupted our plan. Additionally, we did not allocate the proper time for certain user stories properly. It seemed like certain tasks were event distributed, but some members ran into unseen roadblocks because not all user stories had the same difficulty level or implementation time as we had earlier thought. To solve this challenge, we should allocate sufficient time to study the environment usage for our components thoroughly.

Over the course of this sprint, we ended up not distributing the workload properly over the three weeks. We had initially assumed that if we take a week to prepare the database and set up our environment while learning more about the platform and its functionalities, that we could spend the next couple weeks to implement the user stories. This, however, disrupted our work schema because we had members not completing some stories and working on stories that weren't theirs as well. We can solve this by working on user stories during the first week itself and following the sprint planning document more precisely.