|  |  |  |
| --- | --- | --- |
| Date | # Hours | Description of work |
| 02.04.2025 | 2.5 | Today, I spent time testing the program and improving the structure and functionality across the various pages. I separated the navbar and footer into individual Thymeleaf fragment files to reduce code repetition and successfully connected them to each page using `th:replace`. I also resolved some issues with Bootstrap by ensuring the correct scripts were properly loaded, which fixed the dropdown menu that was not functioning on certain pages. Debugging and testing this took quite a while across different views. As the program expands, it takes more time to test all of its functionality. I have been trying to separate it into different blocks to ensure that changes in one block do not affect the others, but it is not working that way al the time.  During testing, I encountered a few issues. The "Buyers of My Products" page in the entrepreneur account is not displaying data due to recent changes made in the database schema. I attempted to fix this, but it is still not working as expected. Additionally, I discovered that when a user purchases a product, the product quantity is not updating in the database. This issue needs to be addressed to maintain accurate stock levels. |
| 03.04.2025 | 3 | Today, I fixed the buyers' page, which had been crashing due to a change in the database schema. The transaction entity no longer had a direct reference to the product, causing an error in the Thymeleaf template that attempted to access `sale.product.productName`, which no longer existed. To resolve this issue, I updated the page to loop through `transactionProducts` and accessed the product information from there.  Additionally, I addressed some styling problems on the user registration page. Yesterday, I accidentally removed Bootstrap, but I reintroduced it today and cleaned up the layout.  Fixed the product qty update after sucesfull purchase.  Today, I encountered an issue while trying to delete a product. I received a foreign key constraint error because the product was still referenced in the recommendations table as a recommended product. Essentially, Hibernate couldn't delete it since other rows were still pointing to it.  To resolve this, I realized that I had only mapped the recommendations list for the products that recommend others and not the inverse — the products that are being recommended. So, I added a new list called `recommendedBy` in the Product entity with `mappedBy = "recommendedProduct"` and used `cascade = CascadeType.ALL` along with `orphanRemoval = true`.   After making these changes, deleting the product worked perfectly, and all related recommendations were removed automatically.  Testing the entire thing.... |
| 04.04.2025 | 1.67 | Today, I worked on the custom product request feature. I updated the product details page so that when the quantity is 0, there is now a "Request Custom Amount" button visible for all users, including both Entrepreneur and Basic users, not just Business users. Additionally, I built the "My Requests" page to list all custom requests a user has made. I fixed some issues with the controller mapping, which previously returned a 404 error, and added the "My Requests" link into the services dropdown in the navbar. To ensure it displayed correctly, I had to change its class to "dropdown-item."  Also, i have updated the design of the request custom amount page. |
| 04.04.2025 | 0.67 | I worked on a feature that allows entrepreneurs to view a list of users who submitted custom product requests. I created a page that iterates through each CustomProductRequest and displays the product name, requested amount, request time, and the requester's information. Initially, I attempted to show the requester's full name using `req.user.firstName + ' ' + req.user.lastName`, but the application crashed with a 500 Internal Server Error. Upon reviewing the User entity, I discovered that it does not contain fields for first name or last name; it only has an email field. To resolve this issue, I updated the template to display just the email instead: `<span th:text="${req.user.email}"></span>`. This adjustment resolved the problem, and the requests now load correctly on the page. |
| 06.04.2025 | 1.83 | Today, I implemented search functionality on the home page that enables users to search for products using keywords found in the name or description. Additionally, I expanded the search feature for entrepreneurs to include job and project postings based on keywords found in the descriptions and required skills. I also introduced filtering options: for products, users can filter by category, which dynamically loads from the database, while for jobs, entrepreneurs can filter by employment type (Full-time, Part-time, Internship). These search inputs and filters were integrated into the existing home page form and connected to the controller logic to apply the filtering when rendering the data.  Creating questions for basic users for the survey:  How easy was it to navigate the platform and find what you were looking for? (Very easy / Easy / Neutral / Difficult / Very difficult) Did the product listings (images, descriptions, pricing) provide enough information for you to make a decision? (Yes / No / Somewhat — please explain) How likely are you to purchase Indigenous-made products through NativeSpark? (Very likely / Likely / Not sure / Unlikely / Very unlikely) What features do you find most valuable as a basic user? (Select all that apply: Product search, Filters, Save (heart) feature, Custom product requests, Recommendations) If a product is out of stock, how useful is the 'Request Custom Amount' feature for you? (Very useful / Somewhat useful / Not useful / Didn't notice this feature) What additional features would make you more likely to use this platform regularly? (Open-ended) How comfortable were you with the design and layout of the site? (Very comfortable / Comfortable / Neutral / Uncomfortable / Very uncomfortable) Did you experience any issues while browsing, searching, or saving items? (Yes — please describe / No) Based on what you’ve seen and the idea presented, how likely are you to recommend NativeSpark to others? (Very likely / Likely / Neutral / Unlikely / Very unlikely) |

Today, I focused on refining the program's structure and functionality. I separated the navbar and footer into Thymeleaf fragment files to reduce code repetition and fixed some Bootstrap issues that affected the dropdown menu. During testing, I identified problems with the "Buyers of My Products" page, which was not displaying data due to changes in the database schema. I resolved this by correcting the Thymeleaf template to access product information properly.

I also addressed styling issues on the user registration page and ensured Bootstrap was loaded correctly. Furthermore, I fixed the product quantity update issue after a successful purchase.

While trying to delete a product, I encountered a foreign key constraint error because it was still linked in the recommendations table. I added a `recommendedBy` list in the Product entity with proper mapping and cascade settings, which resolved the issue.

Additionally, I worked on the custom product request feature, updating the product details page and creating a "My Requests" page for users to view their requests. I corrected some controller mapping errors and improved the design.

Lastly, I implemented search functionality on the home page for products and expanded it for job and project postings, including filtering options for both.

I also began creating survey questions for basic users.