Team Proj18

Project Deliverable H: **Prototype III and Customer Feedback**

GNG 1103 – Engineering Design

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Abstract

In this deliverable, the third prototype for our loyalty points platform is shown with our test results. This prototype focuses on the user engagement section of our loyalty platform. The prototype functions as a survey where users answer questions that are in datasheets. Completion of these surveys allows users to get rewards in the form of loyalty points. Users can select which loyalty points they would like to redeem after completion and have the points added to their loyalty points wallet. Test cases with incomplete and complete survey responses were used to ensure the users finished the survey before submitting it. Additionally, the survey was piloted by providing the survey page for peers to complete. Feedback from the piloting was used to create plans for future iterations for the prototype.

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1. Introduction

In our previous deliverable, we outlined the goals and testing criteria for the third prototype. In this deliverable, we will present the model for the third prototype and highlight the testing results. Potential refinements of our prototype will be discussed, along with the goals for design day. This deliverable will be divided into four parts: showing our design for prototype III, the test cases for prototype III, customer feedback, and the future revisions and iterations for all our prototypes before design day.

2. Prototype III – Survey Interface

The objective of the third prototype was to create a page where users answer survey questions and earn points for their participation. A survey page was created using Wix, which contained text boxes for users to input their name and email. Furthermore, different question types can be assigned to the user to get feedback on various parameters. The question types that the user may receive include multiple-choice questions or multiple selection questions. These results are recorded on a datasheet which can be used for analytics by the bank. The initial design for the survey page is shown in Figure 1.

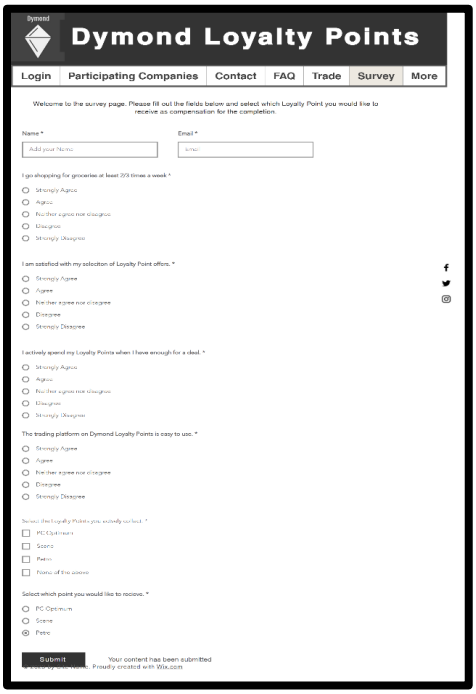

Figure 1. Survey Interface

All the fields in the survey are required parameters meaning the user must answer the questions to submit the response. If any survey questions have not been answered, a statement will flag the user on which questions on the survey require their attention. Once all the fields are filled, the user can submit their responses by clicking the submit button. The final option in the survey allows the user to select which loyalty point they would like to redeem to earn points. Depending on the loyalty point they chose, the quantity for that loyalty point in their points wallet will be increased by 100.

3. Test Cases

The two test cases used for our survey were situations where the user fills in all the required fields and scenarios where parameters are missing. When the survey is submitted with incomplete entries, the survey will highlight the missing questions and return a message telling the user to answer the highlighted questions. This situation is shown on the right in Figure 2. When the user submits a complete survey response, a message will be displayed informing them their submission was complete. This situation is shown in Figure 2 on the left.

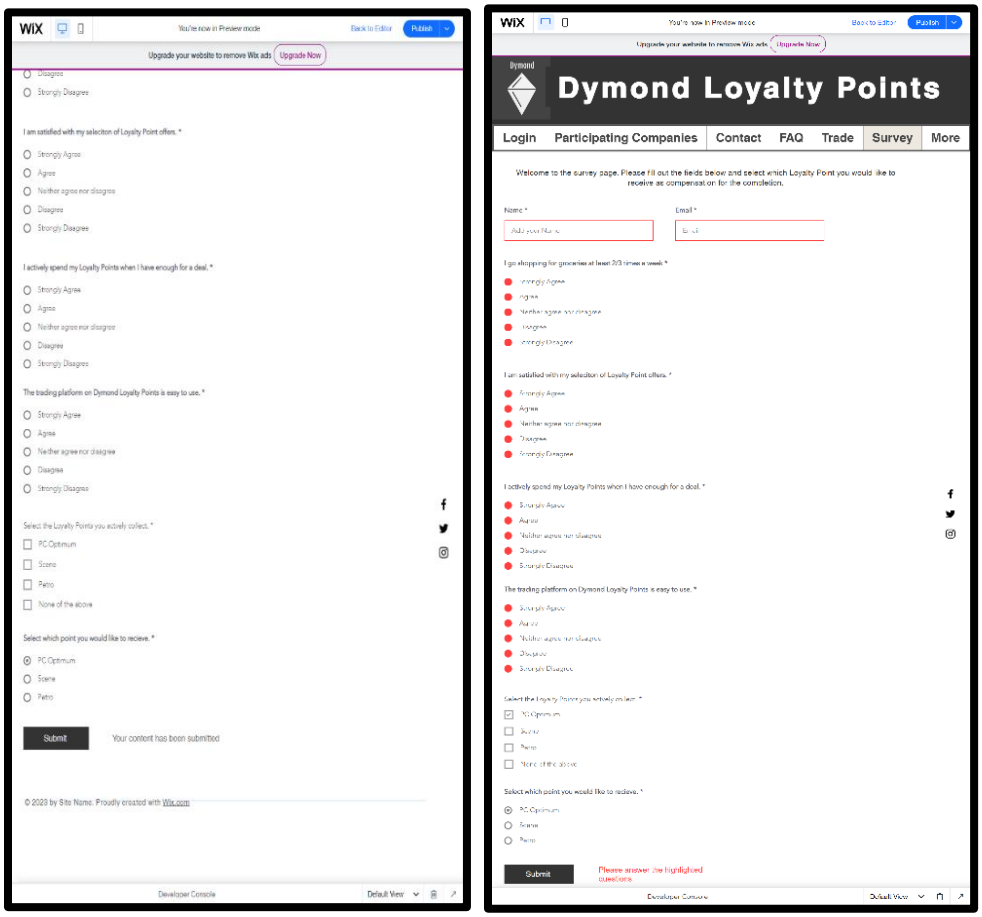

Figure 2. Survey interface after a valid submission (left) and an invalid submission with missing fields (right).

Once the user submits the survey, their responses are saved on a datasheet accessible by banks. Banks can provide these results to businesses or analyze the data for different market trends and features users would like to have. Banks and businesses can modify the questions included in the survey to create specific surveys for various data screenings.

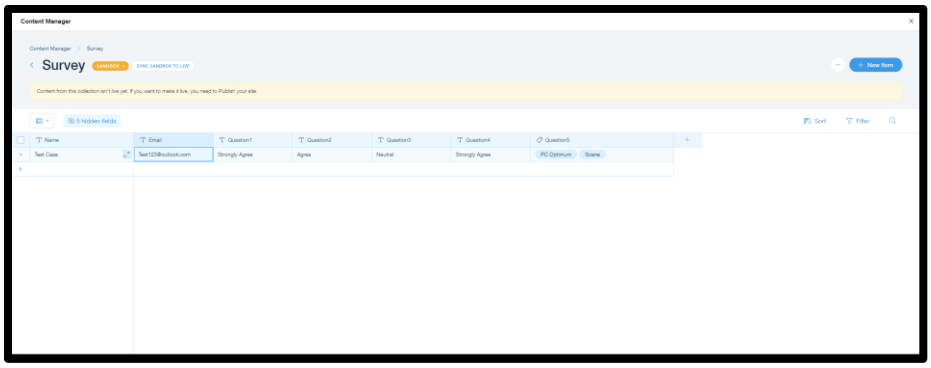

Figure 3. Survey Datasheet

4. User Feedback and revisions

Our group piloted our survey form by inviting friends and peers to submit a test response. Overall, the feedback received was the survey was simple to use and easy to understand. The results obtained from the pilot were stored in our datasheets and can be easily exported from the website. One limitation that appeared during the piloting of our survey page was a bug that allowed users to submit the same survey continuously. Using this bug, users can answer the same questionnaire multiple times to redeem loyalty points without limitation. In the next iteration for the prototype, the platform needs to include a mechanism to detect if the user has completed the survey to prevent multiple submissions. Currently, for our survey page, only one test survey is displayed. In future iterations, the survey page will be changed to include a menu to select from a list of surveys that will be specific to the user based on their account profile. The crediting system adds points to the user's profile after survey completion is still in development. This function will be added to the survey page in future iterations for the page.

5. Future Revisions and Iterations

With the addition of the third prototype, our platform currently has a navigable website obtained from the first prototype, a buy and selling feature created during the second prototype, and a user engagement section to collect user information created in our current prototype.

Before design day, our group still has a few goals that we would like to complete. The first goal we would like to have done before design day is to add conditional statements within the code to fix issues with the buy and sell feature for the second prototype. Secondly, our group would like to add additional features to our surveys page. One of the features includes a method to detect if the survey has already been completed. Our group also plans to finish the login feature along with the bank's side of the website. Lastly, our group would like to do an overhaul of the website's overall aesthetics. To complete our goals, we have made sure to divide up these last few parts to make sure everyone has an equal amount of work so that we can be the most productive and meet our design day deadline.

6. Conclusion

With our final prototype, our platform now has a method for users to earn points outside of retail purchases through surveys. From the addition of surveys, users now have an incentive to use the platform to earn points for free, and businesses and banks can collect valuable customer metrics to improve their products. Overall, the surveys form is functional, but a few revisions still need to be completed for all the prototypes before our design day presentation.