

# Team Proj18

Project Deliverable F: **Prototype I and Customer Feedback**  
GNG 1103 – Engineering Design

**Team Members:**

Shuyuan Bai (300023989)  
Grace Buchardt (300236838)  
Craig Bush (300251044)  
Simon Situ (7761503)  
Steven Wu (7883953)

Faculty of Engineering – University of Ottawa  
2021/11/04

## Abstract

*In this deliverable, our initial prototype is presented with all the current features and planned changes later in the project. The goal was to create a browser platform with a navigable UI that was easy to use. Functionality was tested by piloting the website to peers. Feedback from users suggested improvements in website aesthetics and to add a tutorial video on how to begin trading.*

Contents

Abstract..... 2
List of Figures ..... 3
List of Tables ..... 3
1. Introduction ..... 4
2. Prototype I - Design ..... 4
2.1. The homepage ..... 4
2.2. The Login Page ..... 5
2.3. Participating Companies ..... 5
2.4. Contact ..... 6
2.5. Frequently Asked Questions ..... 6
3. Prototype I - Future Additions ..... 7
4. Feedback for Prototype I ..... 7
5. Prototype Testing Plan for Prototype II ..... 7
6. Conclusion ..... 8

List of Figures

Figure 1. Homepage Display ..... 4
Figure 2. Login Page interface..... 5
Figure 3. Participating Companies Page ..... 5
Figure 4. Contact Page ..... 6
Figure 5. Frequently Asked Questions Page ..... 6

List of Tables

Table 1. Summarized feedback for Prototype 1 ..... 7
Table 2. Test Plan for Prototype 2 ..... 8

## 1. Introduction

In the previous deliverable, our team established a schedule and budget for the project. The goal of this deliverable is to present our prototype I and the customer feedback from the test results. Potential revisions of our design will be discussed along with the test plan for prototype II.

## 2. Prototype I - Design

The purpose of the prototype was to create a functional browser UI that was easy to navigate. Essentially the prototype will be the skeleton of our website to build the foundation. Key pages of the platform include the homepage, login screen, participating companies page, a contact page, and an about us page. All these pages should be accessible by clicking on navigation tools.

### 2.1. The homepage

The homepage is the initial screen the user will see when they enter our website. It will introduce the customer to our platform and inform them of the services we offer. The layout of our homepage can be seen in figure 1. On the homepage, there is also a sub-menu section. The purpose of the sub-menu is to redirect the users to other areas of the platform. These areas include the login page, a participating companies page, and a frequently asked questions tab (FAQ). The login page will allow users to log in to their accounts to access their profiles. The participating companies page will show users to companies associated with our loyalty points trader, and the FAQ tab will redirect users to common questions we receive. If the users or companies wish to contact our team, the contact tab will allow users to submit messages directly to the team. The submenu will be common for all pages to allow for easy navigation and the user can return to the home page by clicking on the Dymond Loyalty Points title.

Additional features that still need to be added to the homepage include a thorough description of the platform and better visuals for the page. For future iterations, a section with featured deals or promoted products can be added to the page.

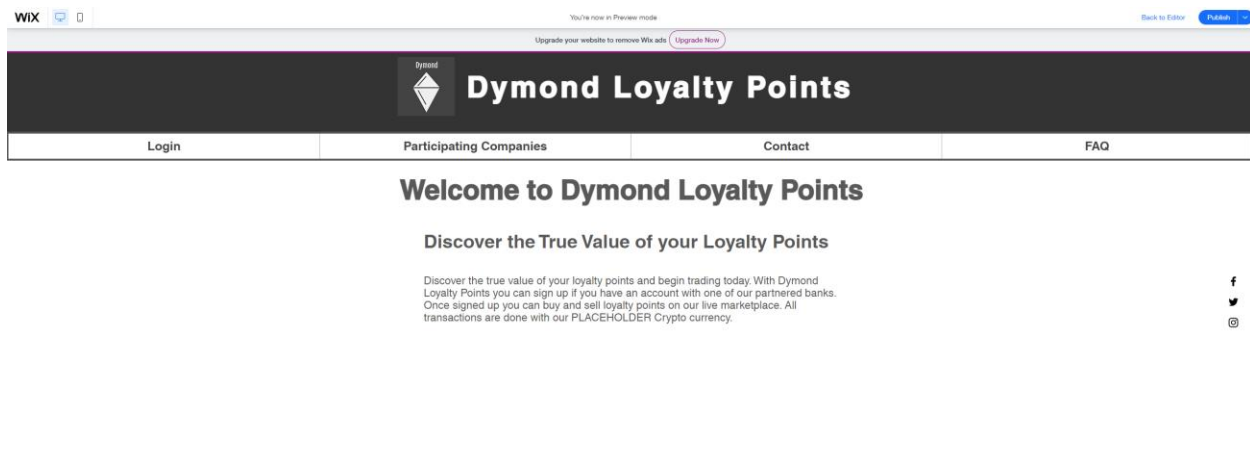


Figure 1. Homepage Display

## 2.2. The Login Page

The login page allows users to access their account profiles for the platform. Below in figure 2 shows the interface for the login screen. Users without an account can also be prompted to create an account with the signup button. Currently, functionality for personalized logins is not operational. A personalized page after the user logs in would be an additional feature to add in the future.

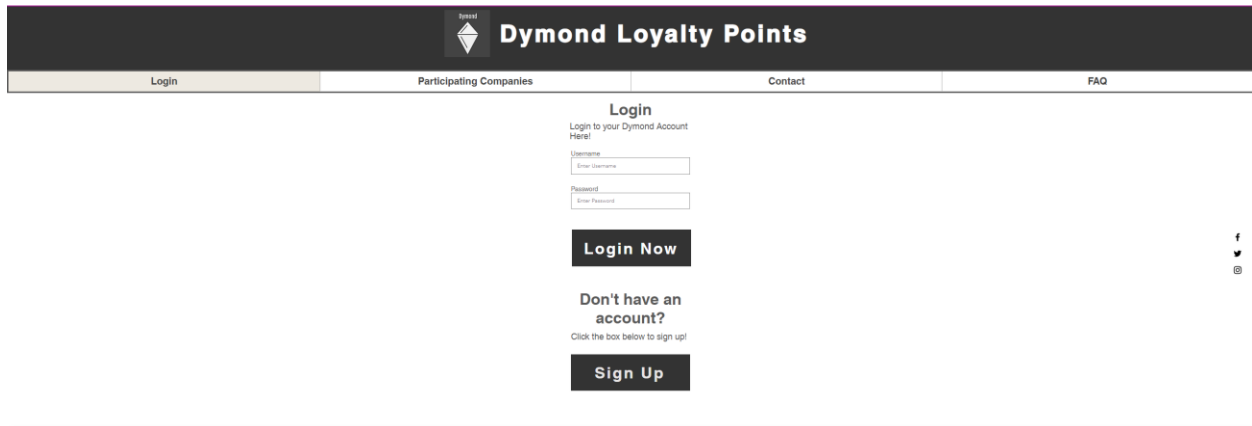


Figure 2. Login Page interface

## 2.3. Participating Companies

The participating companies tab shows the featured companies on the platform. Figure 3 shows the preliminary concept for this page. Partnered companies whose loyalty points are on the platform will be displayed here. In the future links to specific loyalty point providers and their redeemable offers or deals can be added in future versions.

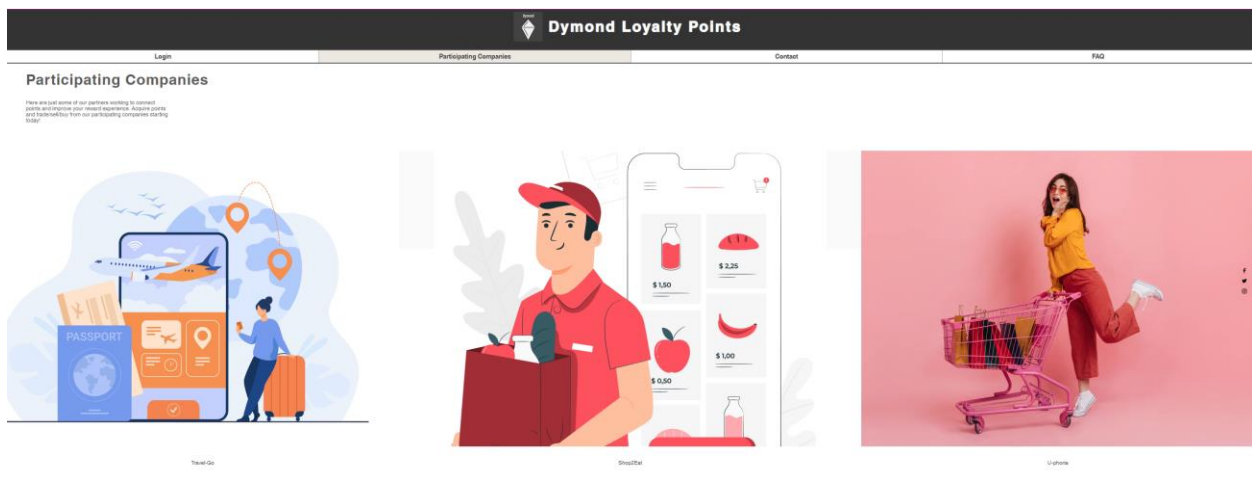


Figure 3. Participating Companies Page

## 2.4. Contact

The contact page allows users to message the providers directly. As seen in figure 4, users can write a personalized message to the administrator with their contact information.

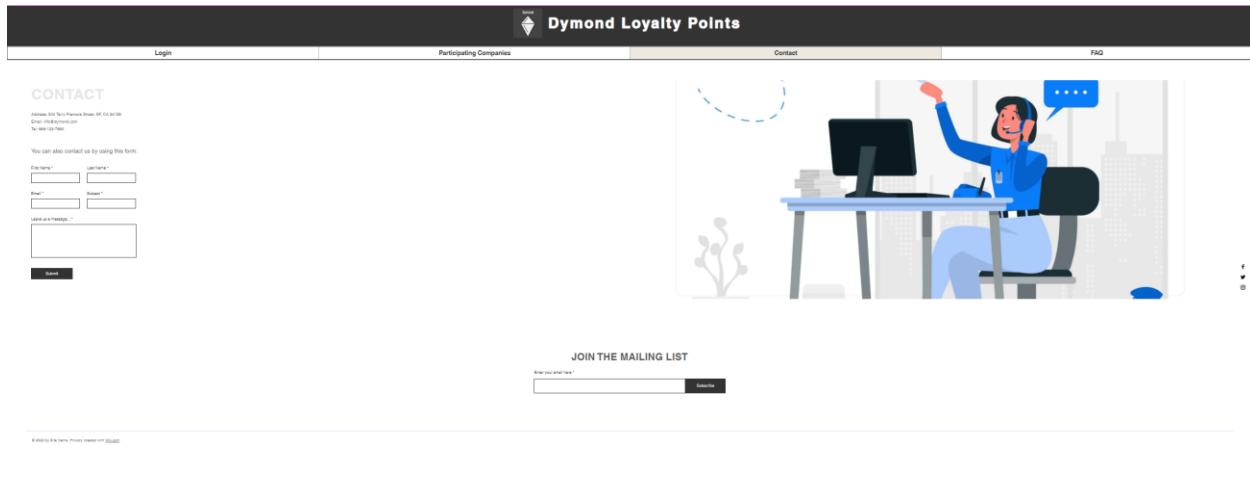


Figure 4. Contact Page

## 2.5. Frequently Asked Questions

The frequently asked questions page displays common questions users ask the platform providers. It gives users an opportunity to find answers to their questions before submitting a message to the administrators. As more users pilot our platform common questions can be updated for the list.

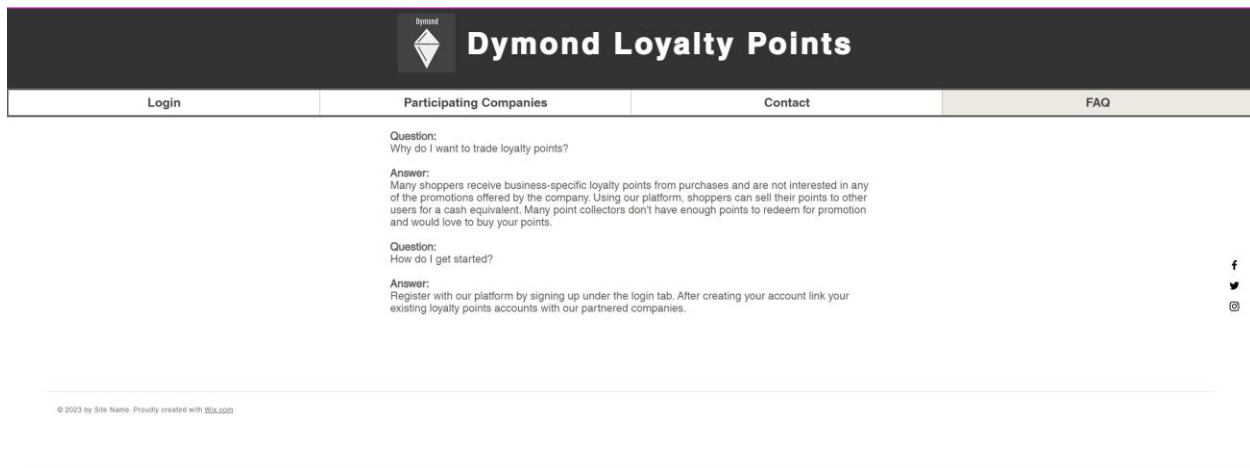


Figure 5. Frequently Asked Questions Page

### 3. Prototype I - Future Additions

The main purpose of this prototype was to create a navigable website interface for the user. Features that still need to be implemented to the website include a buying and selling function, a points wallet, and a point benchmarking page. The buy and sell function allows users to buy and sell loyalty points associated with their accounts. The points wallet stores the balance information for the user. It will summarize the value of their points profile and provide a breakdown of the value of each specific loyalty point. The purpose of a point benchmarking page is to allow users to determine the market value of each loyalty point. This functionality needs to include a method to search for specific loyalty points and see the equivalent cash value for each point. These additional features will be integrated into the next prototype that will test buying and selling of loyalty points. The additional pages will be included in the submenu to allow for easy navigation.

### 4. Feedback for Prototype I

The focus for testing prototype I was to ensure users could intuitively navigate the website and seek out relevant information. Users were asked to access the website with a given url and review the visual presentation of the website. Reading comprehension questions were given to the testers to determine if information was easily accessible. After testing the website, users gave feedback on visual presentation, intuitiveness, and ease of access for information. Overall feedback was summarized in the following table.

**Table 1. Summarized feedback for Prototype 1**

| Parameter                      | Feedback   |
|--------------------------------|--|
| Visual Presentation            | The website is neat, and the pictures chosen clearly to communicate the purpose of each page. A more colourful design could be implemented to promote users' interest in the product.  |
| Intuitiveness                  | Pages are clearly labelled on the banner and are easily accessible. Using the website was very simple and required no guesswork on the part of the user. Further feedback on intuitiveness will need to be conducted when additional features are added to the website.                                      |
| Ease of Access for Information | Information is clearly accessible to the users. Further elaboration on terms and conditions would be a welcome addition for users to understand what information is collected. A tutorial video on how to use the trading market was recommended and considered a feasible objective to add to prototype II. |

### 5. Prototype Testing Plan for Prototype II

The test objective for the second prototype is to ensure that the buying and selling of points of the platform are functional. In this prototype, a trade transaction will be done using a test profile containing an existing balance of points and money in their wallet. The buy and sell functions will then be tested by trading a specific quantity of loyalty points at a predetermined market value. To validate the transaction

balances will be compared from before and after the transaction. If the final values after a trade are consistent with the predicted values, the test is successful. To ensure proper functionality multiple tests will be performed using both valid and invalid inputs.

**Table 2. Test Plan for Prototype 2**

| <b>Prototype Number</b> | <b>Test Objective (Why)</b>                 | <b>Description of Prototype used and of Basic Test Method (What)</b>  | <b>Description of Results to be Recorded and how these results will be used (How)</b>   | <b>Estimated Test duration and planned start date (When)</b>  |
|-------------------------|---|---|---|---|
| 2                       | To ensure trade transactions are successful | A trade transaction will be performed on our loyalty points website using a test profile. A specific quantity of points will be sold or bought using the points and cash balance on the test profile. | The cash and points balance from before and after the transaction on the profile will then be compared to see if the trade was successful. If the values after the transaction are incorrect the trading algorithm will be revised. | The test should only take 1-2 days, but the trading interface needs to be created which will take about 3 days. Plan start date Nov 5 <sup>th</sup> , 2021. |

## 6. Conclusion

The goal of creating a browser with a functional UI that redirects users to correct pages was successful. Feedback for the prototype suggests that the visual aspect of the design needs improvements. Revisions for the overall presentation of the website will be worked on for future iterations. The goal for the next prototype is to create a function that will facilitate trading. Testing for the trading function will be confirmed by comparing point wallet balances from before and after trades.