

# Wallet XVII

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PROJECT PRESENTATION

GROUP 17

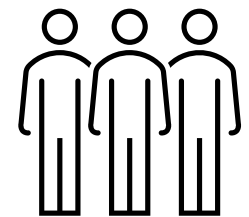
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# Agenda

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1. Design Thinking Process
2. Next Steps
3. Benefits
4. Lessons Learned
5. Questions

# Design Thinking Process

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## EMPATHISE

- Learn about the client you are designing for, and understand their feelings and motivations

For Zafin, this includes:

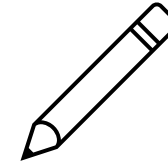
- Democratizing Loyalty Programs
- Accessible, cloud-based platform



**ZAFIN**

# Design Thinking Process

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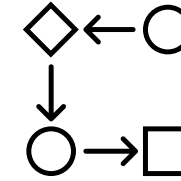


## DEFINE

- Identify and prioritize customer needs
- Generate a Problem Statement:
  - *“Existing Loyalty Programs are currently confined to operating between major banks and corporations, thus prohibiting smaller businesses from participating. A cloud-based platform that allows the democratization of Loyalty Programs by making them more accessible to smaller businesses is required.”*
- Perform Benchmarking to identify existing products



# Design Thinking Process



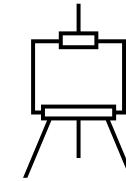
## IDEATE

- Create and prioritize Design Criteria
- Identify a Functional and Non-Functional Requirements
- Generate Constraints and Metrics
- Build Sub-Systems

Specifications	Importance	Solution 1	Solution 2	Solution 3
<b>Functional Requirements</b>				
Software should be cloud-based	5	3	3	3
Should allow storage of loyalty points	5	3	3	3
Should allow exchange of loyalty points between ecosystem partners	4	3	3	3
Should allow users to redeem loyalty points	4	3	2	1
Must generate profit	5	3	3	3
Should provide insights on use of points	5	3	2	1
Should allow exchange of loyalty points between end-users	4	3	3	3
Should allow users to convert points to cryptocurrency	1	1	1	1
<b>Non-Functional Requirements</b>				
Should be high security	5	3	3	3
Should be customizable by each bank/client	2	3	2	1
Should have simple, visually appealing UI	3	2	2	2
Should be customizable by end-users	1	1	1	1
Should be easily accessible by ecosystem partners and end-users	4	3	2	1
Should support multiple languages	1	2	2	2
<b>Total</b>		<b>36</b>	<b>32</b>	<b>28</b>

# Design Thinking Process

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## PROTOTYPE I

### C Program

- Low-fidelity
- Test Programming Logic
- Test functionality



### WIX Website

- Interactive User Interface
- Test User Experience



# Design Thinking Process



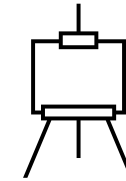
## PROTOTYPE I - C PROGRAM - STARTUP

A screenshot of the Code::Blocks IDE. The main window displays a terminal window for a C program named 'the.grand.points.exe'. The terminal text is as follows:

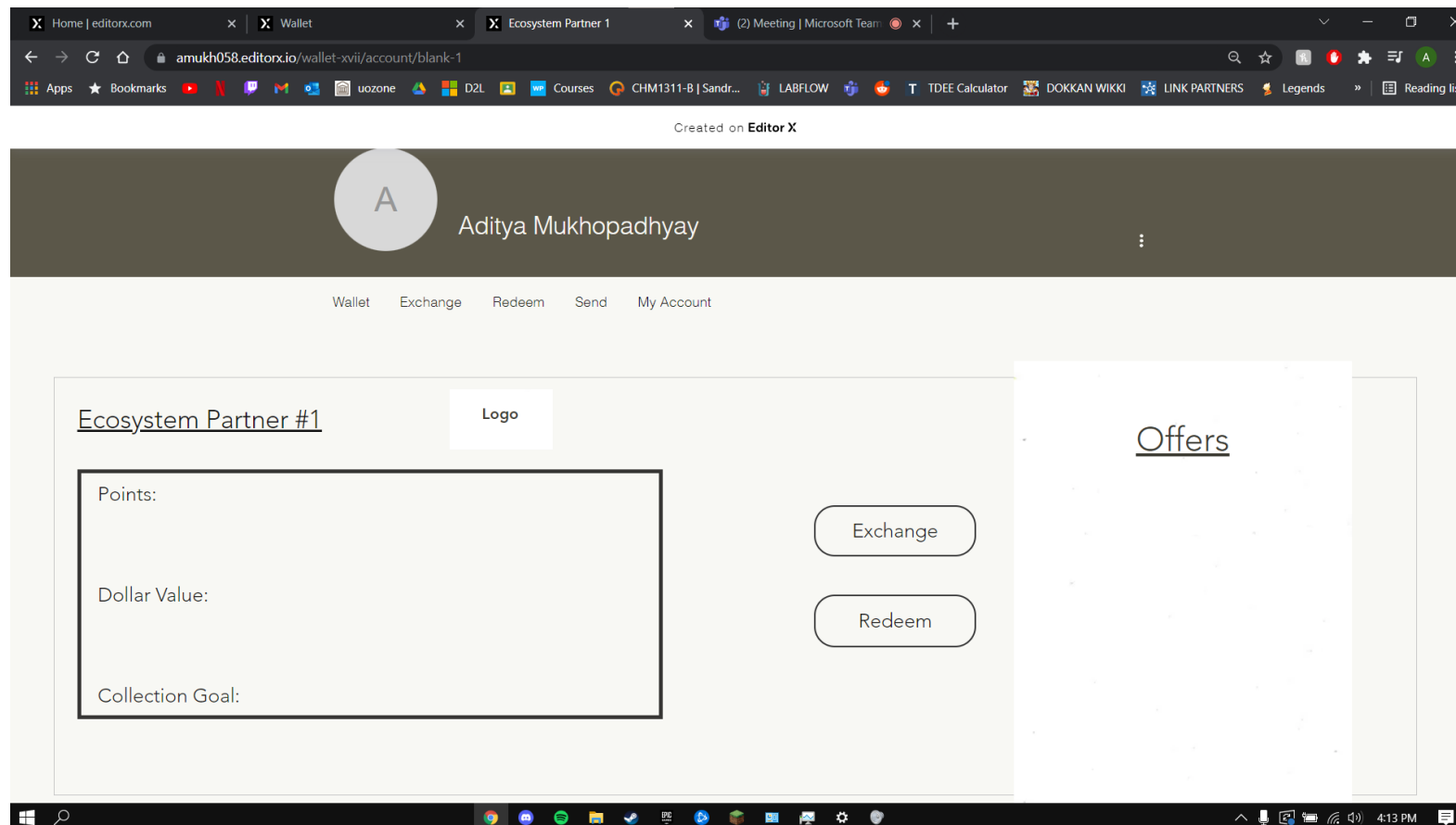
```
*****  
Please enter what action you want to take.  
Enter 1 for storing points  
Enter 2 for exchanging points  
Enter 3 for convert to CAD points  
Enter 4 for sending points  
Enter 5 for a points report  
Enter 6 to end the program
```

The IDE interface includes a menu bar (File, Edit, View, Search, Project, Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, Help), a toolbar, and a status bar at the bottom showing the current file path, compiler (C/C++), and window state (Windows (CR+LF)). The Windows taskbar is visible at the very bottom, showing the search bar and system tray with the time 7:43 PM on 2021-11-17.

# Design Thinking Process



## PROTOTYPE I - WIX WEBPAGE - WALLET

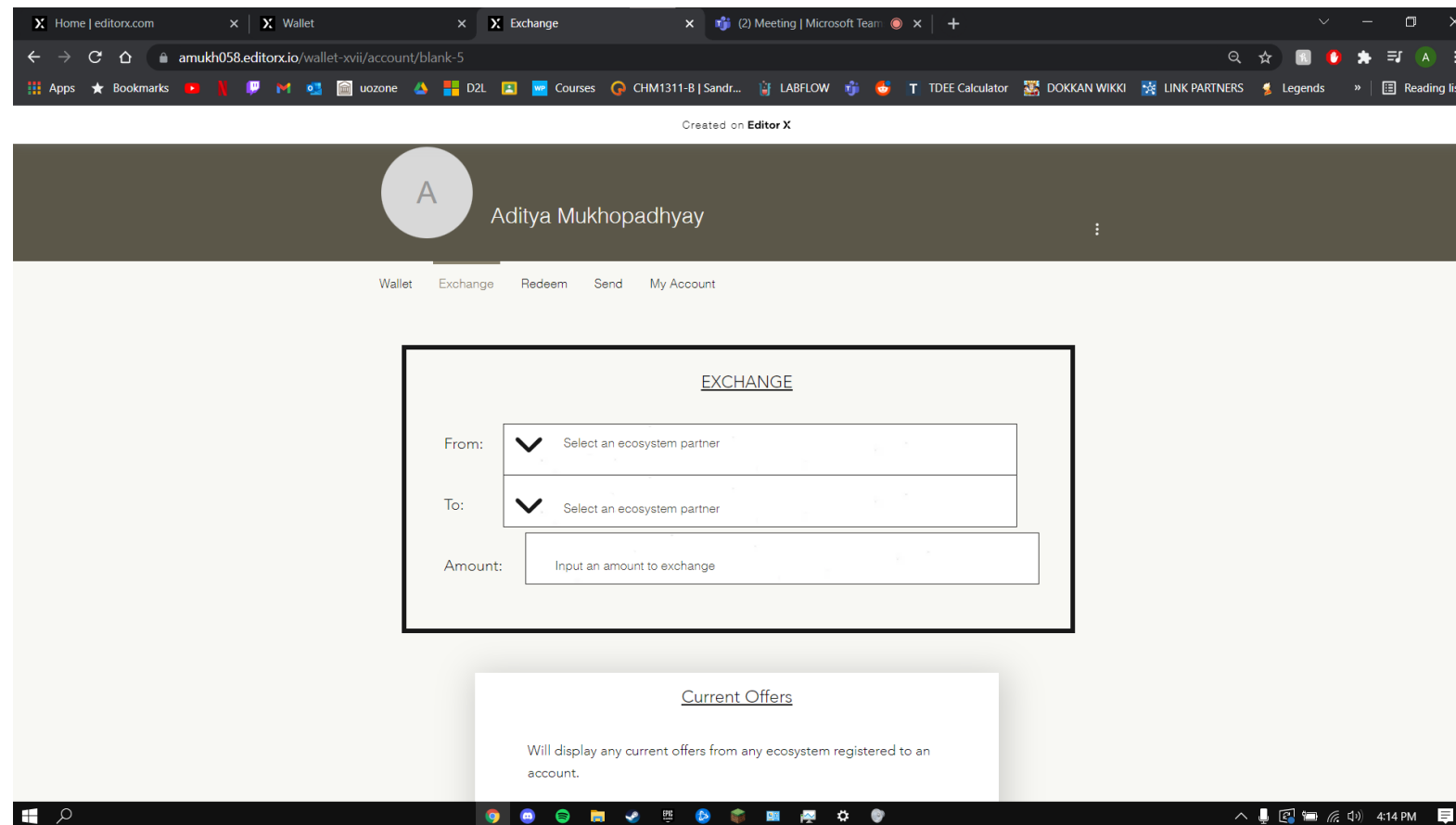




# Design Thinking Process



## PROTOTYPE I – WIX WEBPAGE – EXCHANGE



# Design Thinking Process

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## PROTOTYPE I - TESTING

Test Parameter	Test Result (Next Iteration)
User Interface	Modify Layout
Programming Logic	Need to combine C sub-programs for insights

# Design Thinking Process

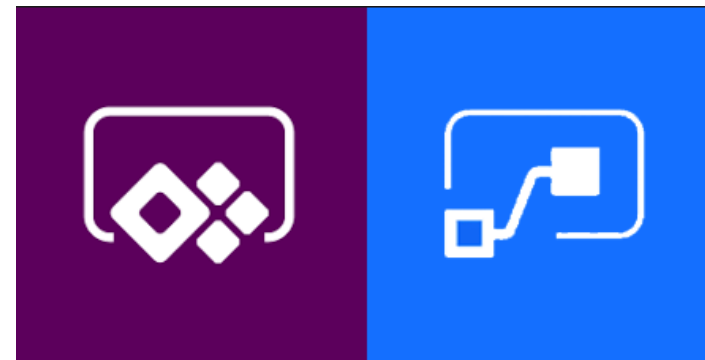
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## PROTOTYPE II

### MS Power Tools

- One SharePoint List per Sub-System
- Power Automate for streamlined Operation
- Did not use Excel tables



### WIX Website

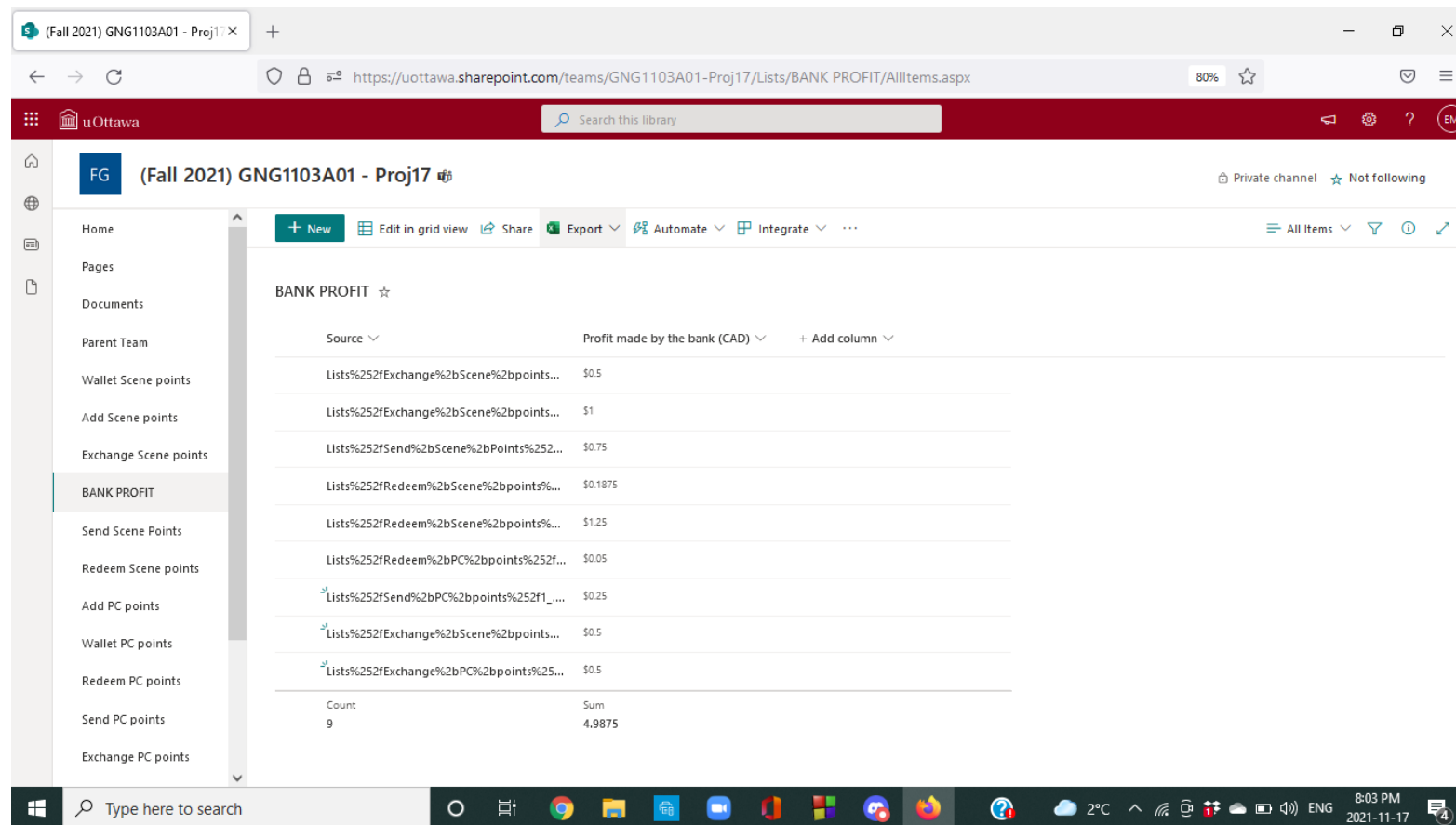
- Perfect User Experience
- Display Embedded Power Apps



# Design Thinking Process



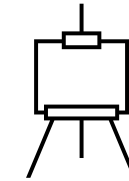
## PROTOTYPE II - SHAREPOINT LIST



The screenshot shows a SharePoint list titled "BANK PROFIT" within a Teams channel. The list has two columns: "Source" and "Profit made by the bank (CAD)". The data is as follows:

Source	Profit made by the bank (CAD)
Lists%252fExchange%2bScene%2bpoints...	\$0.5
Lists%252fExchange%2bScene%2bpoints...	\$1
Lists%252fSend%2bScene%2bPoints%252...	\$0.75
Lists%252fRedeem%2bScene%2bpoints%...	\$0.1875
Lists%252fRedeem%2bScene%2bpoints%...	\$1.25
Lists%252fRedeem%2bPC%2bpoints%252f...	\$0.05
Lists%252fSend%2bPC%2bpoints%252f1_...	\$0.25
Lists%252fExchange%2bScene%2bpoints...	\$0.5
Lists%252fExchange%2bPC%2bpoints%25...	\$0.5
Count	Sum
9	4.9875

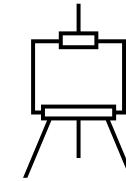
# Design Thinking Process



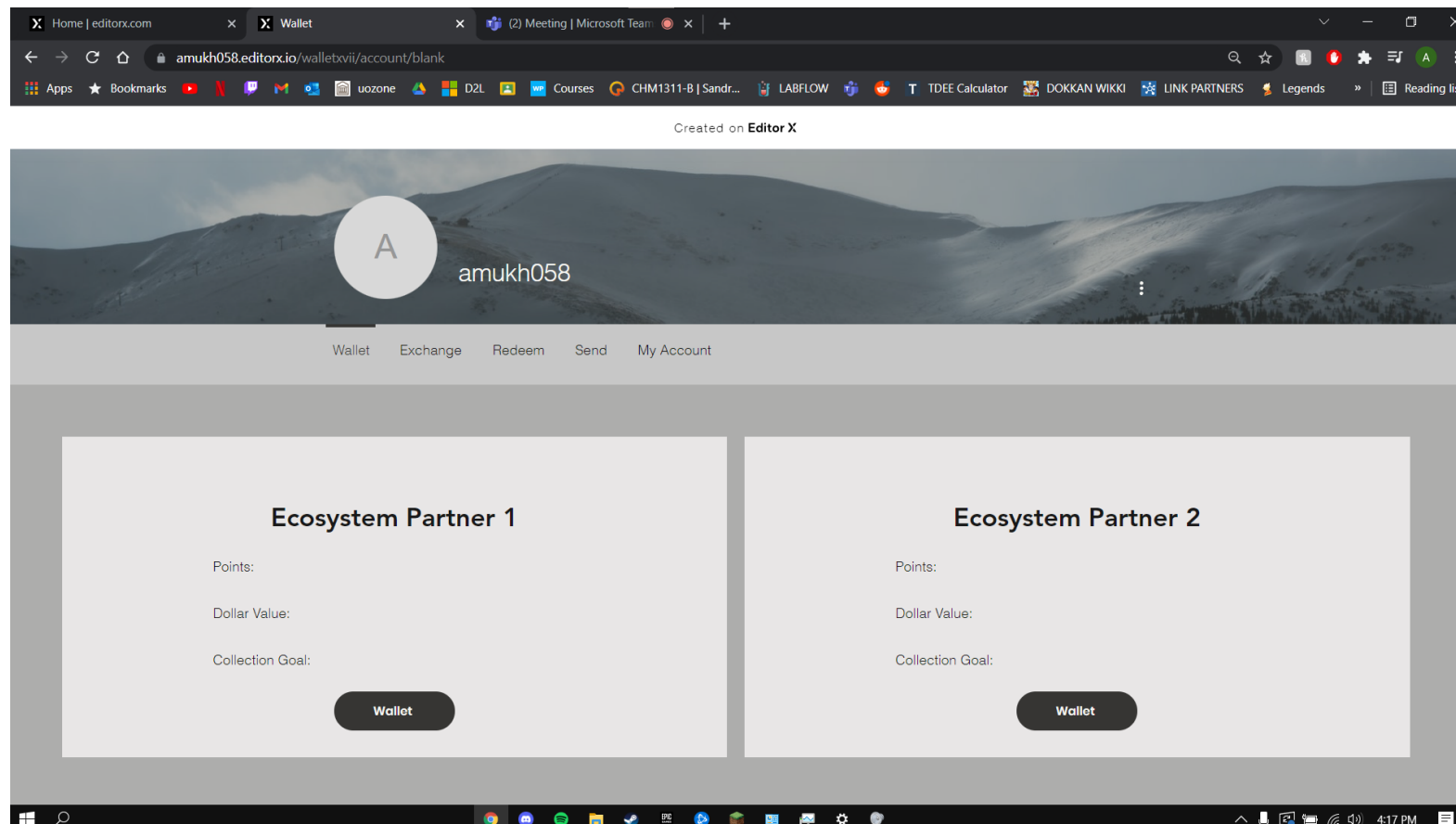
## PROTOTYPE II – POWER AUTOMATE FLOW

A screenshot of the Microsoft Power Automate interface. The window title is "Power Automate" and the environment is "University of Ottawa (def)". The left sidebar shows navigation options like "Home", "Action items", "My flows", "Create", "Templates", "Connectors", "Data", "Monitor", "AI Builder", "Process advisor", "Solutions", and "Learn". The main workspace is titled "Add-to-master" and contains a flow with three steps: 1. "When an item is created or modified" with Site Address "https://uottawa.sharepoint.com/teams/GNG1103A01" and List Name "TEST S-ADD". 2. "Get items" with Site Address "https://uottawa.sharepoint.com/teams/GNG1103A01" and List Name "TEST S-MASTER". 3. "Condition" with the expression "length(-) is equal to 0". Below the condition are two branches: "If yes" containing a "Create item" step, and "If no" containing an "Apply to each" step. The interface includes a search bar at the top, a "Save" button, and a "Flow checker" button.

# Design Thinking Process



## PROTOTYPE II – WIX WEBPAGE – WALLET



# Design Thinking Process

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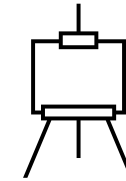


## PROTOTYPE II - TESTING

Test Parameter	Test Result (Next Iteration)
WIX User Interface	No Change
Power App display method on Webpage	Use HTML iFrame function
Power App Integration	Refine Flows in Power Automate
PowerApp UI	Modify PowerApp UI to suit application

# Design Thinking Process

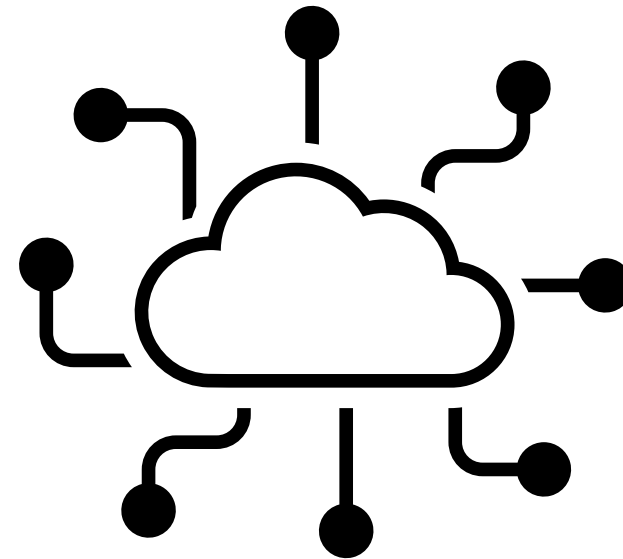
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## PROTOTYPE III

### Combining Pervious Prototypes

- Single, combined platform
- Comprehensive solution
- Facilitate Access





# Design Thinking Process



## PROTOTYPE III - POWER APP - MODIFIED UI

The screenshot displays the Microsoft Power Apps designer interface. The main canvas shows a prototype for a screen titled "Exchange PC points". The prototype includes a blue header bar with the title, a text label "Number of PC points to exchange" above a text input field, another text label "Select Account to Recieve Points" above a dropdown menu, and a blue "Exchange" button at the bottom.

The interface includes a top navigation bar with "Power Apps" and "Environment University of Ottawa (default)". Below this is a ribbon with various tool categories like "New screen", "Label", "Button", "Text", "Input", "Gallery", "Data table", "Forms", "Media", "Charts", "Icons", "Custom", "AI Builder", and "Mixed Reality".

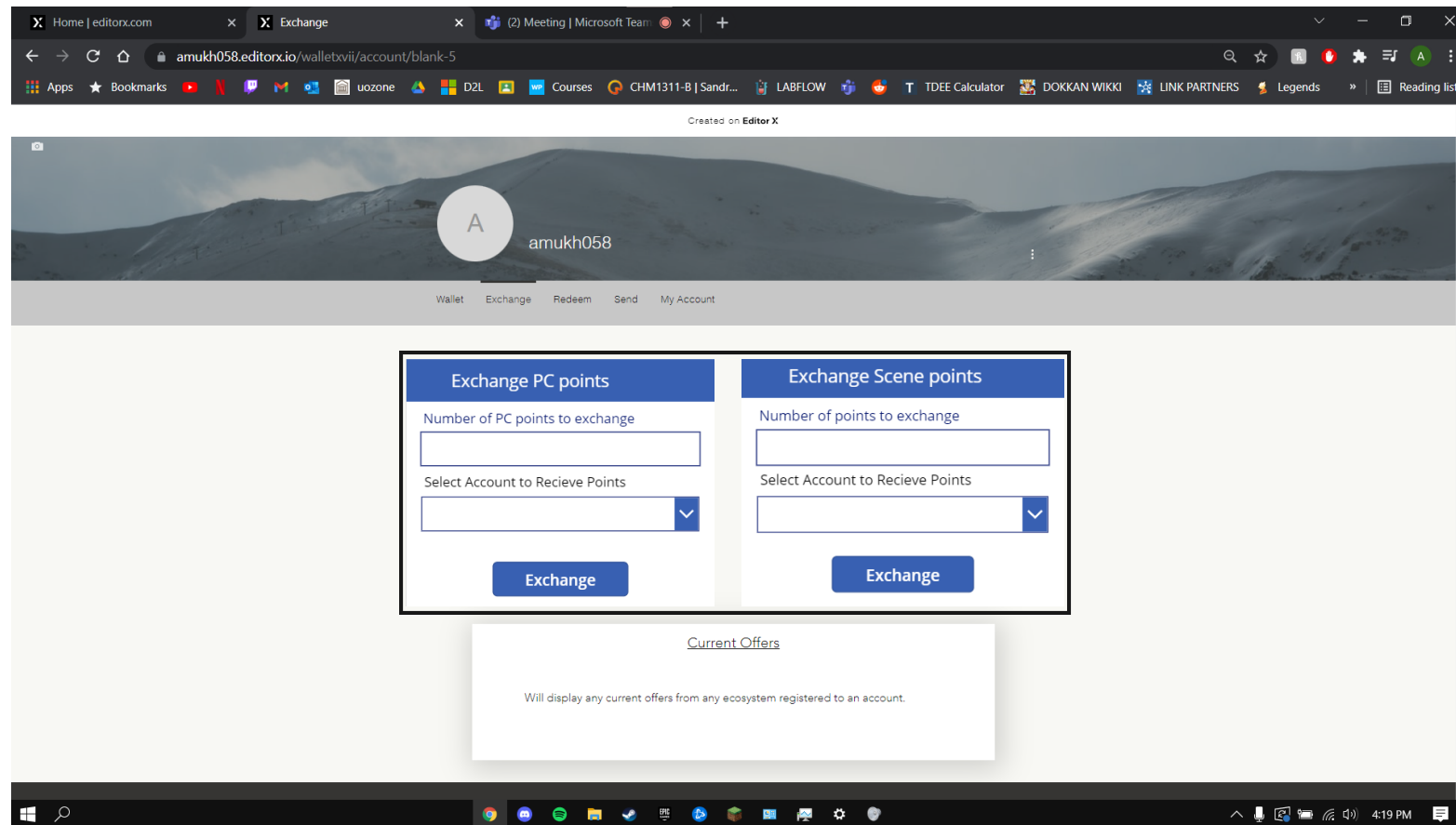
On the left, there is a "Tree view" pane with "Screens" and "Components" tabs. The "Components" tab is active, showing a search bar and a "New component" button.

On the right, there is a "Properties" pane for the selected "Dropdown1" component. It shows various settings such as "Items" (Exchange PC points), "Value" (Compliance Asset Id), "Default" (Select...), "Display mode" (Edit), "Visible" (On), "Position" (X: 32, Y: 286), "Size" (Width: 575, Height: 70), "Padding" (Top: 10, Bottom: 10, Left: 10, Right: 10), "Color" (Selection color, Chevron color), "Font" (Open Sans, 21, Normal), "Font style" (Normal), and "Border" (2).

# Design Thinking Process

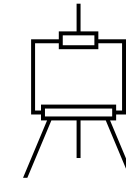


## PROTOTYPE III – EMBEDDED POWER APP – EXCHANGE



# Design Thinking Process

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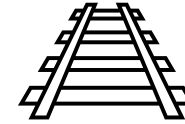


## PROTOTYPE III - TESTING

Test Parameter	Test Result (Next Iteration)
Embedded PowerApp Functionality	TBD
Time to Execute Commands	TBD

# Next Steps: Design Day

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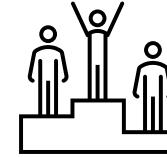


- Link Power BI to SharePoint Lists
- Embed Power BI Visualizations into WIX Webpage Insights page
- Instantaneous updates



# Benefits

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## BANK

- Bank receives a predetermined percentage of points per transaction
- Additional fees if users exceed monthly transaction limit
- Ad space on website

## ECOSYSTEM PARTNERS

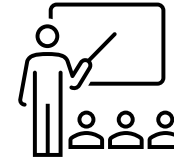
- Instant exposure to large network of users
- Zero Capital Cost
- Infrastructure already in place
- Access to detailed insights

## END-USERS

- Free to join
- Exclusive Offers
- Sharing, Exchanging, and Redeeming of Points

# Lessons Learned

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- Better to learn and understand first, and then apply the knowledge. Trying to learn as you go can waste valuable time!
- Specific task delegation is very important
- For larger teams like ours, more teammates = more productivity (if used correctly)
- Trust the process, i.e., try to avoid major changes at later stages of the project

# Questions

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Thank You!

Team 17