Deliverable G: Prototype 2 and Customer Feedback

Quynh-Ni Au, Louis Choinière, Bhavya Patel, Yiming Han, Runxing Yan

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1. Summary of Prototype 2

In this prototype, we followed the plan from Deliverable F to connect the user, bank, and business interfaces together. To add on from prototype 1, we:

- Enabled transactions to be made through the app interface
- Added user transaction history to the app interface
- Enabled user point balances to be updated after transactions
- Expanded the information collected by the bank to record the amount paid in cash, the amount paid in points, and the points earned during user transactions
- Continued to fix the link between the bank/business data bank and the graphically represented data (Power Bi)

1.1. Prototype 2 Test Plan and Results

1.1.1. Test Plan

Test ID	**Test Objective (why)**	**Description of Prototype used and of Basic Test Method (What)**	**Description of Results to be Recorded and how these results will be used (How)**	**Estimated Test duration and planned start date (When)**
1	Track the recording of customer transactions through the system	Make transactions through the user interface and record how they are updated in the bank and business interfaces.	Are the bank and business transaction data updated (yes/no) Time it takes to update (seconds)	3-4 hours Tuesday (9th) and Wednesday (10th)
2	Test if user transaction history is updated in the user interface	Make transaction through the user interface and observe how the user transaction history is updated in the user interface	Time it takes to update (seconds) Do transactions appear in the correct user profile (yes/no)	30 mins Tuesday (9th) or Wednesday (10th)
3	Test aesthetics, maneuverability of the user interface	Using the user interface through Power Apps, users will navigate through and make transactions.	Mark ease of navigation (feedback; scale from 1-10) Aesthetics (feedback; scale from 1-10); also ask what the users would like the app to look like, since it is not fully designed	1 hour Wednesday (10th)
4	Test how point balances are updated after a transaction	Make a transaction through the user interface and test if it properly updates the	Do the point balances update for the correct user (yes/no)	1 hour

		point balances for the correct user	Do the point balances update the correct amount (yes/no) Time it takes to update (seconds)	Tuesday (9th) or Wednesday (10th)
5	Test how transaction data is updated in the Power Bi	Make a transaction and test if the data is also updated in the Power Bi graphs	Time it takes to update (seconds)	
6	Test the representation of business transaction data	Ask businesses what information they want to see represented in the Power Bi	Feedback from businesses (what they like/dislike)	2-3 hours Tuesday (9th) and Wednesday (10th)

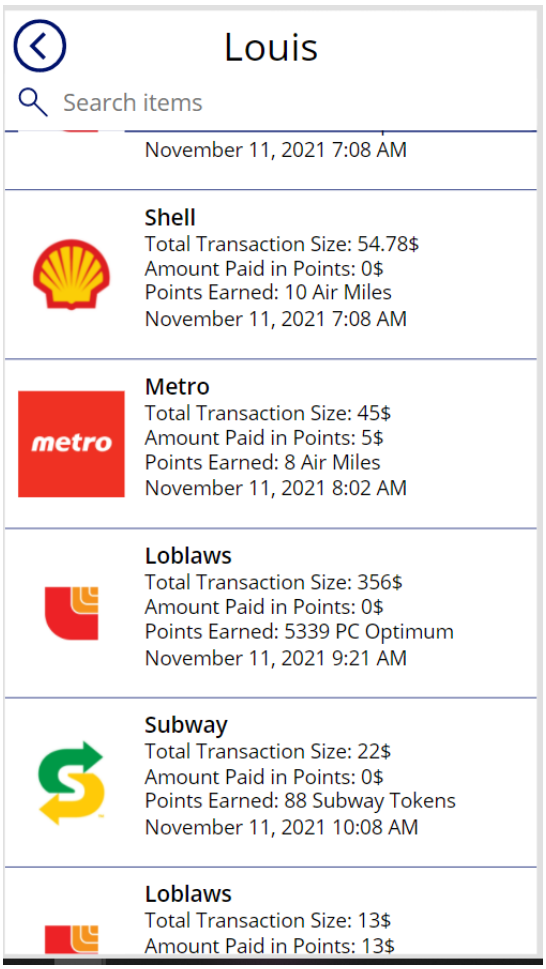
1.1.2. Results

Test 1

The mock transactions are recorded in the SharePoint, the transaction updates the SharePoint instantly.

Test 2

The transaction history is updated instantly after the transactions (in the correct account). Your transaction appears in a list you can scroll through, but the searcher function is not functional yet.



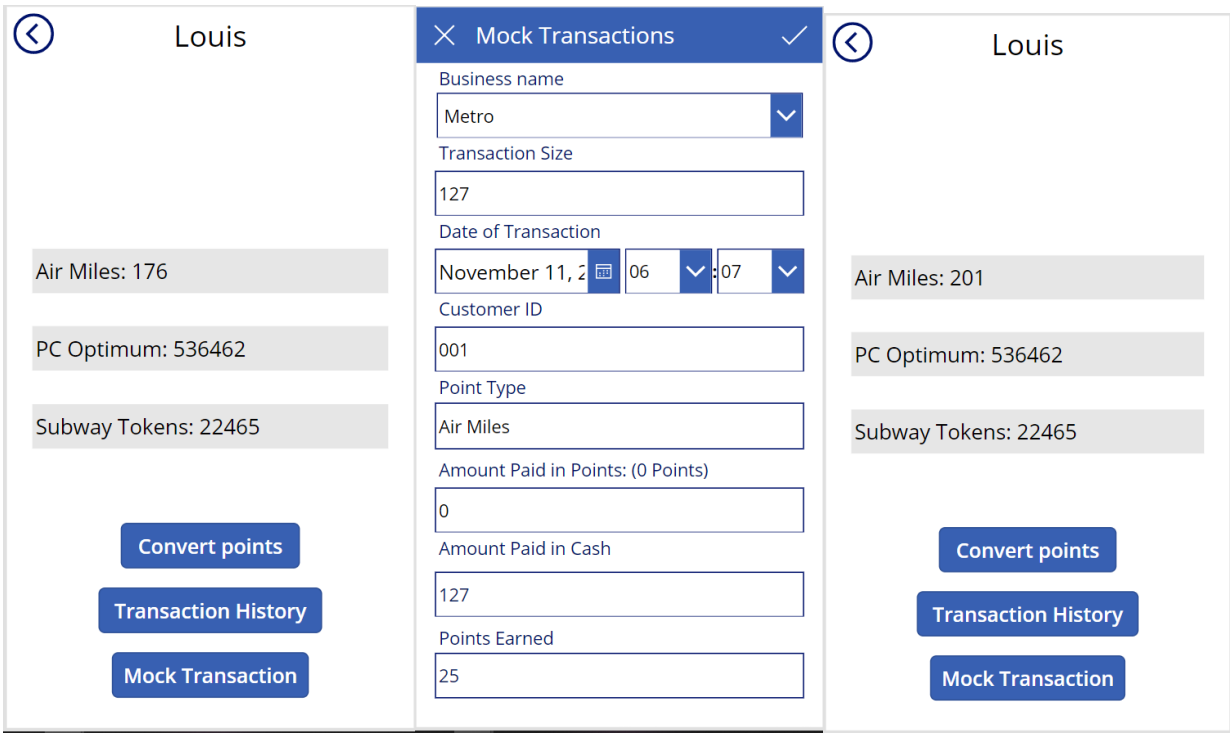
Test 3

We did not test this yet. We will focus on the aesthetics and ergonomics of the app in prototype 3 once all the main functions are executed correctly.

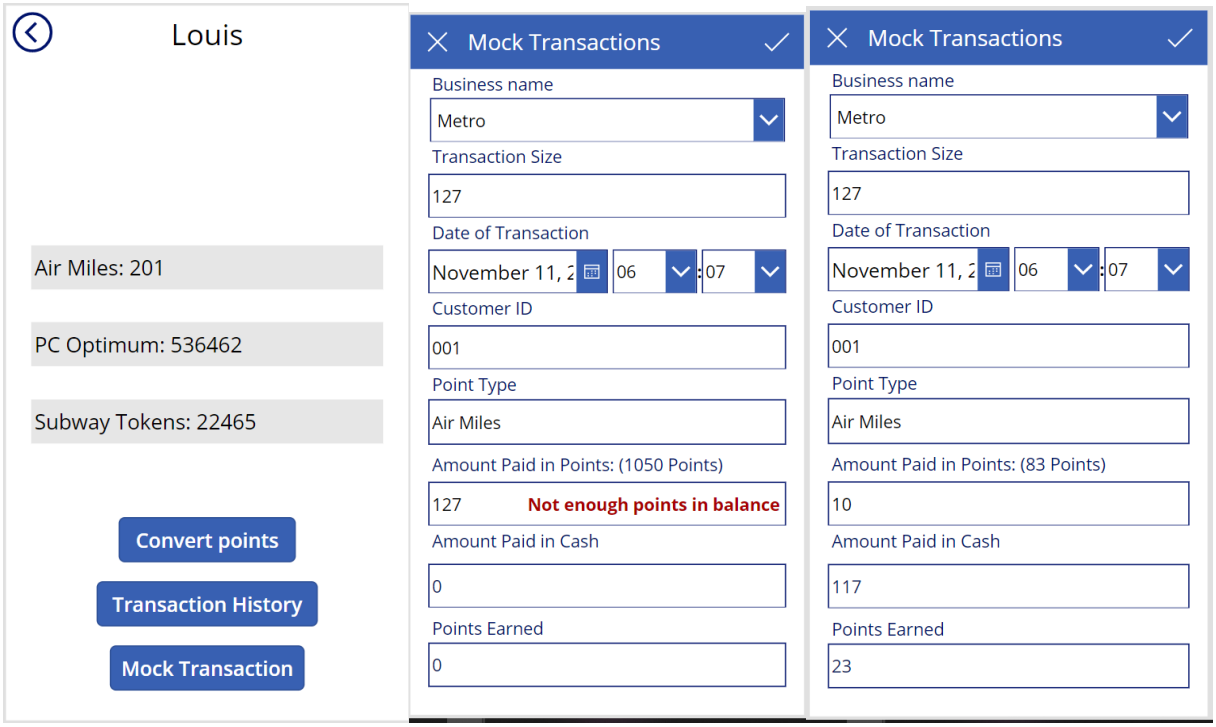
Test 4

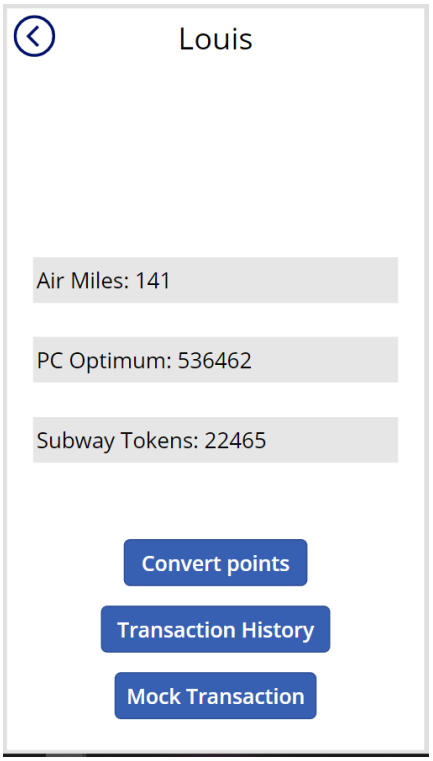
The mock transactions update the point balance instantly and are viewable in your profile.

(For the purpose of testing and convenience the customer ID is entered manually so as to be able to make transactions with other accounts)



If you are able to pay partially or fully in points, if the account does not have enough points to cover that amount and try to complete the transaction a message will appear. If you pay partially in point, you will also earn point on the part you paid in cash. (The app also stops you from pay more than the total amount of the transaction in points)





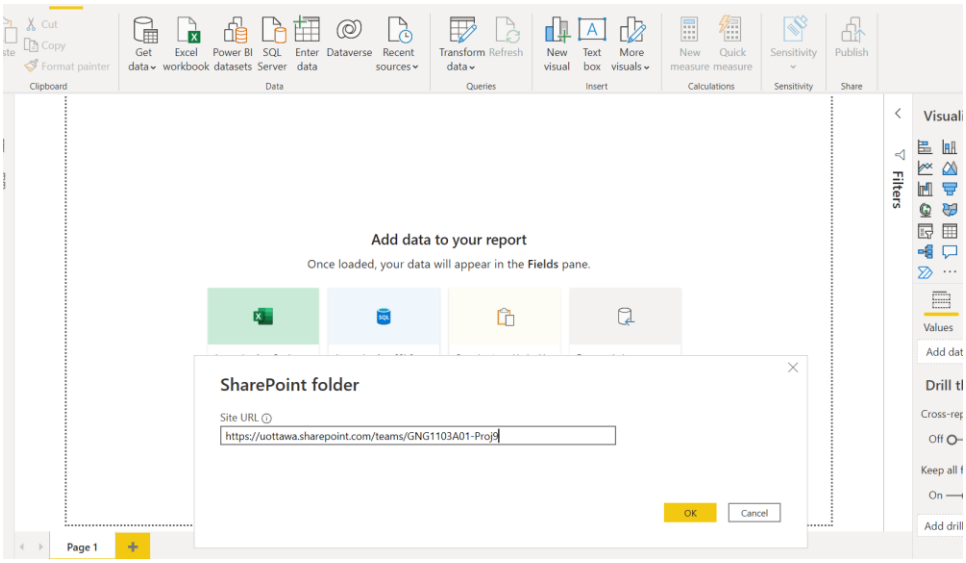
Test 5

Since our flow was always failed to update the datasets from SharePoint list to Power BI graphs, we searched some other methods on the web to solve this problem.

Procedure:

1. Download the Power BI Desktop App

2.Copy and paste the link to the app.

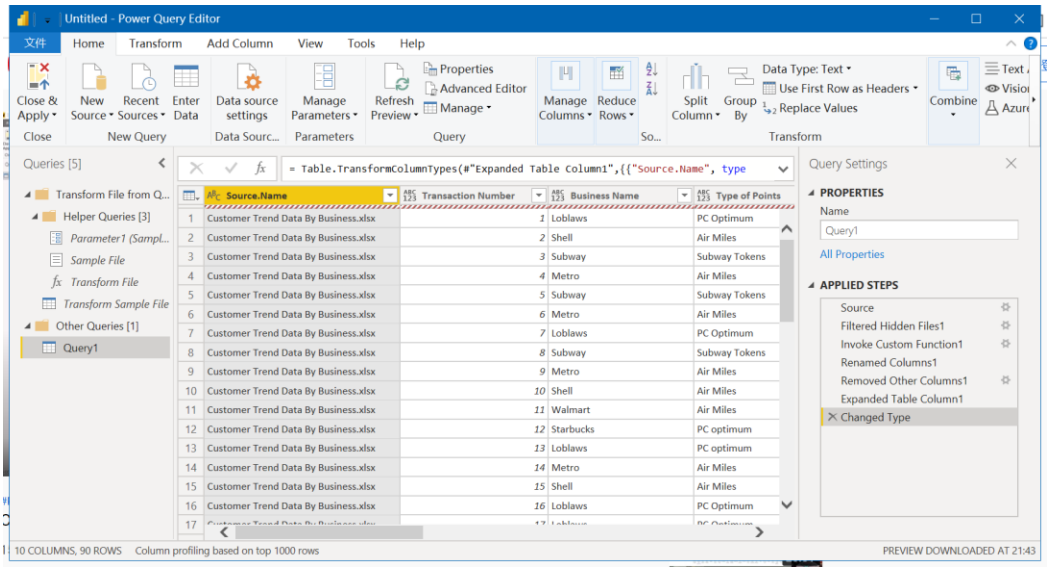


https://uottawa.sharepoint.com/teams/GNG1103A01-Proj9

Content	Name	Extension	Date accessed	Date modified	Date created	Attributes	
Binary	Customer Trend Data By Business.xlsx	.xlsx	null	2021/11/11 18:48:35	2021/10/27 14:43:12	Record	https://uottawa
Binary	Customer Trend Data By Customer.xlsx	.xlsx	null	2021/11/11 18:48:39	2021/11/3 8:08:44	Record	https://uottawa

Combine | Load | Transform Data | Cancel

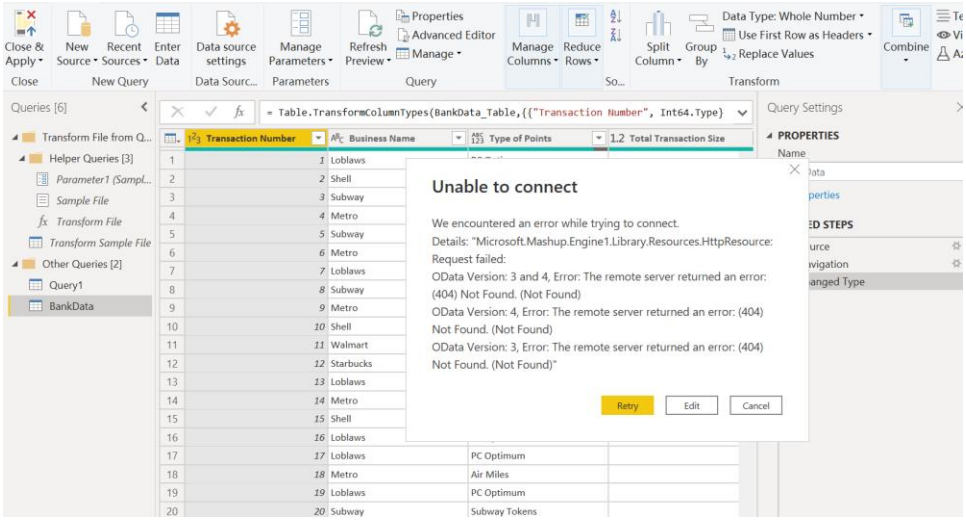
3. Since we only have two .xlsx files in the SharePoint list, we don't have to filter the file that is unnecessary. Then, we can get the Query Editor:



4. Open the excel file (in the SharePoint list) in the desktop app (with the file suffix .xlsx), copy its path link to the Power BI (By clicking the 'New Source').

5. Repeat the step 4 to do the same thing for .pbix file (Power BI) on SharePoint.

The problem is when we add .pbix file to the app, we are unable to connect those.



So, we guess what we went wrong are:

1. Enter the wrong link, or the link should be more specific
2. The .pbix file in the SharePoint could not be viewed for everyone, only can be viewed for the member who updated.

Test 6

We did not test this yet. We will proceed with this test in prototype 3 once we have finished the flow between the SharePoint, Excel, and Power Bi.

1.2. Updates to Target Specifications and Detailed Drawing

We decided to continue using the target specifications and detailed drawing updated in Deliverable F.

1.3. Updates to Bill of Materials

Equipment	**Real price**	**Our price**
Power Bi	$12.80 per month	$0
Power Apps	$20 per month	$0
Power Automate	$15 per month	$0
SharePoint	$5 per month	$0
~~Power Virtual Agents~~	~~$1280 per month per 2000 sessions~~	~~$0~~
~~Figma~~	~~$45 per month~~	~~$0~~
Excel	$6.99 per month	$0

2. Prototype 3

We will continue to build from the subsystems created in prototype 1, and how they were connected in prototype 2. Our prototype plan involves:

- Adding more visualizations of the customer transaction data in Power Bi
- Adjust the aesthetics of the app interface based on user recommendations
- Making any final adjustments to the data flow between all three interfaces to ensure no information loss

Our test plan will incorporate the tests from prototype 2 that were not completed due to lack of time, and some setbacks in the construction of the prototype. We will also retest some tests since we will make changes to prototype 2 that might change its output

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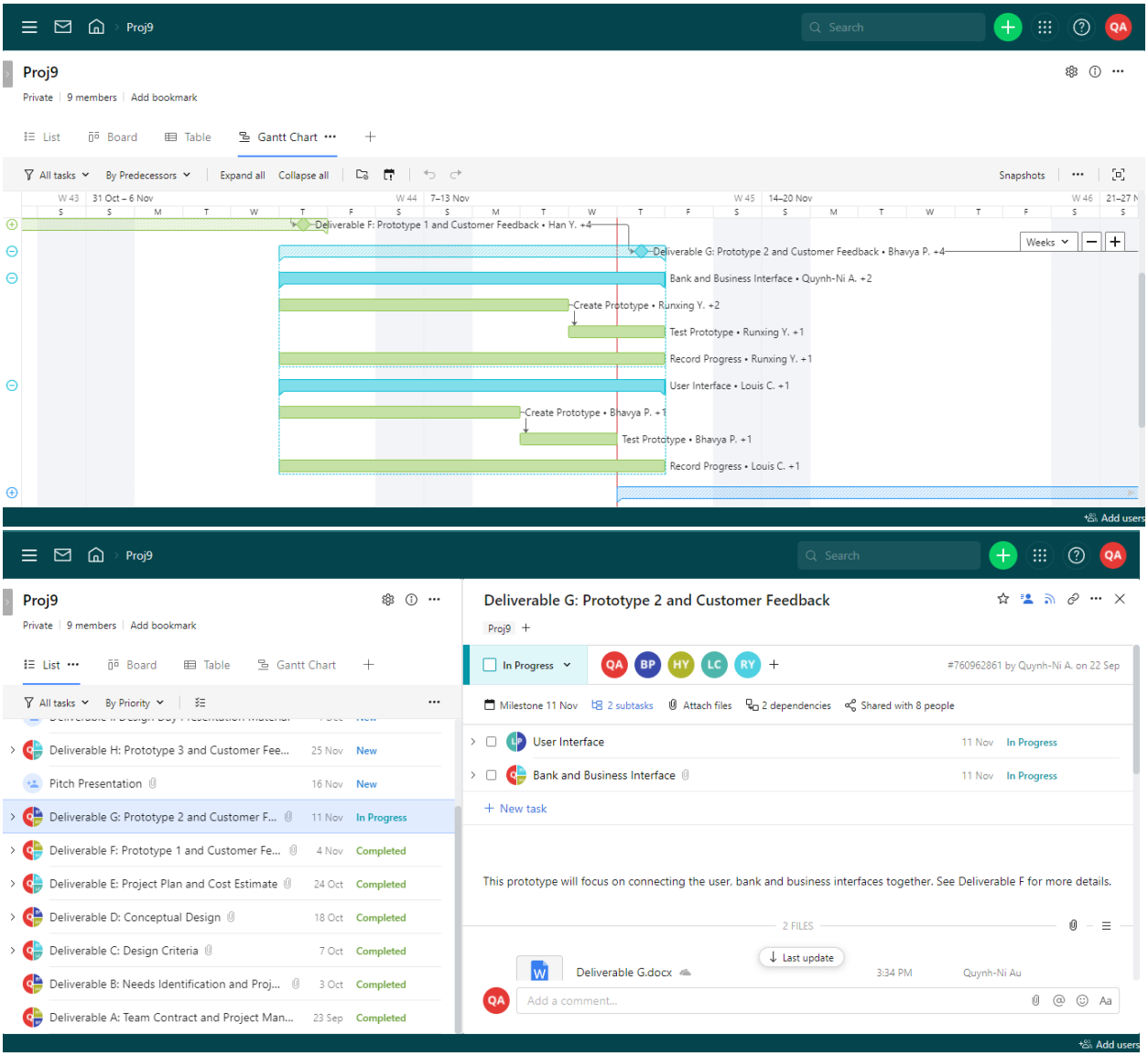
2	Test aesthetics, maneuverability of the user interface	Using the user interface through Power Apps, users will navigate through and make transactions.	Mark ease of navigation (feedback; scale from 1-10) Aesthetics (feedback; scale from 1-10); also ask what the users would like the app to look like, since it is not fully designed	1-2 days Sometime between Tuesday (16th) and Monday (22nd)
3	Test how transaction data is updated in the Power Bi	Make a transaction and test if the data is also updated in the Power Bi graphs	Time it takes to update (seconds) Is the Power Bi updated when transactions are made/changed? (yes/no)	1-2 hours Sometime between Tuesday (16th) and Monday (22nd)
6	Test the representation of business transaction data	Ask businesses what information they want to see represented in the Power Bi	Feedback from businesses (what they like/dislike)	1-2 days

				Sometime between Tuesday (16th) and Monday (22nd)

3. Deliverable G Wrike plan



3. Deliverable G Wrike plan