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# Financial Budgeting App

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# Background

## Description:

- Improve financial literacy across Canada by providing users an easy and informative way to track finances

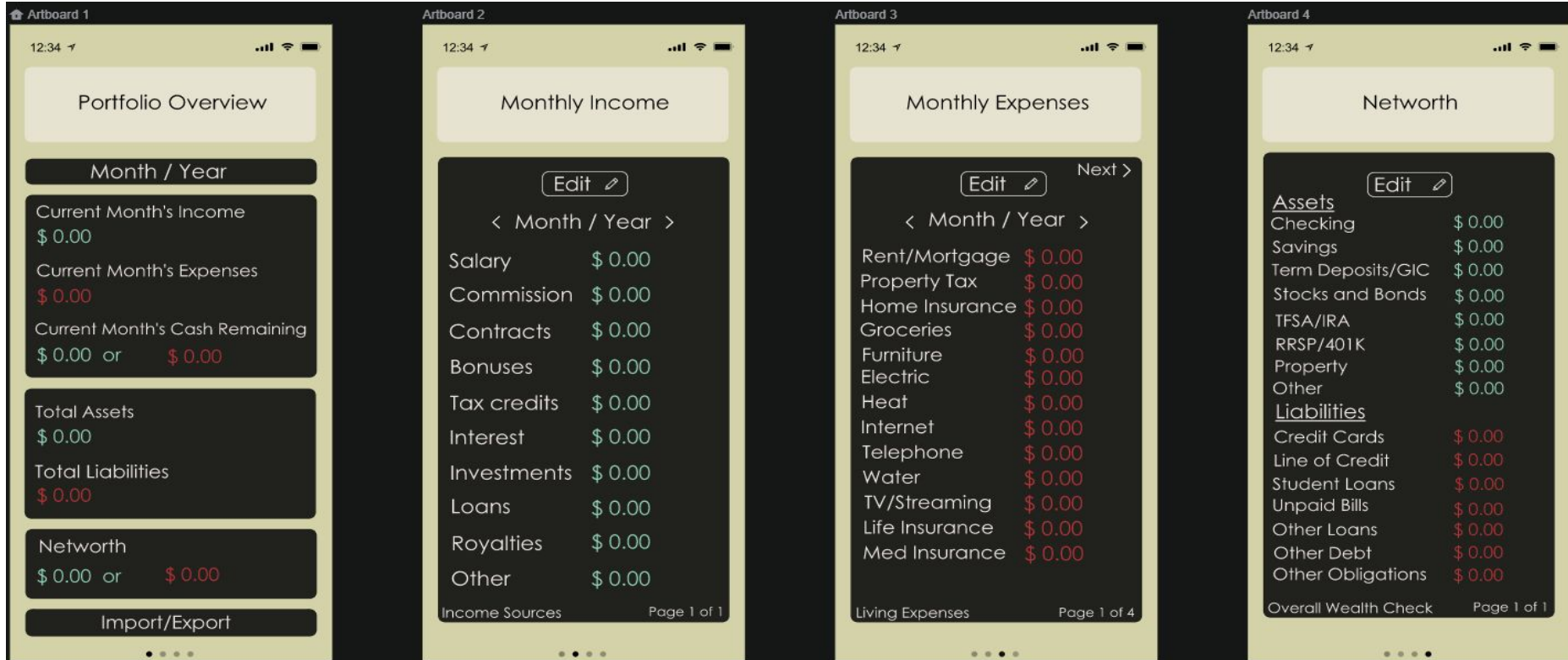
## Problem:

- Debt to income ratio in Canada is at an all time high [1]

## Motivation

- Creating a budget is a great and important first step in managing money [2]

# Proposed Layout Prior to User Research



# Research Methods

## User Research:

- Asked participants 12 questions regarding their financial management habits and preferences in mobile applications.
- Separated questions into sections: 'Financial Management and Literacy' and 'Features'
- Summarized interviews and parsed key words and phrases. Pooled data for final analysis.

## Things done well:

- Good quality data with recurring themes
- Accurate data summary and analysis

## Things for us to consider now or next time:

- Increase the quantity of participants
- Make questions more concise

# Research Methods Cont'd

## Secondary research

- Looked at negative and positive reviews of financial applications in the iOS store to determine what is being done well and/or poorly in this market
- Common complaints: inability add repeat income/expenditures, mandatory account creation, no option to setup financial goal, no calendars or categories, and annoying subscription models

## Things done well:

- UI with great overview pages and ease of use,
- integration with banking institutions and tax filing software, and
- cloud service connection

## Things for us to consider now or next time:

- Address the complaints
- Repeat study with the Google Play Store
- Difficult to judge reviews since most users do not use the premium features

# Participant Summary

## Participant Overview:

- 10 Participants interviewed
- Backgrounds: Education, Finance, Construction, Business, Medicine, and Engineering
- Ages: 18 to 54
- Careers: Program/Project specialist, Pharmacist, Contractor, Architect, Student, etc.
- Generally no debt, good financial literacy, and currently managing finances

## Outcome:

- Know what tasks and features to focus on
- Know how to redesign application UI

## What would we do differently next time?


- Our participants seemed to be financially secure outliers when compared to the majority of Canadians

# Task 1: Modify routine expenditures and income

1. Select Account (single user automatically logs in)
2. Select 'Income' from the bottom navigation menu
3. Select 'Edit' button
4. Add and modify appropriate fields
5. Select if income is recurring and its frequency
6. Select 'Submit'
7. Select 'Expenses' from the bottom navigation menu
8. Add and modify appropriate fields
9. Select if expense is recurring and its frequency
10. Select 'Submit'

# Journey Map Task 1

## NN/g CUSTOMER JOURNEY MAP TEMPLATE


 <b>PERSONA</b> Low on time, experienced with 99, 99, 99 99, 99, 99, 99, 99, 99		<b>SCENARIO</b> Modify routine expenditures/income		<b>USER EXPECTATIONS</b> • Easy to use • Smooth process	
<b>PHASE 1</b> Select income & edit it		<b>PHASE 2 (Income)</b> Select if recurring and frequency		<b>PHASE 3 (Expenses)</b> Select if recurring and frequency	
<b>PHASE 4</b> Outcome					
<b>DOING</b> Select income or expenses		Finding out which incomes are recurring		Find out which expenses are recurring	
<b>THINKING</b> What income or expenses to add?		How often? How much? Did I secure a side contract this month		Should I spend less? Do I need to budget for taxes?	
<b>FEEL AND SAYING</b> Just as I expected, things are easy to locate		I hope this is reliable		I hope I didn't forget anything	
<b>INSIGHTS</b> Easy to navigate and modify things		<b>INTERNAL OWNERSHIP</b> Must manually be entered, which can be time consuming			



# Task 2: Add and Manage Multiple Accounts

1. Select Account (single user automatically logs in)
2. Choose 'Add Account'
3. Fill in appropriate fields
4. Select 'Add New Account'
5. Select 'Settings' from the bottom navigation menu
6. Select 'Switch Accounts'
7. Select Account of interest from 'User List'


# Journey Map Task 2

	<b>PERSONA</b> Phoenix, 24, Lawyer, Married	<b>SCENARIO</b> Able to modify routine expenditures and income	<b>USER EXPECTATIONS</b> Ease of Access between switching accounts Same usability across both accounts	
<b>PHASE 1</b> Add Account	<b>PHASE 2</b> Fill in Appropriate Fields	<b>PHASE 3</b> Select Switch Accounts	<b>PHASE 4</b> Select User Account	
<b>DOING</b> Navigate the user account options and click add account	Fill out user information and financial info	Click on settings and switch users	Click on personal account	
<b>THINKING</b> I need to add my client's account info	I wish they kept better financial records	I need to manage my own finances	I take good care of my finances	
<b>SAYING</b> Great, more paperwork	I should be adding dates to the expenses	Wow this is easy I can do this with all my clients	I should take a vacation	
<b>INSIGHTS</b> Likes that you can have multiple accounts Things are stored locally so they are secure			<b>INTERNAL OWNERSHIP</b> No ability to add dates to expenditures Can't share account info with client	

# Task 3: Export monthly expenditures and income

1. Select Account (single user automatically logs in)
2. Select 'Settings' from the bottom navigation menu
3. Select 'Export' from settings screen
4. Select 'Confirm'
5. View spreadsheet

# Journey Map Task 3


NN/g CUSTOMER JOURNEY MAP TEMPLATE				
 <b>PERSONA</b> Walter White, 40, Arizona, originally Albuquerque, married, 2 kids, Chemistry Teacher		<b>SCENARIO</b> <u>Export Monthly Expenditures/Income</u>		<b>USER EXPECTATIONS</b> <ul style="list-style-type: none"> <li>• Secure</li> <li>• Local Machine Only</li> </ul>
<b>PHASE 1</b> <u>Select Account</u>	<b>PHASE 2</b> <u>Navigation to Settings</u>	<b>PHASE 3</b> <u>Export</u>	<b>PHASE 4</b> <u>View Spreadsheet</u>	
<b>DOING</b> Selects his account instead of his wife's	Choosing Settings button	Select Export (Locally CSV by default)	Viewing itemized expenses and income	
<b>THINKING</b> Maybe I should remove my wife's account	Maybe this should be on each page @ the top right instead	Should be an option to export to another device too and/or	How do I hide this money	
<b>SAYING</b> Great, no need to give away my email for login	I wasn't expecting the button to be bottom right	That was easy	Looks great, but I want more	
<b>INSIGHTS</b> <ul style="list-style-type: none"> <li>• Secure and local</li> <li>• Itemization</li> <li>• No data gathered by developer</li> </ul>		<b>INTERNAL OWNERSHIP</b> <ul style="list-style-type: none"> <li>• Need android option</li> <li>• Settings navigation</li> </ul>		

# Task 4: Checking definitions of financial terms

1. Select Account (single user automatically logs in)
2. Takes user to the home/main screen
3. Click on a term (a box will pop up that says 'Define?')
4. Select 'Define'
5. A box will pop up with a simple definition of the term
6. Click outside the box to dismiss the definition

# Journey Map Task 4

## NN/g CUSTOMER JOURNEY MAP TEMPLATE

		<b>PERSONA</b> Luke, Jedi, Tatooine		<b>SCENARIO</b> checking financial term definition		<b>USER EXPECTATIONS</b> Find a definition for a financial term they do not understand	
<b>PHASE 1</b> Sign in		<b>PHASE 2</b> Select term		<b>PHASE 3</b> Select 'Define?'		<b>PHASE 4</b> close definition box	
(DOING) Selecting desired profile.		clicks on 'RRSP/401K'		clicks on the 'Define?' pop-up box.		clicks somewhere on the screen outside the pop-up.	
(THINKING) I want to log-in to this profile		what dose this mean again?		let me see what this definition is.		Ok, all done.	
(SAYING) I'll log in as Obi-wan		I wonder what this means.		yes, Define the term.		Ah, that was helpful!	
<b>INSIGHTS</b> Intuitive, simple, and informative.				<b>INTERNAL OWNERSHIP</b> The 'Define?' box pops up if I accidentally click a term.			

# Design Requirements

1. Absolutely Must Include:
  - a. The ability to look up financial definitions
  - b. An option to set reminders for recurring tasks/incomes/expenses
  - c. The ability to export financial data as a spreadsheet
2. Should Include:
  - a. Multiuser support
  - b. UI colour customization
3. Could Include
  - a. The ability to invest through application
  - b. The ability to follow stock changes
4. Exclude
  - a. Advertisements

# References

- [1] M. Relations, "Canada's Economy and Household Debt: How Big Is the Problem?," *Bank of Canada*, 01-May-2018. [Online]. Available: <https://www.bankofcanada.ca/2018/05/canada-economy-household-debt-how-big-the-problem/>
- [2] Statistics Canada, "Distributions of household economic accounts for income, consumption, saving and wealth of Canadian households, 2018," *The Daily* – , 27-Mar-2019. [Online]. Available: <https://www150.statcan.gc.ca/n1/daily-quotidien/190327/dq190327b-eng.htm>.