Phase 3
2019-11-24
Version 1

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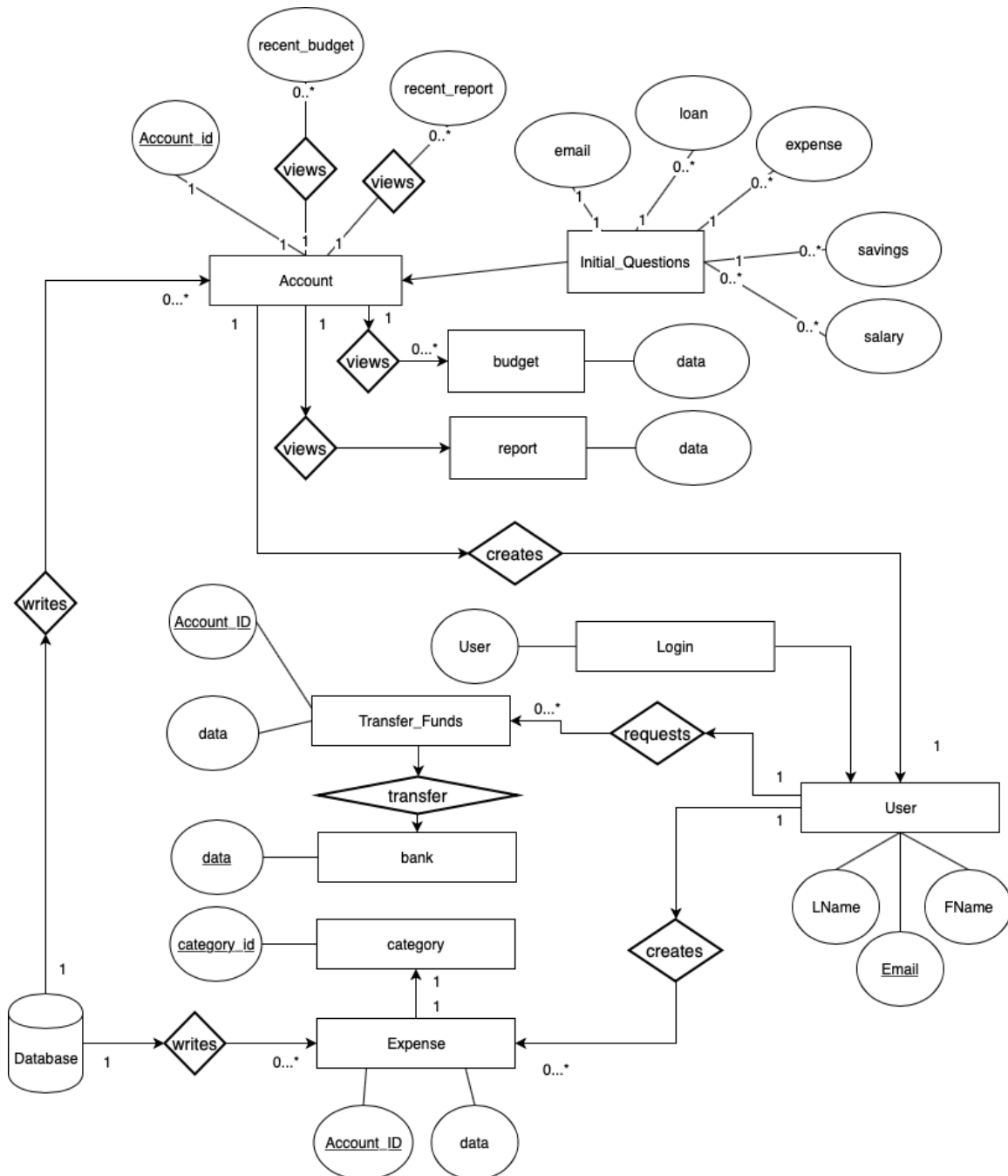Vo Vivian   104 769 052
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Revision History

Version	Date	Name	Description
1	11/24/19	Phase 3	

1   Phase 3 Task 1:

2 Phase 3 Task 2:

	Standard Client	**Standard Web Server**	**Standard Application Server**	**Standard Database Server**
Operating System	Android 9.0 Pie	Linux	Linux	Linux
Special Software	None	Apache	Java	Oracle
Hardware	64GB storage Samsung Exynos 9810 or any processor within 900 MHz to 2.8 GHz Standard 16:9 ratio smartphone touch screen	64 TB disk drive Intel Xeon Processor E5-4669 v4 22 core 2.20-3.00 GHz with 55MB cache	64 TB disk drive Intel Xeon Processor E5-4669 v4 22 core 2.20-3.00 GHz with 55MB cache	64 TB disk drive Intel Xeon Processor E5-4669 v4 22 core 2.20-3.00 GHz with 55MB cache
Network	5 GHz capable Wi-Fi connectivity	Gigabit Fiber Optic connectivity through ethernet	Gigabit Fiber Optic connectivity through ethernet	Gigabit Fiber Optic connectivity through ethernet

Note: The application is designed for Android Mobile technology use. This includes tablets and smartphones but does not have a client for a desktop or laptop. Support for iOS is under development.

Through extensive testing and simulation in Android Studio's emulation software, the development team determined that the minimum hardware requirements for mobile devices in order to maintain a smooth experience using Microsolutions are as follows:
- 1 GB of RAM
- 8 GB of Storage
- 900 MHz Processor
- 16:9 Aspect Ratio (Preferred; functional otherwise, buy may look different, especially in early prototypes)
- 2 MP Camera for Optical Character Recognition Feature (Optional)

- Touch Screen Single Touch

Software requirements for use of Microsolutions' financial advisor include:

- Android OS 5.1 or higher.

Similarly, optimal hardware requirements include:

- 6 GB of RAM
- 64 GB
- 2.8 GHz Processor
- 2280 x 1080 Aspect Ratio
- 16 MP Camera for Optical Character Recognition Feature (Optional)
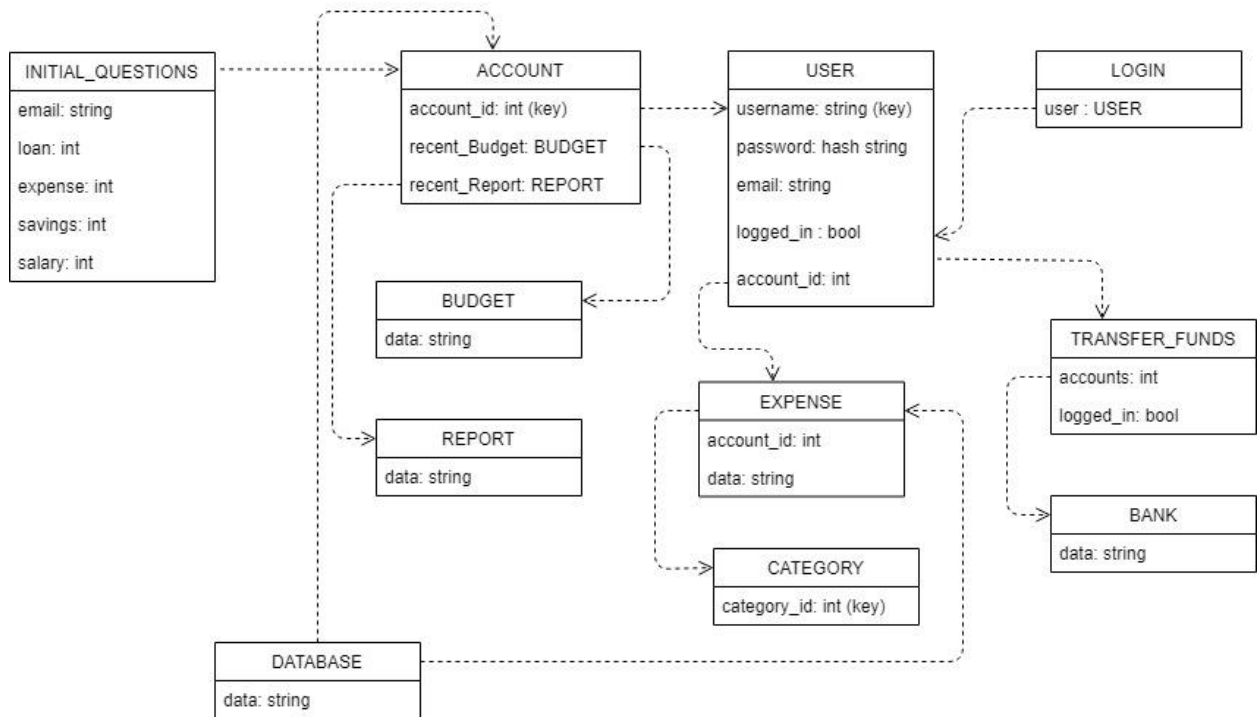- Touch Screen Multi-Touch

Suggested Software for optimal use is the most recent Android Operating System:

- Android 9.0 Pie

3   Phase 3 Task 3:
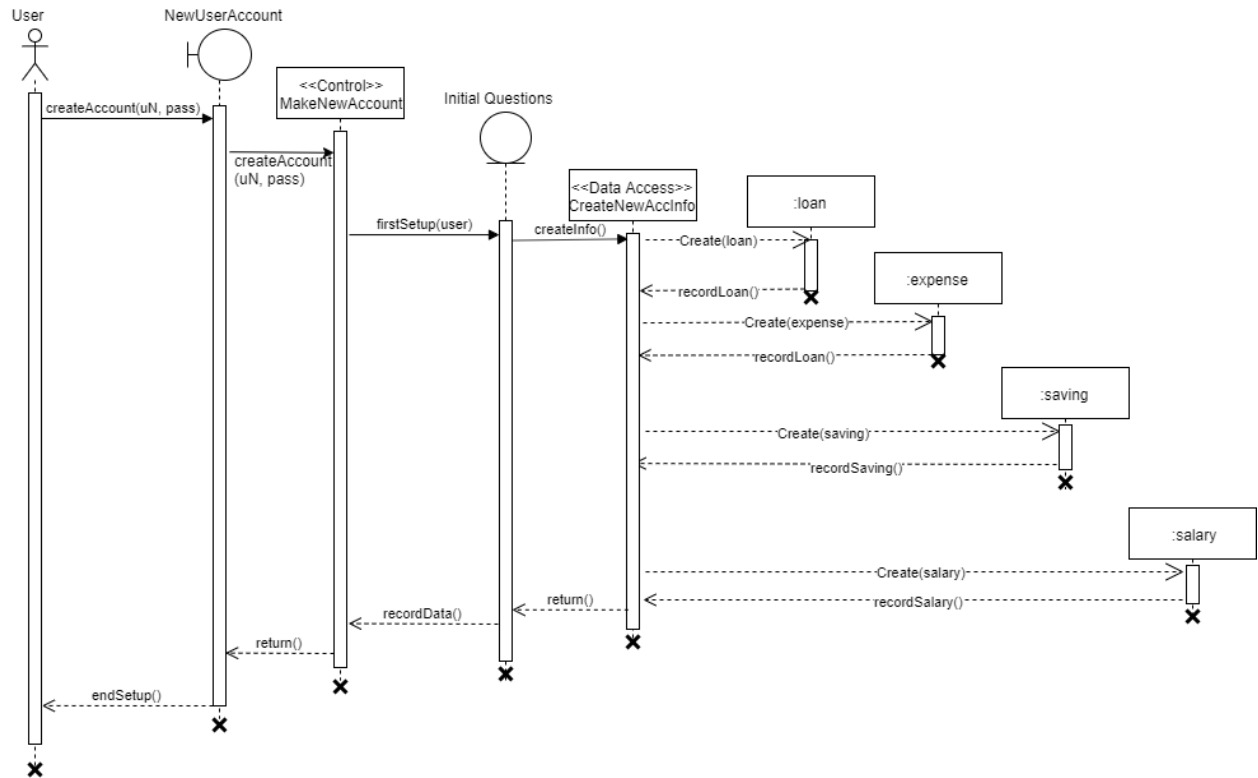
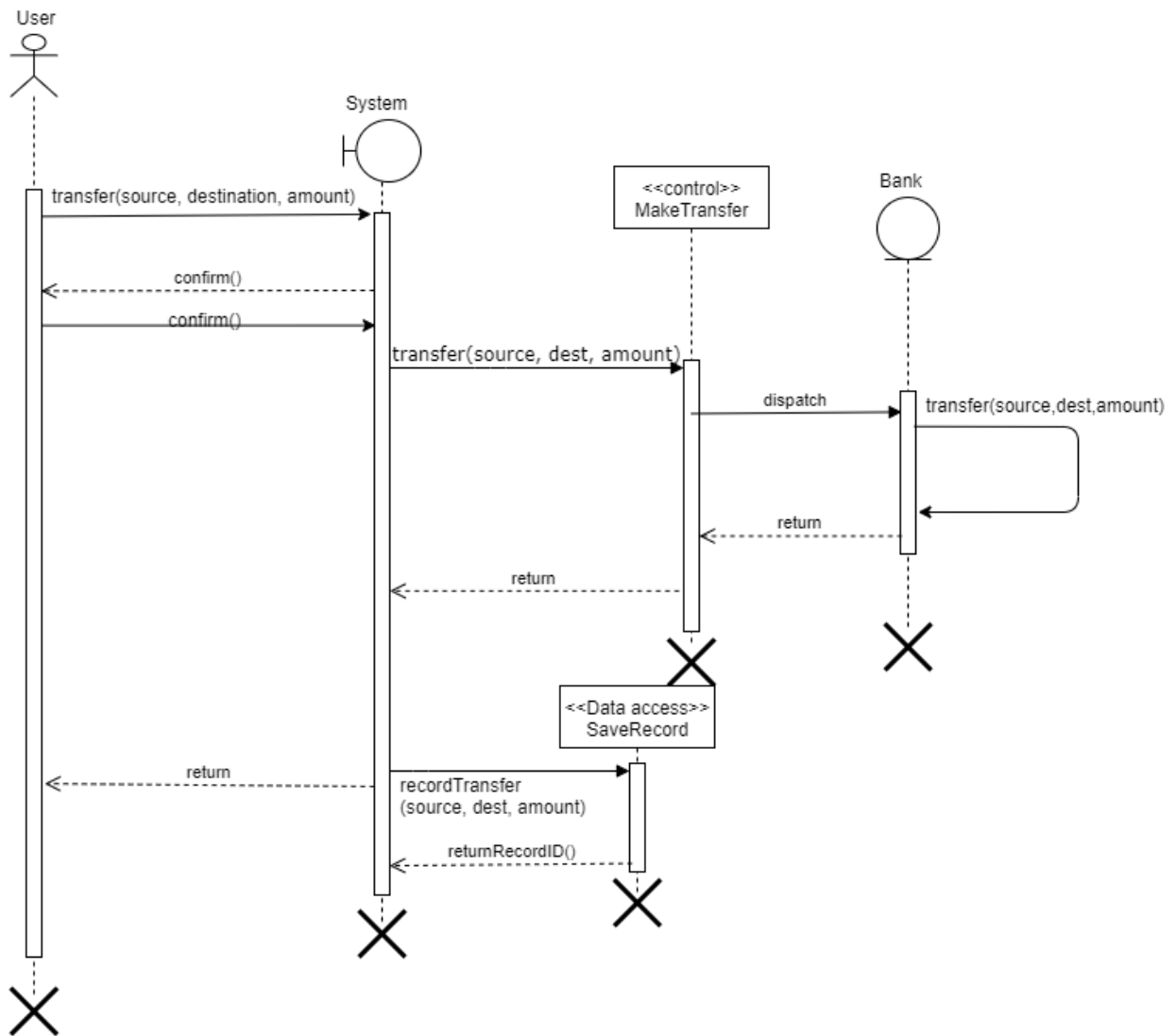## 3.1 First-Cut Design Class Diagram

First Cut Design Diagram

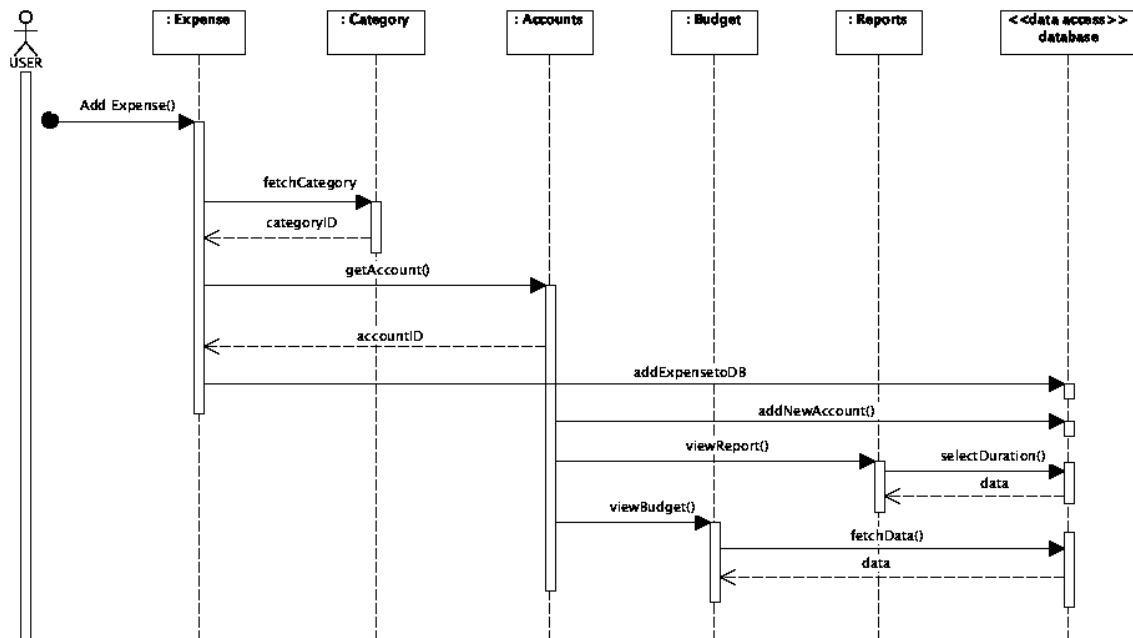## 3.2 Design Sequence Diagrams

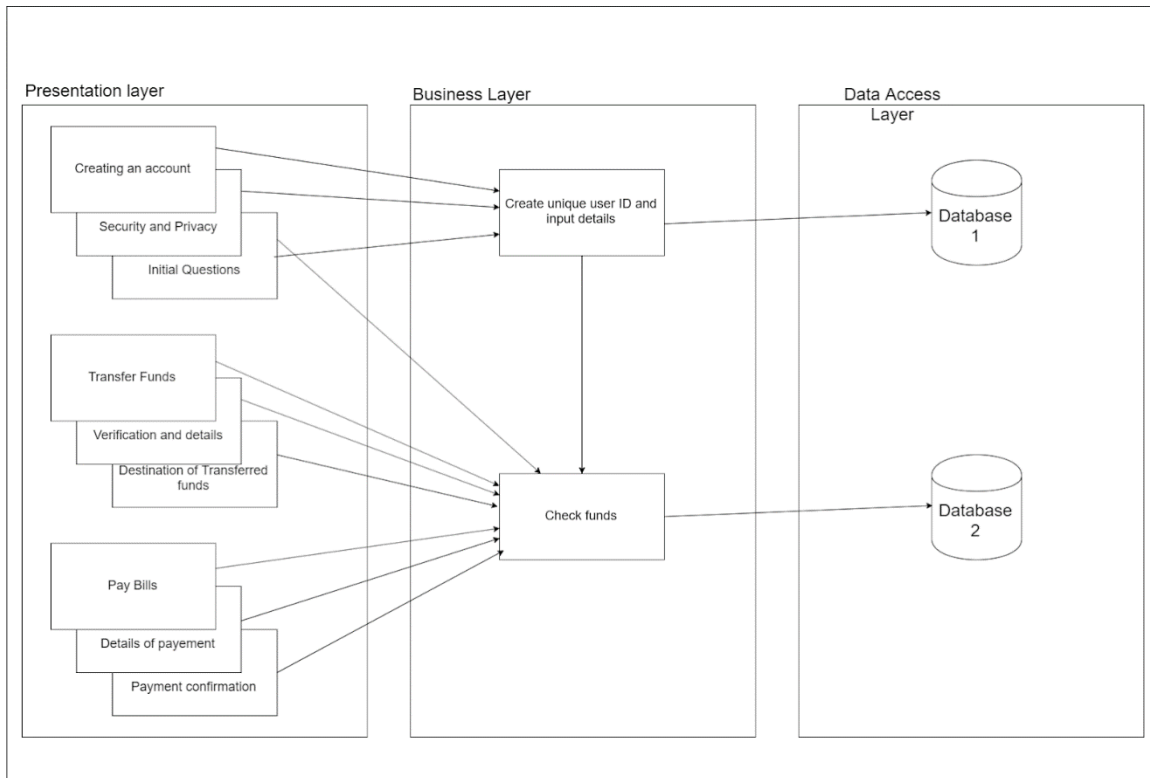### 3.2.1 RQ1: Create Account

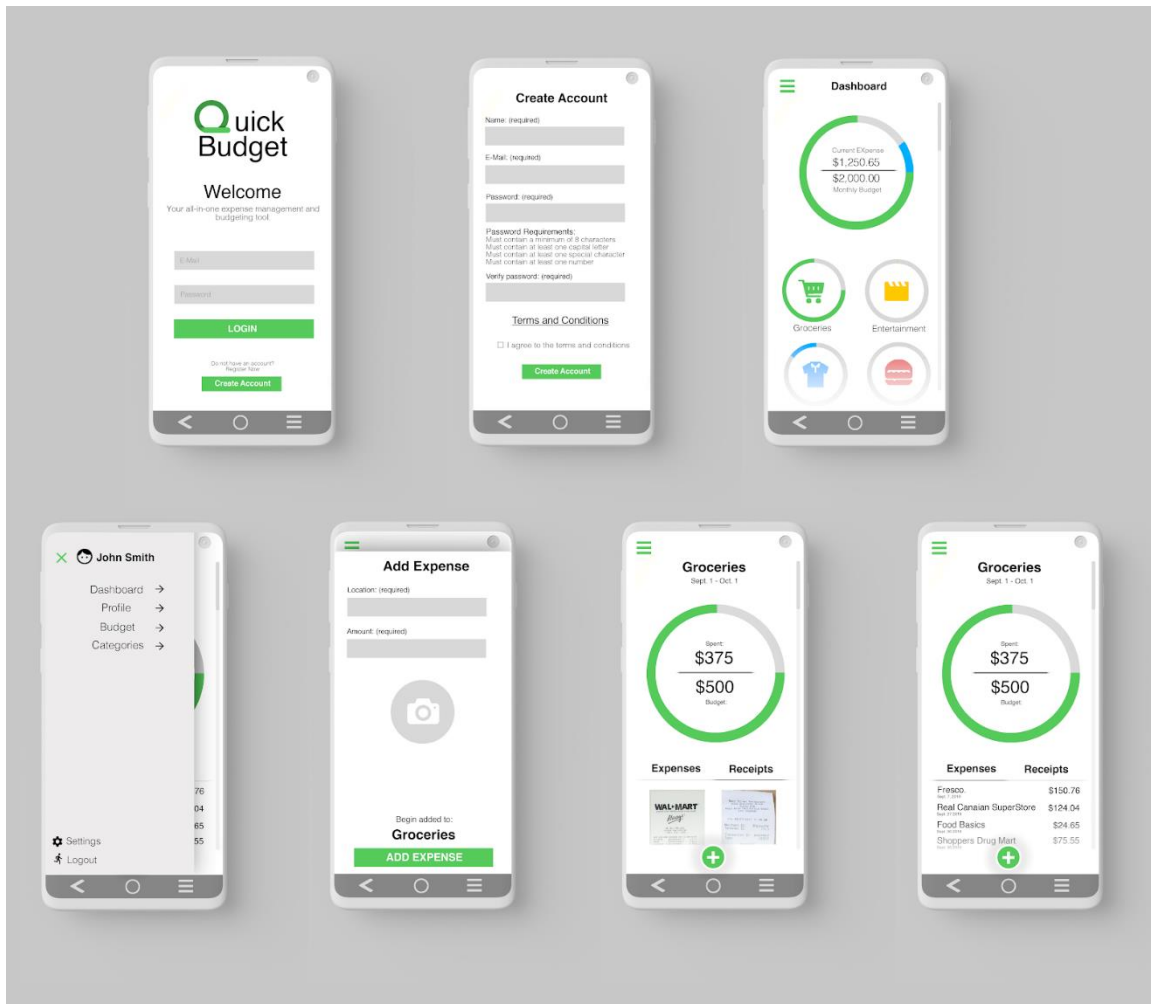## 3.2.2 RQ2: Transfer Funds

3.2.3 RQ3: Pay Bills

3.3 Three-Layer Design Class Diagram

An example of a typical user using the app:
- user logs into the application via android app
- Once logged in, the app will open up to the main page where it shows an overview of the account, which is the presentation layer use by the user
- Once a course of action is selected, that information is passed on to the application layer which will query the data layer to respond with the information back to the application layer.

3.4 Interface Design System

3.5 Table Diagram System

3.5.1 Account

Account ID	**Recent Budget**	**Recent Report**
104606311	$30, 000	-
104606312	$40, 000	-
104606313	$5,567	-

Canadian Education Association
452 Gare du Palais, Bureau 104
Quebec
G1K 3X2

STATEMENT OF ACCOUNT

Date	Account #
08/03/2001	137

Ms. Ruth K. Danforth
Academy of Child Professors
33932 Research
Austin, TX 78680-1278

Amount Enclosed $ _____

Date	Reference	Description	Amount	Credits	Balance
11/12/99	R13	Boston Annual Meeting in the Spring	355.00		355.00
03/31/00	R34	PrePay: 03/31/2000		50.00	(50.00)
08/29/00	R42	Pledges Inst# 1	500.00		500.00

3.5.2 Initial Questions

Email	Loan	Expense	Savings	Salary
NaveedChad@hotmail.com	$70, 000	$6,000	$0	$100,000
BigPapa@yahoo.ca	$10, 000	$4,000	$0	$90,000
HadealAl@gmail.ca	$500,900	$100,600	$0	$34,895

3.5.3 Users

Email	FName	LName
NaveedChad@hotmail.com	Naveed	Chad
BigPapa@yahoo.ca	Michael	Carter
HadealAl@gmail.ca	Hadeal	Al-Safadi

3.5.4 Expense

Account ID	Amount	Category ID
104606311	$35, 000	Alpha336
104606312	$80, 000	Bravo337
104606313	$56,567	Charlie338

3.5.5 Transfer Funds

Account ID	Bank	Email
104606311	TD	NaveedChad@hotmail.com
104606312	RBC	BigPapa@yahoo.ca
104606313	CIBC	HadealAl@gmail.ca