Project Plan

Ultimate Currency and Unit of Measure Converter

Industry Partner	
Primary Instructor	
Team Member	Justin Yeh
Team Member	Luilson Sousa
Team Member	Fab Pisco
Team Member	
Team Member	

Document Revision History

Revision #	Date
V2	2025/01/24

Table of Contents
1. Executive Summary

The following describes the project to be executed.

Objective	Our team's objective is to develop an application that will simplify the way people convert regional currencies and units of measurements into Canadian values.
Corporate Goals Addressed	Our corporate goals are to improve task efficiency for the user. Allowing users to quickly find an answer they are looking for. Other outcomes we want to achieve in the future would be to grow from a small customer base to a larger one.
Planned Start Date	Sept 12th, 2024
Planned End Date	March 28th, 2025

2. Project Approvers, Reviews and Distribution List

Approvers, reviewers and distribution list

Project Role	Name	E-mail	Date
Front-End	Justin Yeh	Justin.yeh@georgebrown.ca	2025/01/24
Back-End	Luilson Sousa	Luilson.sousa@georgebrown.ca	2025/01/24
Back-End	Fab Pisco	Fab.Pisco@georgebrown.ca	2025/01/24

3. Scope

Define the sum total of all of its products and their requirements or features.

In Scope	Out of Scope
Mobile Android application	Creation of a browser-based application version of the product
Creation of a Profile Page	Historical currency exchange rate information
Customer registration page for creating an account	Using currencies other than CAD as the TO currency
Customer login functionality to access the system	iOS application
Getting the real time exchange rate using an external API	
Conversion of the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency	

4. Deliverables

This project will deliver the following.

Scope Item	Related Deliverable
Mobile Android application	Functional Android Application
	User friendly Interface
Creation of a profile page	Profile page where users can update their personal information
	Validation of fields to ensure that all necessary information is filled in
Customer registration page for creating an account	Validation of fields to ensure no duplication of users and all necessary information is filled in

	Back-end system for storage of user data
Customer login functionality to access the system	Login page with password authentication
	Error handling to alert user of incorrect user id and password combination
Getting the real time exchange rate using an external API	Integration with a real-time exchange rate API
	Ensure proper error handling in the event that the API is not available
Conversion of the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency	Creation of an algorithm to convert the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency
	Clear display of the converted price

5. Assumptions

This project makes the following assumptions:

- Project scope will not change

- Team skills will be inline with objective
  - Android mobile application has been confirmed
  - The team has learned Android development using various tools

- End users will be available to test at time agreed upon

- The external API used for exchange rates will be reliable and support the currencies that this project requires
  - https://freecurrencyapi.com/ has been reviewed and confirmed to support the necessary currencies
  - 5,000 free monthly requests

- The users will have access to the internet

6. Dependencies

The following are the internal and external dependencies that will have to be acknowledged and addressed:

- Android software development tools and emulators will be available.
- Java/Kotlin - Programming languages used for app development.
- Firebase Authentication - User authentication and login.
- Retrofit - API calls and data fetching.
- SQLite - Local database storage.
- Front and back-end can be developed simultaneously but the back-end must be completed before the front end can accept currency to be converted.
- Approval of the front-end design by the team must be agreed upon before starting development.
- External currency API must be available and reliable.
- Currency API relies on the back-end being setup.
- Back-end relies on front-end for user input and 3rd party testing.

7. Risk Management

Potential Risk	Severity (H/M/L)	Likelihood (H/M/L)	Management Strategy
Scope Creep	High	Medium	Follow the project goals and objectives
Not having a regular team review of project goals	Medium	Low	Plan regular team reviews of project goals
Delayed currency exchange API response time	Low	High	Ensure program will handle this without crashing
Unstable internet connection	Low	High	Ensure program will handle this without crashing

8. Communication

Reporting

The following reports will be produced:

Report	Audience	Frequency
Progress Updates	Team Members	Twice a month
Issues	Team Members	Any time there is an issue

Meetings

The following meetings/communication will be established:

Meeting	Purpose	Attendees	Frequency
Online	Project review and discussion	Team Members	Weekly

9. Task Listing (WBS- Work Breakdown Structure)

The following resource proposal template summarizes the resource hours committed to this project, upon final approval of this document.

Reference	Tasks	Duration	Dependency
A	Profile page where users can update their personal information	5 days	B
B	Customer registration page with validation	5 days	C
C	Back-end system for storage of user data	3 days	
D	Login page with password authentication	3 days	B
E	Error handling to alert user of incorrect user id and password combination	2 days	D
F	Integration with a real-time exchange rate API	5 days	
G	Ensure proper error handling in the event that the API is not available	3 days	
H	Creation of an algorithm to convert the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency	10 days	F, G

10. Gantt Chart

Create a <u>detailed Gantt Chart</u> from your Task Listing(Use any software tool and paste the image or upload as a separate file that can be opened as pdf/doc/xls)

Task	1/24/2025	1/31/2025	2/7/2025	2/14/2025	2/21/2025	2/28/2025	3/7/2025	3/14/2025	3/21/2025	3/28/2025
Customer registration page with validation	■	■								
Back-end system for storage of user data		■								
Login page with password authentication			■							
Error handling to alert user of incorrect user id and password combination			■							
Profile page where users can update their personal information				■						
Integration with a real-time exchange rate API					■					
Ensure proper error handling in the event that the API is not available						■				
Creation of an algorithm to convert the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency							■	■		

11. Milestones

Major Activity or Milestone	Estimated Milestone Target date	Owner/Reviewer Team Members
Customer registration page with validation	Jan 31, 2025	Fab
Back-end system for storage of user data	Jan 31, 2025	Fab
Login page with password authentication	Feb 07, 2025	Luilson
Error handling to alert user of incorrect user id and password combination	Feb 07, 2025	Luilson
Profile page where users can update their personal information	Feb 14, 2025	Luilson
Integration with a real-time exchange rate API	Feb 21, 2025	Justin
Ensure proper error handling in the event that the API is not available	Feb 28, 2025	Justin
Creation of an algorithm to convert the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency	Mar 14, 2025	Justin

12. RAM – Responsibility Assignment Matrix

PROJECT TEAM RESPONSIBILITIES

PROJECT NAME: Ultimate Currency and Unit of Measure Converter

TASK	JUSTIN	FAB	LUILSON
Customer registration page with validation	S	P	S
Back-end system for storage of user data	S	P	S
Login page with password authentication	S	S	P
Error handling to alert user of incorrect user id and password combination	S	S	P
Profile page where users can update their personal information	S	S	P
Integration with a real-time exchange rate API	P	S	S
Ensure proper error handling in the event that the API is not available	P	S	S
Creation of an algorithm to convert the price per unit of measure in a foreign currency to the target unit of measure in Canadian currency	P	S	S

P=Primary   S=Secondary

13. Approval

The signatures below indicate their approval of the contents of this document.

Project Role	Name	Signature	Date
Front-End	Justin Yeh	Justin Yeh	2025/01/24
Back-End	Luilson Sousa	Luilson Sousa	2024/01/24
Back-End	Fab Pisco	Fab Pisco	2024/01/24