Project Status Summary

The Ultimate Currency and Unit Converter app is progressing just fine, all the key features being incorporated to the Android version. The development is perfectly timed, and we're meeting all the milestones as we planned.

For now, the back-end is still under minor development, as the front-end design has been finalized and approved. The team is working together with communications, testing and quality control, and everything is running smoothly. More updates to be released.

Completed Objectives

1. **Front-End and Back-End Team Setup**

Team roles have been assigned, and the front-end (Justin) and back-end (Luilson and Fab) teams are fully operational.

Comment: Team members are aligned on responsibilities and development tools, ensuring a smooth workflow.

2. **Profile Page and Customer Registration Page Design**

The design for both the profile page and customer registration page has been finalized and validated.

Comment: This design phase has helped ensure user-friendly features, such as profile customization and registration validation.

3. **Back-End System for Storage of User Data**

Back-end system has been set up for storing user data.

Comment: This step is crucial for user account management and security. Next step: implementing the login functionality.

4. **External API Review**

The external API for real-time currency exchange (https://freecurrencyapi.com/) has been reviewed and confirmed to support required currencies.

Comment: This API is crucial for the conversion features, and its reliability is a priority.

Ongoing Objectives

1. **Customer Registration Page with Validation**

Current Status: In development (expected completion: Jan 31, 2025).

Comment: This is a critical feature for ensuring proper user account creation. Validation checks will prevent duplication and incomplete registrations.

2. **Login Page with Password Authentication**

Current Status: In development (expected completion: Feb 7, 2025).

Comment: The login functionality is essential for user authentication and privacy. We're ensuring that error handling is in place to address incorrect login attempts.

3. **Integration with Real-Time Exchange Rate API**

Current Status: Preparing integration (expected completion: Feb 21, 2025).

Comment: Integrating this API will enable accurate, up-to-date currency conversion. The team is preparing for API integration and error handling.

Upcoming Objectives

1. **Profile Page Where Users Can Update Their Personal Information**

Target Date: Feb 14, 2025

Comment: Once the registration and login pages are functional, the next step is

allowing users to update their personal information on their profile page.
Ensure Proper Error Handling If the API is Not Available

Target Date: Feb 28, 2025

Comment: It's important that users are notified when the external API is down,

and that the app gracefully handles this issue without crashing.

2. **Creation of an Algorithm to Convert Price Per Unit of Measure in Foreign**

Currency to Canadian Currency

Target Date: Mar 14, 2025

Comment: This is a key feature of the app, and development will start once the

API integration is complete.

Managing Issues

Risks in the Code, Documentation, or Development and Design Process

1. **Risk: Scope Creep**

Description: There is a risk that new features or functionalities could be added beyond the original scope.

Management Strategy: We will closely follow the project goals and objectives, with regular team reviews to ensure we stay on track. Any changes will be discussed and agreed upon by the team and project manager.

2. **Risk: Delayed Currency Exchange API Response Time**

Description: The real-time exchange rate API might experience slow response times.

Management Strategy: We will implement caching mechanisms to reduce dependency on API calls for frequently accessed data, and ensure the app handles any delays gracefully without crashing.

3.   Risk: Unstable Internet Connection

Description: A unstable internet connection may affect the functionality of the currency conversion.

Management Strategy: The app will be designed to display meaningful error messages when the internet connection is unstable or unavailable and will have offline fallback capabilities for certain features (like accessing previously stored conversion data).

4.   Documentation Risks

Description: As the team is moving quickly, documentation might be at risk of becoming outdated.

Management Strategy: We will have weekly reviews of the project documentation to ensure it reflects the current development progress. Additionally, any changes in code or functionality will be reflected in updated documentation.

5.   Risk: User Authentication Security

Description: The handling of user data and authentication needs to be secure.

Management Strategy: We are implementing Firebase Authentication for secure login and ensuring that sensitive data is handled according to privacy standards and encrypted.

6.   Design Risk: UI/UX Issues

Description: The user interface (UI) might not meet user expectations in terms of design and usability.

Management Strategy: Regular feedback from end users will be collected during testing phases, with design adjustments made based on their input.

7.   Backend Integration Risk

Description: Issues may arise in the integration between front-end and back-end systems, especially concerning real-time data flow and API usage.

Management Strategy: Close collaboration between the front-end and back-end teams, with well-defined API contracts, will ensure that both teams are aligned. Thorough unit and integration testing will also mitigate this risk.