Title: Cahier de Charge - Mobile App Development Project

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1. Project Presentation

This document presents a comprehensive Cahier de Charge for the Mobile App Development project. The project aims to deliver a user-friendly e-commerce platform integrated with messenger functionality, empowering users to build a network and communicate effectively while having a delightful online shopping experience.

Problem Statement: The current digital market lacks a pocket-friendly solution that blend both e-commerce and networking — an online store where you could shop and simultaneously interact without having to switch platforms. Therefore, the proposed project envisions creating a mobile application that culminates the e-commerce and messaging functionality into one platform while maintaining an enjoyable user experience.

2. Analysis of the Existing Situation

Currently, the digital market comprises separate applications for e-commerce and chatting. Switching between these applications not only consumes valuable time but also causes inconvenience to users. Furthermore, the lack of a feature that permits communication between buyers and sellers in real-time often leads to misunderstandings related to product specifications and discontents after purchases. The specific needs and targeting criteria of online customers are transforming, and the existing market platforms are failing to keep pace with these changes.

3. Proposed Solution

We propose to develop an Android and iOS mobile application that will merge an e-commerce platform with a communication network, allowing users to connect, shop, and converse within the same interface. The Scrum methodology will be applied throughout the project to ensure iterative and incremental progress, facilitating adaptability with emerging requirements and changes. We will ensure that the technological solutions applied are compatible with future expansions or interconnections with other systems.

4. Functional and Non-Functional Requirements

Functional Requirements:

a. User registration and profile management

b. Search functionality to explore the product catalogue

c. Shopping Cart to hold chosen products

d. Secure payment gateway

e. Real-time messaging between consumers and sellers

f. Feedback and review system

Non-Functional Requirements:

a. High-Quality User Interface that delivers an intuitive and user-friendly experience

b. High-level security to ensure user data protection

c. Fast loading time and optimized performance

d. Provide support for multiple languages and currencies

e. Scalable architecture to accommodate high traffic and load

5. Technology Stack

The technology stack will consist of:

a. Front-end: React Native, for both the Android and iOS apps.

b. Back-End: Node.js for application logic and Python for data analysis and recommendation features.

c. Database: PostgreSQL, renowned for its robustness and ability to handle substantial data.

d. For real-time communication: Socket.io

e. Cloud hosting: Amazon Web Services (AWS).

6. Application Overview with Design Choices

The application will feature an easy-to-navigate and visually appealing interface to enhance user engagement. The design will prioritize ease of use and rapid access to main features, combining modern aesthetics with functional clarity.

Logo: The logo will combine imagery and text to represent the unique blend of commerce and communication that the app offers. It will be simple, memorable, versatile and appropriate for our target audience.

Interfaces: The application will have separate interfaces for user profiles, product display, shopping cart, and messaging. All interfaces include intuitive and interactive elements, ensuring interfaces are accessible and engaging.

7. Conclusion

The proposed mobile application will fill the existing gap in the digital market by creating a unique blend of e-commerce and social networking. The Scrum methodology will ensure the organized and effective execution of the project. Upon completion, the project will not only provide a platform for users to shop and communicate simultaneously but also set a new trend in the online shopping industry. This project's success could pave the way for a future where online shopping becomes synonymous with networking and connection.