Howudoin Project Phase II Frontend Requirements Document

1. Introduction

This document outlines the requirements for the frontend development of a messaging application using React Native. The frontend will provide the user interface for features such as registration, friend addition, and messaging.

1.1 Purpose

The purpose of this document is to define the user interface and experience requirements for the mobile application.

1.2 Scope

This document focuses on the mobile interface, which will interact with the backend services developed in the first phase. The frontend will be developed using React Native and will support both iOS and Android platforms.

2. Functional Requirements

2.1 User Registration and Login Screen

(10 Points)

The application will have a registration form that allows users to sign up with their email and password. There will also be a login screen for existing users.

**** Important: A JWT token will be issued and received upon successful login. This token must be included in all subsequent requests.

2.2 Friend Request Screen

(10 Points)

Users will be able to search for other users and send friend requests. The status of the friend request will be displayed on the user interface.

2.3 Show Friends List Screen

(10 Points)

Users will be able to search for other users and send friend requests. The status of the friend request will be displayed on the user interface.

2.4 Friend Messaging Screen

(20 Points)

Once users have added each other as friends, they will be able to send messages through a chat interface. The interface will update in real-time as new messages are received.

2.5 Group Creation

(10 Points)

User will be able to create new group with a name and add members from his/her friends.

2.6 Show Group List

(10 Points)

All groups the user is part of will be listed in the groups screen

2.7 Show Group Details

(10 Points)

When a group selected from group list, group name, creatin time and all members will be listed in the group details screen.

2.8 Group Messaging

(20 Points)

Messages will be displayed as they are sent to the group. The app will fetch the group message history when the group chat is opened.

3. Non-Functional Requirements

3.1 User Experience

The app should provide a smooth and intuitive user experience, with easy navigation and fast response times.

4. UI/UX Requirements

The user interface should be simple and clean, with well-organized screens for each feature. The app should include navigation between the main screens such as login, friend list, and chat.

4.1 Screen Design Mockups

Screens should be designed to fit both Android and iOS devices.

4.2 Navigation Flow

The app should include a clear flow between screens.

5. Integration with Backend

5.1 API Calls

The frontend will make API calls to the backend to support registration, login, friend requests, group management, and messaging.

5.2 Authentication with JWT

JWT tokens received from the backend upon login will be used to authenticate further API requests.

Project Deadline for Phase I: Nov 21st 2024

Project Deadline for Phase II: Dec 27th 2024