COM 312: SOFTWARE ENGINEERING II PROJECT (CAT II)

Project Title: Reconnecting Childhood Friends: A Web Application for the Elderly

Objective:

To design and develop a web application that facilitates reconnection among elderly individuals and their childhood friends, applying software engineering principles. This project will be assessed based on presentation and functionality.

Guidelines:

1. **Group Formation**: Work in pairs (2 students per group).
2. **Duration**: Complete the project **1 week before exams**.
3. **Presentation**: Each group will present their work during the final week before the exam.

Project Scope:

Your task is to create a user-friendly web application that:

1. **Registers Users**: Allows elderly individuals to create a profile including details like name, age, childhood hometown, school, and interests.
2. **Friend Matching**: Suggests potential friends based on shared childhood details.
3. **Communication Platform**: Provides a secure messaging feature to connect users.

Requirements:

1. **Follow the Software Development Life Cycle (SDLC)**:

   - **Requirement Analysis**: Identify the key needs of elderly users (e.g., simplicity, accessibility).
   - **Design**: Develop wireframes and basic system architecture using **UML diagrams** (e.g., use case, sequence, and class diagrams).
   - **Implementation**: Build the application using a technology stack of your choice (e.g., HTML/CSS/JavaScript, Flask/Django, React, etc.).
   - **Testing**: Demonstrate how you tested the application for usability, functionality, and security.
2. **Features to Include**:

   - User registration and login.
   - Search and match system for finding childhood friends.
   - Simple and secure messaging platform.
   - Accessibility options (e.g., large fonts, intuitive navigation).
3. **Documentation**:
   Submit a report (3-5 pages) detailing:

   - Project requirements.
   - System design (diagrams and wireframes).
   - Implementation steps.
   - Testing results.
   - Screenshots of the application.