

## **Graduation Project Proposal Form**

### **1. Project Information:**

- **Project Title:** Skinmate | AI-Powered Cosmetics Advisor
- **Course/Track:** Google Project Management & ERP
- **Team Members:**
  - Safynaz Mohamed Elmaghraby
  - Mohamed Ahmed Ezzelrgal
  - Yasmin Tarik AbdAllah
  - Salma Said Abdelrahman
  - Samah Ateia Elazab

### **2. Project Overview**

- **Objective:**
  - Skinmate aims to deliver an innovative mobile application that helps users make personalized skin and hair care choices. By leveraging advanced AI-driven skin analysis, Skinmate will recommend suitable skincare and haircare products based on individual needs, offering users a seamless experience and product insights tailored to their unique characteristics.
- **Scope of work:**
  - Conduct extensive requirement gathering and define project objectives in collaboration with all stakeholders.
  - Design user-friendly UI/UX that enhances the user journey.
  - Develop AI algorithms for skin analysis, product recommendations, and customization.
  - Build a cross-platform mobile app compatible with both iOS and Android.
  - Test the app for functionality, accuracy, and user experience to ensure the highest quality.
  - Launch and provide ongoing support, improvements, and updates for six months post-launch.
- **Expected Outcomes:**
  1. Launch of Skinmate app on iOS and Android platforms with user-friendly, intuitive design.
  2. AI-based product recommendations with 90% accuracy in matching user needs.
  3. A structured feedback loop with dermatologists to maintain and improve recommendation quality.
  4. Positive user reviews with a focus on product accuracy, usability, and experience.
  5. Increased brand engagement and trust among targeted demographics.

### 3. Problem Statement

- Klar Cosmetics Company wants to develop its product sales system and make the process of choosing products for the customers more accurate and enjoyable, to help its customers choose the most suitable products for their skin and hair.

### 4. Proposed Solution:

- Skinmate will address these issues by creating an AI-driven app to analyze users' skin and hair profiles, then recommend the best products available based on individual needs. By employing AI, dermatology insights, and robust system architecture, we can provide precise, reliable, and customized recommendations to enhance customer satisfaction and engagement.
- **Technologies Used:**
  - AI/ML Frameworks for developing skin and hair analysis algorithms.
  - Cloud-based Infrastructure for secure data storage and seamless access.
  - Mobile Development Frameworks (Flutter) to create cross-platform applications for iOS and Android.
  - Database Management Systems for structured data storage and product information retrieval.
- **System Architecture:**
  - **Frontend:** Mobile interface using Flutter for easy navigation and intuitive user experience.
  - **Backend:** Secure, cloud-based server architecture hosting the database and product recommendation engine.
  - **AI Engine:** Integrated skin analysis and product recommendation module utilizing AI/ML.
  - **Data Security:** End-to-end encryption and compliance with data privacy regulations.

### 5. Resources Needed:

- **Development Team:** Project Manager, Software Architect, Flutter Developer, Backend Developer, AI/ML Specialist, UI/UX Designer, QA Specialist.
- **Dermatology Consultants:** Experts to validate AI outputs and provide dermatological insights.
- **Software Tools:** Cloud hosting, mobile development platforms, AI frameworks, testing tools.
- **Testing Devices:** Variety of iOS and Android devices for cross-platform testing.
- **Budget Allocation:** Funds for development, testing, launch, and post-launch support.

### Approval

- **Instructor/Advisor:** Eng. Haitham Salem
- **Signature:** .....