

**Mob App Development**

**Section – A**

**Project Proposal**

**Group Members:**

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**Project Title:**

**Mobile Application for Color Blindness Testing**

**Project Overview:**

The purpose is to develop a mobile application aimed at testing color blindness in individuals. Color blindness is a common visual impairment affecting a significant portion of the population. The goal of this application is to provide a user-friendly and accessible platform for individuals to self-assess their color vision, enabling early detection and awareness.

**Project Objectives:**

* Diagnostic Accuracy: Develop a series of scientifically validated color vision tests to accurately assess different types and levels of color blindness.
* User-Friendly Interface: Create an intuitive and easy-to-navigate mobile application interface, ensuring accessibility for users of all ages and technical abilities.
* Personalized Reports: Generate detailed color vision reports for users, offering insights into their specific color blindness type and severity.

**Key Features:**

* User Authentication: Enable users to create accounts and log in, providing a personalized experience and the ability to track their color vision changes over time.
* Diagnostic Testing: Implement a comprehensive color blindness test within the app, allowing users to identify their specific type and severity of color vision deficiency after logging in.
* Progress Tracking: Develop a user profile system for tracking changes in color vision over time, aiding individuals in monitoring their condition and providing valuable information for healthcare professionals.
* Accessibility Enhancements: Ensure the application is accessible to individuals with disabilities, with a focus on compatibility with screen readers. This will enhance the inclusivity of the app for a broader user base.

**Target Audience:**

* General Users: Individuals interested in assessing their color vision or those suspecting color blindness.
* Healthcare Professionals: Optometrists, ophthalmologists, and educators can use the app as a supplementary tool for screening and education.

**Technology Stack:**

* Platform: Cross-platform development for Android.
* Development Frameworks: Android Studio/React Native for efficient and consistent development. The app will be made with Kotlin, a language that's good for making things work smoothly on Android because it's easy to understand and works well with other code.
* Backend: Utilize a secure and scalable backend system to store user data and generate reports.

**Conclusion:**

This project aims to make color blindness testing accessible and informative, fostering early detection and awareness. With an intuitive interface and robust testing methodologies, the mobile application will contribute to improved understanding and management of color vision deficiencies.