# Statement of Work (SOW)

# Mahindra University Mobile Application

## 1. Project Overview

Mahindra University currently lacks a mobile application. This project aims to develop a mobile app that provides essential university-related information and enhances communication between students, parents, and faculty.

## 2. Objectives

* Develop a mobile application for Mahindra University.
* Provide basic university information.
* Enable parents to track their children's geo-location.
* Implement a broadcast mechanism for faculty announcements.

## 3. Scope of Work

### **3.1 Features and Functionalities**

* **University Information Module**: General information about Mahindra University, including departments, courses, events, and contact details.
* **Parent Tracking System**: Secure geo-location tracking for parents to monitor their children's whereabouts on campus.
* **Faculty Broadcast System**: A mechanism for faculty to send announcements and notifications to students.
* **User Authentication**: Secure login for students, parents, and faculty.
* **Push Notifications**: Real-time alerts for announcements and location updates.
* **Intuitive UI/UX**: A user-friendly interface for easy navigation.

### **3.2 Technology Stack**

* **Frontend**: React Native (for cross-platform compatibility)
* **Backend**: Node.js with Express.js
* **Database**: Firebase/ PostgreSQL
* **Location Services**: Google Maps API / Geolocation API
* **Authentication**: Firebase Authentication / OAuth

### **3.3 Development Phases**

1. **Requirement Analysis & Planning** – Define features, roles, and scope.
2. **UI/UX Design** – Create wireframes and user interface designs.
3. **Backend & Database Development** – Set up the server, database, and APIs.
4. **Frontend Development** – Implement mobile app screens and functionalities.
5. **Integration & Testing** – Perform integration testing of modules.
6. **Deployment & Maintenance** – Launch the app and provide ongoing support.

4. Team Structure & Responsibilities  
The development team consists of 8 members with the following roles:

* **Kasoju Aravind** – Project Manager, Fullstack Developer (oversees progress, ensures deadlines are met, manages team coordination, and contributes to both frontend and backend development).
* **P.K.L. Ganesh** – Frontend Developer (develops UI components and user experience).
* **A. Sai Rohan** – Backend Developer (implements APIs, authentication, and database management).
* **Tanush** – UI/UX Designer (designs user interfaces and improves user experience).
* **Sai Snigdha** – QA Tester (conducts testing to ensure app functionality and security).
* **Pavan Tejas Marri** – Backend Developer (assists in backend development and database management).
* **Koushik** – Deployment Engineer (manages app deployment and version control).
* **Rithvik** – QA Tester (assists in testing and bug tracking).

## 5. Deliverables

* A fully functional mobile application for iOS and Android.
* Source code and documentation.
* User manual for app navigation.
* Deployment and maintenance plan.

## 6. Success Criteria

* Successful deployment on App Store and Google Play.
* Efficient user authentication and security mechanisms.
* Seamless performance with minimal bugs.
* Positive feedback from students, parents, and faculty.

## 7. Assumptions & Constraints

* The university will provide required APIs and data access.
* The app must comply with data privacy regulations.
* Development will be within the specified timeline and budget.

## 8. Approval & Sign-Off

This document serves as an agreement between the development team and stakeholders. Approval indicates acceptance of the scope, deliverables, and timeline.