Project Proposal

**2024-25**

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| **Team Details** | | | | |
| **S.No** | **University Roll Number** | **Name** | **Email** | **WhatsApp Number** |
| 1 | 2161244 | Navraj Devali (TL) | devalinavraj@gmail.com | 8859098661 |
| 2 | 2161246 | Neeraj Koshyari | neerajkoshyari1@gmil.com | 8439500690 |
| **Project Details** | | | | |
| **TITLE:** Smart Route Monitoring and Alert System | | | | |
| **Technologies to be used**:  - **Framework :** React Native - **Mapping & Geolocation:** React Native Maps + Google Places Autocomplete - **Alert & SOS:** Custom Native Module for pop-ups and SMS - **Storage:** React Native AsyncStorage | | | | |
| **Brief Description of the Project :**   * Entirely Frontend, Built in React Native * On launch, the user chooses one of the modes:  1. **Automatic**: App auto-places checkpoints and expected times along the route. 2. **Manual:** User taps map to add checkpoints and sets an expected time (in minutes) from the previous checkpoint  * User enters a destination via a google-powered search bar. * App plots the route on the map and adds checkpoints per the selected mode. * Tapping Start Simulation begins a mock “movement” along the route. * At each Checkpoint:  1. If reached on time, simulation continues. 2. If late, a native-module popup (“Are you Safe”) appears with 10s Countdown.   If no response or Pressed “NO” the same native module sends an SOS SMS to contacts saved in Settings(via AsyncStorage), including current GPS location | | | | |
| **Whether compared with any existing system**:  The app can be compared to Google Maps and other navigation apps, but with the added functionality of automated checkpoint monitoring and alert notifications for safety. | | | | |
| **Whether discussed with any Faculty Member (NAME):** Mr. Rahul Singh. | | | | |
| **Whether proposed work is extension of internship work:** NO | | | | |
| **Any previous work with proposed technologies:**  NO | | | | |
| **Whether crude DFD/ERD are prepared**: YES | | | | |

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| **Planning Details (Aug-24 to May-25)** | | |
| **Phase** | **From** | **To** |
| Literature Survey | Aug-24 | Sep-24 |
| Design | Sep-24 | Oct-24 |
| Implementation-1 | Nov-24 | Dec-24 |
| Implementation-2 | Feb-25 | Mar-25 |
| Implementation-3 | Mar-25 | Apr-25 |
| Testing | Apr-25 | May-25 |
| Submission | 30 May 2025 | |

**WORK DISTRIBUTION PLAN**

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| **Project Number**:- 14 | | **Team Leader**:- Navraj Devali | | | |
| **Project Title**:- Smart Route Monitoring and Alert System | | | | | |
| **S.No** | **MODULENAME(S)** | | **FUNCTIONALITIES** | **TECHNOLOGIES USED** | **TEAM MEMBER** |
| 1. | UI & Navigation | | Mode selecton, start screen,  simulation UI | React Native | Navraj Devali |
| 2. | Map & Route Engine | | Destination search, route plotting, checkpoint placement | React Native Maps, Places API | Navraj Devali |
| 3. | Simulation Controller | | Timer logic, checkpoint arrival detection, progress simulation | React Native | Neeraj Koshyari |
| 4. | Alert & SOS Module | | “Are you safe?” popup, 10s timer, and SMS dispatch via native module | Native Module (Java/Obj-c bridge) | Neeraj Koshyari |
| 5. | Settings & Contacts Storage | | UI for saving emergency contacts; persist/retrieve via AsyncStorage | React Native AsysncStorage | Navraj Devali |

The above-mentioned students shall be working under the supervision of the undersigned on the “Smart Route Monitoring and Alert System”

Signature

Supervisor

**Internal Evaluation (By DPRC Committee)**

**Status of the Project Proposal:**  Accepted / Rejected

Any Comments:

Name of the Committee Members: Signature with Date