Kerala State Road Transport Corporation (KSRTC) understands the pivotal role that technology plays in enhancing operational efficiency and customer experience within the transportation sector. With this in mind, KSRTC committed to leveraging innovative solutions that optimize thier services and elevate passenger satisfaction.

Outlined below are the technical specifications and key functionalities that KSRTC is seeking in the proposed mobile application:

- 1. **Advanced Mapping integration**: implementation of cutting- edge mapping technology to enable real-time tracking of KSRTC buses. ensuring accurate and up-to-date location information for passengers.
- 2. **API Integration for Live Feed:** Utilization of KSRTC's existing API infrastructure to seamlessly integrate live bus feed functionality into the application, allowing passengers to monitor bus movements in real-time.
- 3. **Robust Failover Mechanism**: Development of a robust failover mechanism to ensure continuous service availability even in the event of API unavailability or system downtime, thereby minimizing disruptions to passenger services.
- 4. **Inbuilt scheduling Software:** Integration of comprehensive scheduling software within the application framework to streamline operations and minimize dependencies on external systems, enhancing reliability and efficiency.
- 5. **Reduced third-Party API Dependency**: implementation of strategies to minimize reliance on third-party APIs, thereby enhancing data security. reducing operational costs, and ensuring greater control over the application ecosystem.
- 6. **Standalone Functionality**: Development of a standalone application capable of meeting the diverse needs of both KSRTC and its passengers, with seamless integration of core functionalities to deliver a cohesive and user-friendly experience.
- 7. **Real-time Bus Tracking and Planning:** implementation of real-time bus tracking capabilities to empower passengers to locate the next bus arrival at their designated bus stop, as well as plan their journeys by accessing up-to-date bus schedules and routes.
- 8. **Open-Source initiative**: Mandating the sharing of the application's complete source code to foster transparency, encourage community-driven innovation, and facilitate ongoing improvements and customizations.

- 9. **One Time Purchase Model**: Adoption of an outright purchase model for the application, eliminating the need for recurring subscription fees and providing a cost-effective solution for KSRTC
- 10. **API Sharing and integration**: Provision of APIs for seamless integration with other solutions and services as directed by KSRTC, facilitating interoperability and enabling future scalability and expansion,