

Introduction

Ajeevi Commute Web Portal and Mobile Application, as part of the passenger information and service system, offer a seamless and user-friendly experience for commuters. The web portal provides a consistent brand look and feel, allowing users to input their route preferences or select them from lists or maps. It offers real-time information, including predicted bus arrival times and graphical vehicle locations on maps. The mobile application, available on Android and iOS, extends the convenience to commuters on the go, enabling ticket booking, pass issuance, locating nearby bus stations, checking real-time bus arrivals, and providing feedback. These digital platforms enhance the overall commuting experience, ensuring that passengers have access to timely and accurate information while facilitating transactions and interactions with the transit authority.

Features

Real-Time Bus Information: CPIS provides up-to-the-minute bus arrival and departure times, offering commuters accurate predictions for the next two buses on each route, improving their travel experience.

Route Selection: Users can easily input their route preferences, including direction and station/stop ID, or choose from a list or map for added convenience.

Real-time Information: The system provides real-time data, displaying the predicted number of minutes until the arrival of the next bus, keeping commuters informed.

Graphical Vehicle Locations: Users can view graphical representations of vehicle locations on Google Maps or equivalent mapping services, enhancing their understanding of bus positions.

Automatic Updates: Information such as map line diagrams, tables, ETA, ETD, and more are updated automatically without requiring manual page refreshes.

Visitor Analytics: The portal generates detailed visitor analysis, including popular pages and page loading times, offering valuable insights to the transit authority.

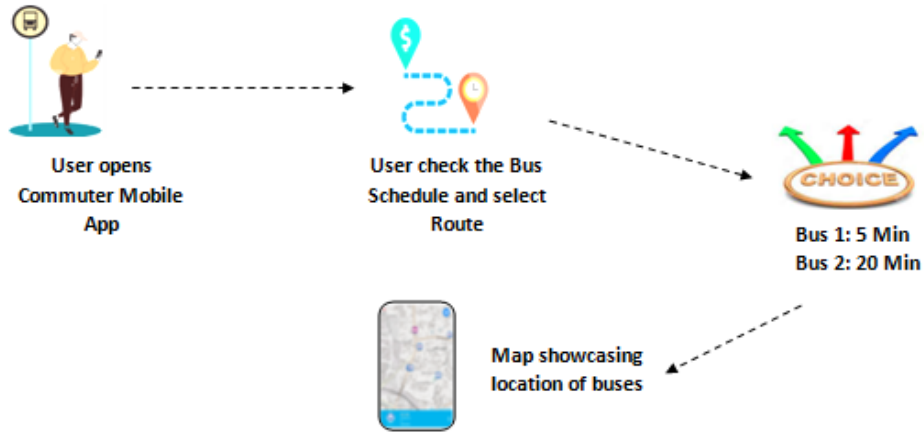
Content Management: The platform includes content management software, allowing the authority to easily update and modify portal content as needed.

Screen Layouts and Approval: Screen layouts, menus, and screen information are provided for review, comment, and approval during implementation, ensuring alignment with requirements.

Mobile Application: The mobile app is available on both Android and iOS platforms, expanding accessibility for commuters.

Vehicle Location Finder: Commuters can track the real-time location of buses, helping them plan their journeys more effectively.

Real-time Bus Arrival: Users can check real-time bus arrival information for specific bus stations, ensuring they are well-informed about bus schedules.



<p>App continuously refreshes bus location on map</p>	<p>Visitor Analytics</p>	<p>Feedback & Concerns by User</p>	<p>Payment Handling</p>
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Technical Specifications:

S. no.	Parameter	Remarks
A	GENERAL	
1	Centralized and Integrated Solution	Ajeevi Commute Web Portal and Mobile Application
2	Technology Used	COTS(Commercial Off the Shelf)Technology
3	Access Features	RBAC Model(Role-based access and control)
4	Architecture	N-tier scalable architecture, modular design, robust software
5	Framework	.NET Core Framework, ASP.Net MVC
6	Database	SQL Server 2016 and above, Mongo DB, Posgre SQL, Unified database for all SWM data
7	Operating System	Windows/Open Source Linux
8	Frontend	JavaScript, JQuery, React JS, Angular, HTML, Bootstrap, Razor Pages
9	IOT Hub Integration	Kafka, Rabbit MQ, Socket Programming, Web APIs
10	Application Availability	High availability and DR replicability
11	Single-Sign On facility	Available
12	Audit Trail	Ability for logging, audit, and tracking of any changes carried out on the database
13	Interoperability Standards	Can be integrated with any other application through web APIs(Push or Pull)
14	Security Features	<ol style="list-style-type: none"> 1. Security design with well-designed identity management system, security of physical and digital assets, data and network security, backup and recovery and disaster recovery system. 2. Support for security features such as W3C specifications, Information access/transfer protocols SOAP,HTTP/HTTPS, etc 3. API Integration allowed post authentication
15	External Communication	Through SMS Gateway and SMTP Integration
16	Web Enabled Solution	Yes

17	Services for GIS Integration	Google Maps, ESRI Map, Any other available open map
18	GIS Features	Geomapping, Geotagging, POI, Geofencing through Geo JSON and drawing tool
19	Deployment Features	SaaS Model, On-Premise Model, BOOT Model
20	Cloud Deployment	Amazon AWS, Microsoft Azure
21	Information Security	ISO 27001 certified System
22	Operations	ISO 9001 Certified
B	GENERAL FEATURES	
		Ability to enter the route, direction, and station/stop ID, or select these from a sequence of drill down lists or from a map.
		Displays the predicted number of minutes until arrival of the next bus.
		Allows for graphical presentation of vehicle locations on Google or equivalent based maps.
		Provides basic information like ETA, ETD, Line diagram, etc. on the website in real-time
		provide details of standard portal visitor analysis, popular pages, page loading times, complete analytics of commuter portal
		Ability to view, respond and generate the feedback, concerns sent by commuters.
		Functionality to generate feedback from the commuters with set parameters.
		Ability to enter the route, direction, and station/stop ID, or select these from a sequence of drill down lists or from a map.
		Facilitates ticket and pass purchase for different existing operators through payment gateway.
		provide relevant MIS reports for monitoring transactions