Feasibility Study

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Title: Feasibility Study (Bus Management System)

Project Introduction:

Overview: Bus management system is an online web-based application with which one institution has many vehicles and passengers to manage for an extended period of time. This application will make things easy for both consumers and clients at the same time managing their desired vehicles and organizing a large fleet with close to zero hassle.

Objective:

- Schedule management for buses
- Assigning roles to drivers
- Setting routes to dedicated buses
- Consumer profile creation
- Database for vehicles
- Database for Users
- Database for moderators
- Database for Drivers
- Data protection for every Sector
- UI for all user base
- Specific destination selection
- Dynamically assigned updates
- Notification to consumers
- Consumer’s profile management
- Consumer’s front page management
- Better UX system

Need for this project: Bus management system is an easy-to-use web-based App. This can dramatically change the scenario for bus management if the venture has a large fleet they need to manage. From the user end, one can easily find the designated vehicle they need to jump into without needing to ask others. Everything will be automated ensuring a smooth ride. Not only that, with the Data, one venture can even out and calculate the need for the approximate number of vehicles for each route, cutting costs on fuel, manpower, etc for the future.

Feasibility Study:

Technical Feasibility: Bus management system will be a complete web-based application. The main Technologies and tools that are associated with them are given below:

- HTML
- CSS
- JavaScript
- Bootstrap
- PHP
- MySQL
- Figma (For wireframing)
- Adobe Illustrator (For elements)

The technical skills needed for each of the Technologies are doable and each is publicly available. time constraints for product development and the simplicity of The use of these technologies are coordinated. All of the concepts may be transformed into functional solutions by our technical team. These demonstrate the project's technological feasibility.

Economical Feasibility: The main cost of a web-based application will be things like Hosting, Managers, development, and maintenance. Other than that the app will not cost the client that much. Our application will require less manpower to handle and considering the fact, that the venture can optimize its workflow by reducing vehicles and saving on fuel and manpower, that alone can make this service a good decision for the venture to make. Also, the smooth transportation

experience will also leave a positive impression on the venture from all the consumers.

Legal Feasibility: Currently there are no similar services to ours. Some apps may come close to some ride-sharing apps like Uber, Pathao, etc. There are some GPS-based services that have similar fleet management system but they are foreign-based services who has no official copyright in our country right now. Potential clients will only be charged for maintenance costs. There won't be a copyright issue because the software libraries utilized in this system are free open-source libraries. The proposed project is compliant with all applicable laws. All data protection laws and social media regulations are observed here.

Operational Feasibility: We will use the agile software development approach for this project. Because facilitating rapid project completion is the Agile model's primary goal. Agility is necessary for this assignment to be completed. By adapting the process to the project and eliminating processes that might not be necessary for that project, agility is accomplished. Additionally, time and effort wastes of space are prevented. The steps involved in the operation are:

- Requirement gathering
- Requirement Analysis
- Design
- Coding
- Unit Testing
- Acceptance testing

Scheduling Feasibility: From our perspective, our project can be finished in 80 to 90 days. The project will take a few more days to finish if there are any adjustments. We intend to deliver a system that is on schedule and entirely bug-free.