REQUIREMENT GATHERING

**WATERMETRO MANAGEMENT SYSTEM: *AQUA MOTUS***

**Date**: 17/06/2024

1. **Project Overview**:

The AQUA MOTUS project is a dynamic web application designed for managing ticket and facility bookings within a water metro system. It streamlines the process of booking tickets for boat transportation services, offering users easy access to boat schedules, routes, and comprehensive information about available facilities. The system includes administrative functionalities such as registering boats, station masters, updating services, and overseeing the entire system's operation.

1. **System Scope**:

The system is proposed for comprehensive management of water metro services, focusing on ticket booking, facility management, and operational oversight. It aims to enhance user experience through streamlined processes and provide administrators with tools to efficiently manage services and resources.

1. **Target Audience**:

The viewers/public involved in the system include:

* Users: Individuals looking to book tickets for boat transportation services.
* Station Masters: Responsible for managing boat services, scheduling, and maintenance.
* Administrators: Oversee the entire system, including registering boats, station masters, and updating services.

1. **Modules**:

The system includes the following modules:

* Admin Module: Allows administrators to log in, register new station masters, add events, register boat details, and add new stations.
* Station Master Module: Enables station masters to log in, manage services, assign boats to routes, view booked tickets, and generate reports.
* User Module: Provides users with the ability to log in, browse boat schedules, select routes, book tickets, view booked tickets, and cancel ticket requests.

1. **User Roles**:

The primary users of the system are:

* Boat Transportation Service Users: Individuals who require boat transportation services and wish to book tickets online.
* Station Masters: Employees responsible for managing the day-to-day operations of the boat transportation services.
* Administrators: Personnel tasked with overseeing the entire system, including registration of boats and station masters, and updating service information.

1. **System Ownership**:

The ownership of the system would typically fall under the organization or entity operating the water metro services. This could be a government agency, a private company, or a consortium responsible for managing the water transportation infrastructure and services.

1. **Industry/Domain**:

The system is related to the water transportation industry, specifically targeting firms or organizations that operate boat transportation services within a metro area. It could also be applicable to tourism companies offering boat tours or any entity involved in marine transportation services.

1. **Data Collection Contacts**:

Kochi Water metro:

* Dani Danish

Operation team member

Ph: 9656955491

1. **Questionnaire for Data Collection**:
2. What is the current status of the Kochi Water Metro project?

The Kochi Water Metro project is currently operational, serving commuters with boat transportation services across Kochi city. It aims to reduce traffic congestion and provide a sustainable mode of transport.

1. How does the Kochi Water Metro contribute to reducing pollution levels in Kochi city?

By providing a clean, efficient mode of transportation that reduces reliance on cars, the Kochi Water Metro contributes significantly to lowering air pollution levels in Kochi city, promoting a healthier living environment for residents.

1. What technologies are currently available to support the development of this system?

The Kochi Water Metro system leverages advanced technologies to support its development and operation, ensuring it is a state-of-the-art and environment-friendly water transport system.

Electric Hybrid Boats: The system uses low wash, twin-screw, aluminum-hulled, hybrid electric-powered boats. These boats are developed locally by technical experts/engineers in Kochi, combining the efficiency of electric power with the durability of aluminum hulls.

1. What are the key features of the Kochi Water Metro system?

Key features include modern, eco-friendly boats, digital ticketing systems, and state-of-the-art terminals equipped with amenities for passengers.

1. How does the Kochi Water Metro integrate with other modes of public transportation?

It integrates seamlessly with Kochi Metro Rail Limited (KMRL) services, allowing passengers to transfer between rail and water transport easily.

1. What measures are in place to ensure passenger safety on the Kochi Water Metro?

Safety measures include regular boat inspections, trained crew members, emergency evacuation procedures, and adherence to international maritime standards.

1. How does the Kochi Water Metro contribute to reducing traffic congestion in Kochi city?

By providing an alternative mode of transport, the Kochi Water Metro helps divert traffic from roads, thereby reducing congestion and improving overall mobility in the city.

1. What plans are there for future expansions or improvements to the Kochi Water Metro?

Future plans include expanding the network to cover more areas, introducing new boat models, and upgrading terminal facilities to enhance passenger experience.

1. How has the public responded to the introduction of the Kochi Water Metro?

Public response has been generally positive, with increasing numbers of commuters opting for water transport over traditional road-based options. Feedback suggests improvements in convenience and reliability.

1. How does the Kochi Water Metro compare to other forms of public transportation in terms of cost-effectiveness?

Compared to traditional road-based public transportation, the Kochi Water Metro offers a more cost-effective solution by reducing traffic congestion and providing a faster, cleaner mode of transport, thus lowering overall operational costs and improving efficiency.

1. What are the key performance indicators (KPIs) used to evaluate the success of the Kochi Water Metro?

Key performance indicators for the Kochi Water Metro include ridership numbers, passenger satisfaction rates, reduction in travel times, and environmental impact metrics such as carbon emissions savings.

1. What measures are in place to ensure the safety of passengers during adverse weather conditions?

During adverse weather conditions, the Kochi Water Metro implements a series of safety measures, including adjusting schedules, rerouting boats where necessary, and providing passengers with real-time updates via mobile apps and announcements onboard.