Improving Public Transport for People with Disabilities in Kenya.

Public transport plays a crucial role in the urban portability of Kenyan cities such as Nairobi and Mombasa. Therefore, most Kenyans rely on this form of transportation to move from one place to another. Transportation systems pose great difficulties in accessing public transport for most disabled persons. Many public transport services are not adapted to the needs of people with disabilities. **Main reasons being**:

• **In-accessible Vehicles**: this would include features such as lack of ramps, designated seating etc.

• **Lack of Information**: persons with disability don't have access to real time information routes, schedules etc

• **Limited Infrastructure**: In stop stations there is a shortage in necessary facilities ie signage in Braille that would accommodate people with disabilities

The project, therefore, develops and deploys a relational database system that would drive all efficiencies in respect of existing options in the improvement of the general experience of passengers with disabilities.

This database system tries to solve these challenges by providing one base where operation and optimization of public transport meant for people with disabilities can be done.

Alignment to Sustainable Development Goal (SDGS):

The project will be implemented with the **SDG 10: Reduced Inequalities**, which acts upon nurturing the social, economic, and political inclusion of all people, including people with

disabilities. By improving the efficiency of public transport, we are promoting equal access to transportation, hence nurturing social inclusion. It nurtures independence among persons with disabilities, enabling full participation in society.

Relevance in the Kenyan Context

The growth of people with disabilities in Kenya is highly significant, but this group faces systematic barriers in accessing public services, including transportation. The government of Kenya has made commitments in this area; these commitments, however, need proper practical solution implementation. This project would provide basic necessary support by implementing an accessible database system on public transport that should be able to facilitate improvement in access and meet the needs of this marginalized group for increased mobility and independence.

Scope and Objective of the Project:

The scope of the project will mainly cover designing and implementing a relational database system that enhances the use of public transport concerning people with disabilities in Kenya. It will enable the management and service delivery and enhance the overall experience for these passengers more efficiently.

General Objectives:

1. Information accessibility about accessible transport options and vehicle features
2. Real-time updates on routes and features to help passengers plan their journeys
3. User-friendly interface to allow passengers with disabilities to easily access information
4. Data Management of data related to accessible vehicles, routes and stops.
5. Reporting and Analytics to help transport authorities identify gaps in accessibility and improve services.

Main Functionalities and Fields:

1. Registration of Buses for passengers with disabilities and its feedback mechanism on accessibility features

2. Access to All Details about Accessible Buses and their accessibility features, like ramps; manage information about accessible stations

3. Schedule Creation: Emphasize accessible transport options and make the schedules easy to access and update in real-time

4. Integration with GPS to provide the locations of accessible buses in real time and display the status of arrival at the stations

Stakeholders:

1. **Disabled Passengers**: The database will provide information about accessible transport services therefore enhancing their ability to navigate public transport independently

2. **Transport Authorities**: The database will enable transport authorities to monitor and improve the accessibility of public transport.

3. **Operators of Buses**: The database will help operators understand the requirements for accessible transport, enabling them to make required adjustment

4. **Local Government:** The database will provide essential data to inform policy making and investments in accessible transport solutions.

5. **Groups Advocating for the Welfare of the Disabled**: The system will generate reports that can be used to advocate for better services and policies for people with disabilities

6. **Technology developers:** The project will provide developers with a defined scope, facilitating the creation of user-centric system focused on accessibility.

Conclusion

Thus, in proposing a solution that caters to the needs of passengers with disabilities and availing technology in the quest to improve access to public transport, this project will go an extra mile in making a critical difference to one of the most marginalized groups in Kenya in their transportation experiences. Such a relational database system will, in turn, support various stakeholders in the realization of more accessible and inclusive public transports.