Economic Center Wastage Reduce Platform

Group mem:

S.H.A.M.J.N.Sooriyahetti - 21IT0530

P.G.S.V.Puswalkatiya - 21IT0513

D.M.R.M.Dissanayaka - 21IT0466

H.B.S.Wijerathna - 21IT0539

P.D.S.N.Pathirage - 21IT0508

Introduction:

- In recent years, there has been a lot of vegetable waste in economic centers.
- This has led to the development of apps that facilitate the reduction of vegetable waste.
- Developing an application that connects the economic center, the wholesaler, the job seeker, and the manufacturing establishments can bring significant benefits to the economic center.

Aim:

- The surplus of vegetables left in the economic center is reduced.

Objectives:

- To provide access to wholesalers between two economic hubs and the ability to transact there.

- To display the surplus left in one economic center on the board of another economic center and enable the wholesalers who wish to order it to order it.

- Providing employment to unemployed truck owners.

Problem Definition and solutions:

Problem	Solution
Lack of transparency in vegetable stock availability and pricing among economic centers.	Implement a centralized dashboard or database where economic centers can upload real-time data on vegetable stock levels and pricing. Ensure that this information is accessible to all stakeholders, promoting transparency and facilitating informed decision-making.
Difficulty in coordinating transportation logistics and scheduling delivery routes..	Develop an automated logistics management system that optimizes delivery routes based on factors such as vehicle capacity, delivery deadlines, and traffic conditions. Integrate GPS tracking to monitor the location and status of vehicles in realtime, allowing for proactive management of transportation operations.
Inefficient communication and coordination between stakeholders.	Implement a messaging and communication feature within the mobile application or dashboard, allowing stakeholders to communicate directly with each other. Enable notifications and alerts to keep stakeholders informed about important updates, such as new orders, delivery status, or changes in vegetable availability.
Concerns about food safety and quality assurance during transportation and storage.	Establish quality control standards and protocols for handling, packaging, and transporting vegetables to ensure freshness and safety. Implement regular inspections and audits along the supply chain to monitor compliance with these standards. Provide traceability features within the platform, allowing stakeholders to track the origin and handling of vegetables from farm to market.

Technology:

- Flutter for mobile application
- React for web application
- Python programming language use for coding Dashboard.
- Database for MongoDB Boundaries:

Geographic Scope:

- Define the specific geographic area or regions where the project will be implemented. This could include one or multiple economic centers within a city, region, or country.
- Consider factors such as the availability of resources, infrastructure, and stakeholders within the chosen geographic scope.

Stakeholder Involvement:

- Identify the key stakeholders who will be involved in the project, such as economic centers, wholesalers, farmers, transportation providers, and consumers.
- Facilities: - Include swimming pools, cricket grounds, and basketball courts.
- Clearly define the roles and responsibilities of each stakeholder in the project, including their level of participation and contribution.

Vegetable Types and Varieties:

- Specify the types and varieties of vegetables that will be included in the project. This could include common vegetables grown and traded in the region, such as tomatoes, carrots, onions, and leafy greens.
- Consider factors such as seasonal variations in vegetable availability and demand when defining the scope of vegetable types.

Technological Infrastructure:

- Determine the technology platforms and tools that will be used to develop and implement the project, such as mobile applications, web dashboards, GPS tracking systems, and data analytics tools.
- Set boundaries around the technological capabilities and resources available for the project, taking into account factors such as budget constraints and technical expertise.

Outcome Metrics and Goals:

- Establish clear metrics and goals for measuring the success of the project, such as reduction in vegetable wastage, increase in efficiency of distribution, or improvement in farmer livelihoods.
- Define the boundaries of what constitutes a successful outcome for the project, considering both quantitative metrics and qualitative indicators of impact.