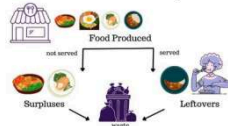## 1. Project planning Phase

During this phase, the objectives, scope, and goals of the project are clearly defined. The main aim is to create a sustainable system that collects surplus food from restaurants, events, and households, and distributes it efficiently to underprivileged communities. Detailed timelines, team roles, and resource requirements are identified. A feasibility study is conducted to assess the practicality and potential impact of the project. Risk factors, such as food safety and transportation delays, are also analyzed. The planning phase focuses on building partnerships with NGOs, volunteers, and food donors to ensure smooth operations. It concludes with a clear roadmap that outlines the workflow, budget, and measurable outcomes needed for successful project execution and long-term sustainability.

1. Problem Study – Analyse Food Waste Patterns

In the first week, the team studies local food waste patterns by surveying restaurants, events, and households. Data is collected to understand the sources and quantity of leftover food. This helps identify key contributors, common wastage points, and potential areas for food recovery and redistribution to the needy.

2. Requirement Gathering – Identify Stakeholders and Data Needs

During week two, analysts gather system requirements by identifying key stakeholders such as donors, NGOs, and volunteers. They define data needs for registration, pickup scheduling, and tracking. The goal is to ensure smooth communication, secure data management, and effective coordination for transparent and efficient food distribution.

3. Design & Development – App / Database Prototype

In week three, developers design and build the application prototype and database structure. The app includes modules for donor registration, food listings, and pickup management. The database securely stores user and transaction data. This stage focuses on creating a functional, user-friendly platform to support real-time food distribution operations.