**📝 Project Document: Local Food Wastage Management System**

**📌 1. Project Title**

**Local Food Wastage Management System**

**🎯 2. Objective**

The objective of this project is to develop a web-based platform that connects food providers (e.g., restaurants, caterers) with food receivers (e.g., NGOs, shelters) to reduce food waste and ensure surplus food is efficiently distributed to those in need.

**🧰 3. Tools & Technologies Used**

* **Frontend/UI**: Streamlit
* **Backend/Database**: SQLite3
* **Language**: Python
* **Libraries**: Pandas, sqlite3, Streamlit, Seabon & Matplot

**📂 4. Modules & Features**

**1. Provider Module**

* Register food providers
* Add/edit/delete food listings
* View claimed and unclaimed listings

**2. Receiver Module**

* Register food receivers
* View available food
* Claim food items
* View history of received food

**3. Admin Dashboard**

* View statistics (total food listed, claimed, users)
* Filter food listings
* Analyze food wastage patterns

**🧱 5. Database Structure (SQLite)**

**Tables:**

* **providers**: (id, name, contact, location)
* **receivers**: (id, name, contact, location)
* **food\_listings**: (id, provider\_id, food\_item, quantity, expiry\_date, status)
* **claims**: (id, food\_id, receiver\_id, claim\_date)

**🔄 6. Workflow Overview**

1. Providers list surplus food.
2. Receivers view and claim available food.
3. Food status updates in real-time.
4. Admin can monitor platform activity.

**📊 7. Key Functionalities**

* CRUD operations for all users.
* Real-time interaction using Streamlit.
* SQL queries for backend operations and analytics.
* Interactive dashboards (filters, statistics).

**✅ 8. Outcomes**

* Minimized food waste
* Simple and efficient food donation process
* Real-world applicable web app with user-friendly UI

**📸 9. Screenshots *(Add screenshots of the UI here)***

You can insert visuals of your Streamlit app such as:

* Homepage
* Provider form
* Receiver view
* Admin dashboard

**🔚 10. Conclusion**

This project addresses a critical social and environmental issue by creating a digital bridge between those with excess food and those who need it. It serves as a prototype that can be scaled or customized for real-world implementation.