**Title of the Project  : ZeroBite – A Real-Time Food Donation and Waste**

**Management System**

**Name of the Students :** Alin Jebitha B, Amrin Joshiga A

**Register Numbers :** 211423104032, 211423104036

**Name of the Guide  :** Mrs. Cinthuja

**ABSTRACT**

Food wastage is one of the major challenges faced across the world, while millions of people still suffer from hunger and malnutrition. To address this, ZeroBite is a real-time food donation and waste management platform designed to connect restaurants, event organizers, and donors with NGOs and needy individuals. The system enables users to post surplus food details with live location and expiry information, allowing NGOs to view available food in their vicinity through an interactive map interface. Built using Django for the backend, React for the frontend, and MySQL for data management, the platform ensures secure data handling, real-time updates, and efficient food redistribution. The main objective of ZeroBite is to minimize food waste and promote social responsibility through technology-driven sustainability, making it a bridge between food surplus and scarcity in an intelligent and impactful way. Furthermore, the system encourages collaboration between communities and organizations to ensure timely delivery of edible food, reducing both environmental and economic losses caused by wastage. Through features such as role-based authentication, automated food expiry alerts, and donor-NGO communication, the platform enhances transparency and accountability. The integration of real-time tracking also helps NGOs plan efficient pickup routes, saving time and resources. In the future, ZeroBite can be extended to include predictive analytics for forecasting food availability and demand, and can also be adapted into a mobile application to increase accessibility. This initiative not only contributes to the global effort of reducing hunger but also supports the United Nations’ Sustainable Development Goal of achieving zero hunger by promoting responsible consumption. By merging innovation with compassion, ZeroBite demonstrates how technology can be used effectively to create a sustainable ecosystem that values food as a vital resource rather than waste.