Project Title

AgroBoli

Project Theme

Agriculture and tourism

Description

AgroBoli is a web-application based on the theme of Agriculture and Tourism. Its main purpose is to serve as a platform for online bidding of products directly from a farm. A farmer can put his products such as fruits and vegetables for bidding and interested people can bid for the products. The highest bidder shall be able to purchase the products from the farmer. This way, farmers will get easy access to a large market than usual. Thus, this project is another step towards digital Nepal.

Problem Statement

Farmers in Nepal usually do not get proper market, especially in the rural areas and as a result lots of organic products get wasted every season as well. Farmers are also one of the least income generating occupations with their hard work taken in account. This project attempts to highlight and solve this problem in a digital manner.

Objectives

The objectives of the project are listed below:

- Create an easy to use and visually appealing system.
- Take a step towards digitalisation in Nepal.
- Increase the digital literacy among people, especially farmers.
- Develop a digital platform for open bidding of organic products.

Features

The project contains the following features:

- Easy to use and visually appealing UI/UX of the system.
- Responsive design for devices of all screen sizes.
- Secure system with Firebase as the backend.
- Authentication and Authorization system with two user roles *buyer* and *seller*.
- Opening products for bidding by *sellers*.
- Buying products through bidding by *buyers*.
- Managing and editing user profiles.
- Email verification to avoid scams to some extent.

Tools and Techniques Used

- **Hardware**: Windows 11 Laptop
- **Code Editor:** Visual Studio Code
- **Version Control:** Git and GitHub
- **Languages and Frameworks:** React, Vite, TypeScript, HTML, CSS
- **Backend:** Firebase (including Cloud Firestore, Cloud Storage, Firebase Authentication)
- **Package Manager:** Node Package Manager (NPM)
- **UI Libraries:** MUI (Material-UI), Tailwind CSS, Material Icons, react-google-button
- **Utility Libraries:** SweetAlert2, MomentJS, browser-image-compression, uuid
- **Routing:** React Router DOM
- **Development Tools:** ESLint, PostCSS, Autoprefixer, Prettier
- **AI Assistance:** ChatGPT (for coding assistance, documentation, etc.)