Capstone Project Board:

1. Epics

- ➔ **Epic 1:** Backend Development
- ➔ **Epic 2:** Frontend Development
- ➔ **Epic 3:** Advanced Features
- ➔ **Epic 4:** Microservices Architecture
- ➔ **Epic 5:** Testing Deployment and Documentation

2. Features

☐ **Epic 1: Backend Development**

- **Feature 1:** Spring Boot Setup
- **Feature 2:** Database Management
- **Feature 3:** RESTful API Development
- **Feature 4:** User Authentication
- **Feature 5:** Payment Integration

☐ **Epic 2: Frontend Development**

- **Feature 1:** Angular Project Setup
- **Feature 2:** Product Management Components
- **Feature 3:** API Integration

☐ **Epic 3: Advanced Features**

- **Feature 1:** Real-time Availability
- **Feature 2:** User Reviews and Ratings
- **Feature 3:** User Dashboard
- **Feature 4:** UI Enhancements

☐ **Epic 4: Microservices Architecture**

- **Feature 1:** Microservices Design
- **Feature 2:** API Gateway Setup
- **Feature 3:** Docker Containerization

- **Feature 4:** **Service Communication**
- **Feature 5:** **Monitoring and Logging**

☐ **Epic 5: Testing and Deployment**

- **Feature 1:** **Application Testing**
- **Feature 2:** **Cloud Deployment**
- **Feature 3:** **Application Optimization**
- **Feature 4:** **Documentation Creation**

3. User Stories

Epic 1: Backend Development

- **User Story 1:** As a developer, I want to set up a Spring Boot project so that I can create a robust backend for the Organic Farms application.
- **User Story 2:** As a developer, I want to configure MySQL for data management, so I can store and retrieve information about farming partners and customers.

Epic 2: Frontend Development

- **User Story 1:** As a customer, I want to see a list of available fruits, vegetables, and pulses, so I can choose what to order.
- **User Story 2:** As an admin, I want to add or edit products easily, so I can manage the inventory effectively.

Epic 3: Advanced Features

- **User Story 1:** As a customer, I want to check the availability of products in real-time, so I can make informed decisions while ordering.
- **User Story 2:** As a user, I want to leave reviews for products, so I can share my experience with others.

Epic 4: Microservices Architecture

- **User Story 1:** As a developer, I want to design a microservices architecture to ensure scalability and maintainability of the application.
- **User Story 2:** As a developer, I want to set up an API Gateway to route requests to the appropriate services.

Epic 5: Testing and Deployment

- **User Story 1:** As a QA engineer, I want to test the application thoroughly, so I can ensure its reliability and performance.
- **User Story 2:** As a developer, I want to deploy the application to Azure Cloud, so users can access it online.

4. Tasks

For Feature 1: Spring Boot Setup

- **Task 1:** Create a new Spring Boot project.
- **Task 2:** Add dependencies for Spring Data JPA and MySQL.
- **Task 3:** Configure application properties for the database.

For Feature 2: Angular Project Setup

- **Task 1:** Initialize a new Angular project using the Angular CLI.
- **Task 2:** Set up the project structure with necessary modules and components.

For Feature 1: Application Testing

- **Task 1:** Write unit tests for backend RESTful APIs.
- **Task 2:** Write integration tests for frontend components.