Individual Contribution: Mallipam Satya Praneeth

1. Individual Contribution: For the Vindhu Bhojanam project, Satya Praneeth was in charge of database and backend development. For pages like login, signup, cart, and checkout, he developed routes and Flask server logic. He put in place full CRUD operations for items, users, and cart data, as well as user session handling and menu rendering from the SQLite database. He developed features like order placement, cart quantity management, dynamic cart updates, and data persistence in the orders table. Additionally, he made sure that the database schema supported image paths and nutrition data and helped link the frontend templates with the backend logic.

2. Skills Acquired and Used: To oversee server operations, he used his knowledge of Flask development, SQLite queries, and Python programming. He also enhanced relational database operations, session storage mechanisms, and Flask form handling throughout the project. He improved his error-handling skills with Jinja2 templates and discovered how to dynamically pass backend data into HTML views.

3. Difficulties: Using sessions to ensure consistent and dependable cart behavior was the biggest difficulty, particularly during login/logout transitions. Integrating optional nutritional fields and image paths into menu item storage and making sure they rendered correctly presented another difficulty. He fixed these by validating request data for every POST route and redesigning the form data logic.

4. Reflection: The system's ability to scale with dynamic menu categories, session management, and cart functionality all satisfy Satya. In his next work, he would think about modularizing the application using Flask Blueprints for cleaner routing and employing hashed passwords for increased security.

5. Teamwork Assessment: According to Satya, the collaboration with Tejaswini worked well. His backend development was enhanced by her frontend work, and they kept in close contact to promptly address problems. Her help in debugging template displays and testing backend features was invaluable. He attributes a large portion of the seamless user experience to their well-organized collaboration.