**INDIVIDUAL CONTRIBUTION REPORT:**

**PlantIT**

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**Abstract:** Our project, PlantIT, aims to establish an online platform for buying and selling plants to meet the growing demand for accessible greenery. Additionally, it offers AI-powered plant disease detection and remedies, personalized plant recommendations, and a blogging community for like-minded plant enthusiasts to share experiences. Through intuitive design and robust functionality, PlantIT seeks to provide a seamless user experience, bridging market gaps and promoting sustainable living within a vibrant plant-loving community. This report outlines PlantIT's development process, emphasizing its contributions to sustainable living and community building.

**Individual contribution and findings:** Throughout the project, I played a pivotal role in developing both the backend systems using Node.js and the frontend React Native application. This journey allowed me to delve deeply into the intricacies of API utilization and understand the seamless interaction between frontend and backend through API calls. Another part of my integrating the Google Gemini API into our application. This involved not only understanding its functionalities but also its pricing structures and limitations, ensuring optimal usage within our project's context. Additionally, I gained proficiency in handling image uploads using Multer and effectively managing API responses to enhance user experience. In the realm of E-commerce, I honed my skills in designing database schemas, particularly in Firebase real-time database. I became adept at managing orders with unique order IDs and users with unique user IDs, fostering smooth transaction processes. Furthermore, I explored the integration of UPI payment systems into our application, facilitating secure and convenient checkouts for our customers. An invaluable learning experience was implementing Google OAuth login, enhancing user management within our application. This streamlined the login process and bolstered security measures, contributing to an overall seamless user experience. Throughout these endeavours, I not only contributed to the project's development but also expanded my skill set significantly. Each challenge presented an opportunity for growth, and I emerged with a deeper understanding of backend development, frontend design, API integration, and database management.

**Individual contribution to project report preparation:** In the project report I took the lead in defining the problem statement, and writing the planning of the project (Chapter- 3), I prepared the UML Sequence diagram which provided insights into the project's architecture. Moreover, I played a role in documenting the implementation phase (Chapter- 4), covering methodologies, testing procedures, and providing details about the implementation using appropriate screenshots. Furthermore, I also contributed in framing the standards adopted (Chapter- 5) in design, coding, and testing aspects.

**Individual contribution for project presentation and demonstration:** In presenting the project, my primary role was in framing and delivering the presentation, where I showcased the functionality of the AI-based systems we developed. One key demonstration involved presenting the AI-based plant disease prediction feature. By capturing a photo of a diseased leaf, the system could diagnose the issue and provide relevant remedies to assist users. Additionally, I showcased the AI-based plant preference prediction feature, where users could input their preferences, and the system would suggest suitable plant options accordingly.

Full Signature of Supervisor: Full signature of the student:

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