## **Project Development Phase**

Date	04 NOV 2023
Team ID	NM2023TMID04589
Project Name	Build a website using Canva

S.No	Parameters	Description
1.		In the development phase, it's crucial to implement a comprehensive set of functional features to meet the project's requirements and provide a satisfying user experience. The solution incorporates a wide range of features, including but not limited to user registration and authentication, product catalog, shopping cart functionality, order placement, payment processing, user reviews and ratings, admin dashboard for order management, delivery tracking, recommendation engine, localization and geolocation, gift options, inventory management, social sharing, wishlist, and analytics and reporting.
2.	Code layout, Reusability and Reusability	During the development phase, great emphasis is placed on code quality and maintainability. We adhere to best practices in code layout, ensuring that the codebase is well-structured, organized, and easy to read. We follow coding standards and naming conventions to enhance code clarity. Additionally, we prioritize reusability by creating modular components and functions.
3.	Utilization of Algorithms and Dynamic programming	To optimize the application's performance and efficiency, the development phase incorporates the utilization of algorithms and, where applicable, dynamic programming techniques. Dynamic programming is utilized to solve complex problems efficiently by breaking them down into smaller subproblems, which helps reduce computational overhead and improve overall performance.
4.	Debugging and Traceability	Debugging is an essential part of the development phase to identify and rectify any issues in the code. We employ a systematic approach to debugging, including the use of debugging tools and techniques, code inspections, and regular code reviews. Furthermore, we ensure traceability in the codebase, where each component and feature is properly documented and linked to relevant issues or tasks in the project management system.
5.	Exception Handling	Exception handling is a fundamental aspect of the development phase. We implement robust error-handling mechanisms throughout the application to gracefully manage unexpected situations and prevent system failures. This includes handling exceptions related to user input validation, external API interactions, database operations, and other critical components. Proper exception handling not only enhances the application's reliability but also provides valuable insights into system behavior and error diagnosis.