

Qn : Develop a case study analyzing the implementation of SDLC phases in a real-world engineering project. Evaluate how Requirement Gathering, Design, Implementation, Testing, Deployment, and Maintenance contribute to project outcomes

Case Study: Developing a Mobile Food Ordering App

Design and launch mobile app for customers to browse menus, place orders, and pay for meals, improving convenience and streamlining the ordering process.

SDLC Phases:

1.Requirements

- User research identified key needs: easy navigation, clear menu display, secure payment options, and order tracking.
- Restaurant staff input highlighted the need for order integration with existing kitchen systems and real-time order updates.
- Functionality requirements included menu management, secure payment gateway integration, order tracking system, and push notifications.

2.Design

- User Interface (UI) and User Experience (UX) design focused on intuitive navigation, clear menu presentation, and a smooth ordering process.
- The app architecture was designed for scalability to handle increasing user base and order volume.
- Back-end systems were designed to integrate with existing restaurant infrastructure and payment gateways.

3. Implementation

- Developers built the app for both iOS and Android platforms with a focus on UI/UX design and secure payment processing.
- Back-end systems were developed for order management, communication with restaurant systems, and user account management.

4. Testing

- A Unit testing verified individual app functionalities on both iOS and Android platforms.
- Usability testing evaluated user experience, identifying any navigation or ordering issues.
- Security testing ensured secure payment processing and user data protection.

5. Deployment

- The app was submitted to the Apple App Store and Google Play Store for review and publishing.
- Marketing campaigns were launched to generate user awareness and app downloads.

6. Maintenance

- The app is continuously monitored for performance and user feedback.
- Bug fixes and updates are released to address any issues and improve functionality.
- New features might be added based on user feedback and evolving trends in mobile food ordering.