SDLC/STLC Analysis: Online Food Delivery App

1. Functional vs Non-functional Requirements

Functional Requirements	Non-Functional Requirements
Users can register/login using email/mobile number.	The app should load within 3 seconds.
Users can search restaurants by name, cuisine, or location.	The system should handle 1000+ concurrent users.
Users can place orders and make online payments.	The app must be available 99.9% of the time.
Restaurant owners can add/edit menu items.	All personal data must be securely stored using encryption.
Users can track their food delivery in real-time.	The mobile app should support both Android and iOS platforms.
Admin can manage users, restaurants, orders, and disputes.	Pages must follow responsive design principles for all screen sizes.

2. STLC Phases Involved in Testing the Product

Phase	Activities Involved
Requirement Analysis	Analyze functional and non-functional requirements to identify testable features.
Test Planning	Define scope, objectives, resources, schedule, tools, and risk management.
Test Case Design	Write test scenarios, positive and negative test cases for all app features.
Environment Setup	Set up test servers, install the app on Android/iOS devices, and configure test data.
Test Execution	Execute test cases and log defects. Re-test and perform regression as fixes are applied.
Test Closure	Prepare final test summary report, lessons learned, and defect analysis.

3. Test Strategy Outline (In Simple Words)

- Hybrid strategy: manual + automated testing
- Automate critical flows (login, payment, etc.) using Selenium/Appium
- Use manual testing for UI, exploratory, and ad-hoc scenarios
- Risk-based testing focus on payment/order modules
- Test across multiple devices/browsers for compatibility
- Use JIRA for defect tracking, TestNG for automation framework

4. Sample Test Plan

Title: Test Plan for Online Food Delivery Application

1. Objective

To ensure the Online Food Delivery App functions correctly, reliably, and securely across all devices and platforms.

2. Scope

- In Scope: User registration, restaurant search, order placement, payment, order tracking
- Out of Scope: Backend integration with delivery partner APIs

3. Test Items

- Mobile app (Android & iOS)
- Web dashboard (admin and restaurants)
- Payment gateway module

4. Entry Criteria

- Requirements document approved
- Test environment set up

• Test cases reviewed and signed off

5. Exit Criteria

- All critical test cases passed
- No high or critical severity bugs open
- Final test summary report submitted

6. Test Deliverables

- Test Plan
- Test Cases
- Test Execution Report
- Defect Report
- Final Test Summary

7. Tools Used

Purpose	Tool
Test Management	TestRail
Bug Tracking	JIRA
Automation	Selenium/Appium
Reporting	Extent Reports

8. Responsibilities

Role	Responsibility
QA Lead	Plan, coordinate, and review test activities
Test Engineer	Write and execute test cases

Automation QA Write automation scripts for regression suite