Software Test Plan (STP) – ONLINE FOOD DELIVERY SYSTEM

Project: Online food delivery system System
Version: 1.0
Authors: <JAYPAL REDDY, NAMITH B U, MANOJ R, MANUPRASAD H S>
Date: 11-09-2025
Status: Draft

1. Introduction

Purpose:
This document defines the test plan for the Food Delivery System v1.0. It outlines objectives, scope, strategy, resources, schedule, and responsibilities for testing.

Scope:
Testing covers FDS features such as authentication, restaurant search, ordering, payment, delivery tracking, and rating/review. External restaurant kitchen management and third-party financial systems are excluded.

References:
- FDS SRS v1.0
- Design Specifications v1.0
- PCI-DSS standards
- OWASP Testing Guide

Definitions:
- FDS: Food Delivery System
- OTP: One-Time Password
- UI: User Interface
- API: Application Programming Interface
- RTM: Requirements Traceability Matrix

2. Test Items

- Authentication & User Management module
- Restaurant search & menu module
- Order placement & cart module
- Admin dashboard

3. Features to be Tested

Features mapped to SRS requirement IDs:

- FDS-F-001: User registration & login
- FDS-F-010: Restaurant search & details
- FDS-F-012: Cart management
- FDS-F-020: Restaurant order acceptance
- FDS-F-021: Delivery assignment
- FDS-NF-002: 99.9% availability

4. Features Not to be Tested

- Restaurant internal kitchen systems
- Third-party mapping/payment provider internals
- Mobile OS-specific features beyond app requirements

5. Test Approach / Strategy

Levels:

- Unit Tests (module-level)
- Integration Tests (API & service interactions)
- System Tests (end-to-end workflows)
- UAT (User Acceptance Testing with stakeholders)

Types:

- Functional Testing (ordering flow, payments)
- Regression Testing
- Performance & Load Testing
- Usability Testing (UI, accessibility)
- Security Testing (encryption, RBAC, vulnerability scans)

Entry Criteria: Stable build delivered, test environment ready, test data prepared.

Exit Criteria: 100% planned cases executed, 0 critical defects open, all acceptance criteria satisfied

5.1 Security Validation

- Validate OTP handling (masking, no logging)
- TLS 1.2+ verification
- PCI-DSS compliance checks

- OWASP Top 10 vulnerability testing

6. Test Environment

Hardware:
- Smartphones (Android/iOS)
- Restaurant dashboards (PC/tablet)

Software:
- FDS app v1.0 (mobile/web)
- Payment gateway sandbox
- Maps API sandbox

Tools:
- Selenium (UI automation)
- Postman (API testing)
- JMeter (performance/load testing)
- Jira (defect tracking)

Test Data:
- Dummy customer accounts
- Sample restaurant menus
- Test cards & UPI IDs

7. Test Schedule

Milestones:
- Test case design: 05-Sep-2025
- Environment setup: 07-Sep-2025
- Test execution start: 08-Sep-2025
- Test execution end: 20-Sep-2025
- UAT: 22-Sep-2025 to 25-Sep-2025

8. Test Deliverables

- Test Plan (this document)
- Test Cases (manual & automated)
- Test Scripts
- Test Data
- Test Execution Logs
- Defect Reports
- Test Summary Report

9. Roles and Responsibilities

Role	Name	Responsibility
QA Lead	JAYPAL REDDY	Prepare plan, coordinate execution
Test Engineer	MANOJ R	Design & execute test cases, log defects
Developer	NAMITH B U	Support defect fixes and triage
Product Owner	MANUPRASAD H S	Approve test results, sign-off readiness

10. Risks and Mitigation

Risk	Mitigation
Delay in stable build delivery	Request early smoke builds
Third-party API downtime	Mock APIs for testing
Network instability during GPS tracking	Implement retry/caching

11. Assumptions & Dependencies

- Payment gateway sandbox available
- Maps API keys provided
- Stable test environment maintained

12. Suspension & Resumption Criteria

Suspend if: Environment unavailable >4 hrs OR build blocks >30% of tests.
Resume if: Blocking defects resolved and environment restored.

13. Test Case Management & Traceability

RTM ensures mapping of SRS → Test Cases. Example:
- FDS-F-001 (User Registration) → TC-Auth-01
- FDS-F-013 (Payment) → TC-Pay-01
- FDS-F-022 (Tracking) → TC-Track-01
- FDS-NF-001 (API Response Time) → TC-Perf-01
- FDS-SR-002 (RBAC) → TC-Sec-03

14. Test Metrics & Reporting

Metrics collected:
- % test cases executed
- % passed/failed
- Defect density
- Defect aging
- Requirement coverage

Reports:
- Daily execution status
- Final Test Summary Report

15. Approvals

Role	Name	Signature / Date
QA Lead		
Dev Lead		
Product Owner		