**Test Strategy Document**

**Project Title**: Test Strategy for Food & Beverages Loyalty System (Costa Coffee)

**Table of Contents**

1. Project Overview
2. Objectives & Scope
3. Test Approach
4. Project Timelines
5. Test Environment
6. Testing Tools
7. Test Resources
8. Test Data Management
9. Test Schedule
10. Risks & Mitigations
11. Defect Management
12. Communication Plan
13. Approval

**1. Project Overview**

The Costa Coffee Loyalty System project aims to deliver a digital ecosystem that integrates the mobile app e-commerce experience, order management system (OMS), retail POS terminals, and delivery management. The system facilitates loyalty points accrual, redemptions, and real-time customer engagement.

**2. Objectives & Scope**

**Objectives**:

* Ensure end-to-end quality across mobile and backend systems.
* Validate integrations between subsystems.
* Deliver defect-free customer journeys.

**In Scope**:

* Mobile App (Android/iOS)
* OMS Integration
* POS Functionality
* Delivery module

**Out of Scope**:

* Internal store employee apps not tied to the loyalty system
* Hardware-specific POS testing (handled by vendor)

**3. Test Approach**

* **Agile Testing Methodology**: Continuous testing in sprints.
* **Types of Testing**:
  + Unit Testing
  + API Testing
  + Functional & Integration Testing
  + UI/UX Testing
  + Regression Testing
  + End-to-End Testing
  + UAT (User Acceptance Testing)
* **Automation**:
  + Mobile app tests using Appium
  + API automation using Rest Assured
  + Web testing using Selenium

**4. Project Timelines**

| **Phase** | **Start Date** | **End Date** |
| --- | --- | --- |
| Requirement Analysis | May 10, 2025 | May 20, 2025 |
| Test Planning | May 21, 2025 | May 25, 2025 |
| Test Case Design | May 26, 2025 | June 10, 2025 |
| Test Execution | June 11, 2025 | July 5, 2025 |
| UAT | July 6, 2025 | July 15, 2025 |
| Sign-Off | July 16, 2025 | July 20, 2025 |

**5. Test Environment**

* Mobile Devices: Android 10-14, iOS 14-17
* POS Emulators for in-store scenarios
* Pre-prod and staging environments
* Backend API endpoints with authentication and mock servers

**6. Testing Tools**

| **Category** | **Tool** |
| --- | --- |
| Automation | Selenium, Appium |
| API Testing | Postman, Rest Assured |
| Test Management | Jira |
| CI/CD | Jenkins, GitHub Actions |
| Defect Tracking | Jira |

**7. Test Resources**

* **Test Manager**: 1
* **QA/AUtomation Engineers**: 4

**8. Test Data Management**

* Synthetic data for performance tests
* Masked production data for UAT
* Realistic customer profiles with loyalty histories

**9. Test Schedule**

| **Activity** | **Duration** |
| --- | --- |
| Sprint 1 Testing | 2 Weeks |
| Sprint 2 Testing | 2 Weeks |
| Regression Cycles | 3 Days per cycle |
| UAT | 1 Week |

**10. Risks & Mitigations**

| **Risk** | **Impact** | **Mitigation** |
| --- | --- | --- |
| Third-party API delays | High | Mock services for early testing |
| Device fragmentation | Medium | Use device farms (BrowserStack) |
| Incomplete test data | High | Establish data provisioning pipeline |

**11. Defect Management**

* Defects tracked via Jira
* Triage daily
* SLAs: Critical - 24 hrs, Major - 48 hrs, Minor - 3 days

**12. Communication Plan**

| **Stakeholder** | **Channel** | **Frequency** |
| --- | --- | --- |
| QA Team | Daily Stand-up | Daily |
| Project Manager | Email, Weekly Call | Weekly |
| UAT Team | Demo & Feedback Sessions | End of each sprint |

**13. Approval**

| **Role** | **Name** | **Signature** |
| --- | --- | --- |
| QA Lead | John Doe | \_\_\_\_\_\_\_\_\_\_ |
| Project Manager | Jane Smith | \_\_\_\_\_\_\_\_\_\_ |
| Product Owner | Ravi Kumar | \_\_\_\_\_\_\_\_\_\_ |