**Test Plan Document**

**1. Introduction**

This test plan outlines the strategy, approach, resources, and schedule for testing the financial dashboard and sign-up functionality. The goal is to ensure that all features, including income and expense tracking, CSV management, and user registration, meet the specified requirements and perform seamlessly.

**2. Objective**

To validate the financial dashboard and sign-up module, ensuring they are user-friendly, secure, and functional. The objective is to deliver a reliable, defect-free application for tracking income and expenses with seamless CSV import/export functionality.

**3. Scope**

The testing will cover the following areas:

* **Sign-Up Page**: User registration, validation, and Google sign-up functionality.
* **Dashboard Functionality**: Adding, modifying, and searching transactions, balance calculation, and CSV import/export.
* **Transaction Management**: Sorting and filtering transactions by date or amount.

**Out of Scope**:

* Integration with third-party payment gateways.
* Mobile application testing (if applicable).

**4. Testable Features**

**Sign-Up Functionality:**

* User registration with email and password validation.
* OTP validation (if applicable).
* "Sign up with Google" integration.

**Dashboard Features:**

* Add, edit, or delete income and expense entries.
* View total income, expenses, and current balance dynamically.
* Search and sort transactions.
* Import and export transactions via CSV files.

**Error Handling:**

* Graceful handling of invalid data inputs and empty states.

**5. Testing Approach**

**Type of Testing:**

* Functional Testing
* Usability Testing
* Compatibility Testing
* Regression Testing
* Performance Testing

**Techniques:**

* Black-box testing for core functionality.
* Exploratory testing for usability and responsiveness.

**Test Environment:**

* Web-based application tested on Chrome, Firefox, Edge, and Safari.
* Simulated CSV uploads for import/export functionality validation.

**6. Roles and Responsibilities**

* **Tester**: Prepare and execute test cases, identify and report defects, and verify fixes.
* **Test Lead**: Create the test plan, manage tasks, and monitor progress.
* **Developer**: Address defects and implement required fixes.
* **Project Manager**: Ensure the testing process aligns with the project timeline and objectives.

**7. Test Schedule**

| **Activity** | **Start Date** | **End Date** |
| --- | --- | --- |
| Test Plan Preparation | 15.12.2024 | 15.12.2024 |
| Test Case Design | 16.12.2024 | 16.12.2024 |
| Test Execution | 17.12.2024 | 20.12.2024 |
| Final Report Submission | 21.12.2024 | 21.12.2024 |

**8. Test Deliverables**

* Test Plan Document
* Test Scenario Document
* Test Case Document
* Defect Report
* Test Summary Report

**9. Entry and Exit Criteria**

**Entry Criteria:**

* Requirement document is finalized and approved.
* Development of sign-up and dashboard functionalities is complete.
* Test environment and test data are ready.

**Exit Criteria:**

* All critical and high-priority defects are resolved.
* 100% test case execution with a minimum 95% pass rate.
* Stakeholders approve the test summary report.

**10. Tools**

* **Test Case Writing Tool**: MS Excel
* **Defect Tracking Tool**: Jira
* **Automation Tool** (if applicable): Selenium or Cypress
* **Performance Testing Tool**: Apache JMeter

**11. Risk and Mitigation Plan**

| **Risk** | **Mitigation Plan** |
| --- | --- |
| Delayed feature implementation | Coordinate with the development team for timely updates. |
| Changes in requirements mid-testing | Use an adaptive test strategy and prioritize test case updates. |
| Unresolved critical defects | Perform risk-based analysis for release readiness. |
| Limited resources for testing | Automate repetitive test cases to optimize resource utilization. |

**12. Approvals**

| **Name** | **Role** | **Approval** |
| --- | --- | --- |
| Project Manager | Approval for test strategy and execution |  |
| Test Lead | Approval for test plan and test cases |  |
| Stakeholder | Final approval of the test summary report |  |