Software Risk Management Plan – Sample

1. Introduction

This document identifies, analyzes, and manages potential risks associated with the development and implementation of the Passport Automation System. The purpose is to minimize uncertainties and ensure the successful delivery of a secure, reliable, and efficient passport processing system.

2. Risk Identification

The major risks involved in the Passport Automation System include:

Technical Risks

- System security vulnerabilities

- Integration issues between modules (application, verification, payment)

- Database failure or data loss

- Performance issues under heavy load

Schedule Risks

- Delay in development due to changing requirements

- Delayed testing and deployment

- Dependency on third-party services (payment gateway, SMS/email)

Cost Risks

- Budget overrun due to extended development time

- Additional cost for security, hosting, or licenses

Resource Risks

- Lack of skilled developers

- Team unavailability

- Insufficient testing resources

3. Risk Analysis

Each identified risk is analysed based on:

- **Probability:** Likelihood of occurrence (Low / Medium / High)

- **Impact:** Effect on project (Minor / Moderate / Severe)

Risk	Probability	Impact
Security Breaches	Medium	High
Security Downtime	Low	High
Security Delay	Medium	Medium
Data Loss	Low	High
Resource Shortage	Medium	Medium

4. Risk Mitigation

Strategies to reduce or eliminate risks:

For Technical Risks

- Use encryption and secure authentication

- Regular security audits

- Backup and recovery mechanisms

- Load testing before deployment

For Schedule Risks

- Proper project planning

- Milestone-based tracking

- Buffer time for critical tasks

For Cost Risks

- Budget monitoring

- Avoid unnecessary features

- Use open-source tools where possible

For Resource Risks

- Proper team allocation

- Training programs

- Backup personnel planning

5. Risk Monitoring

Risk management is a continuous process:

- Regular project reviews

- Risk register updates

- Monitoring system logs and performance

- Immediate action when new risks arise

- Periodic audits and progress reports