CSP113-SOFTWARE ENGINEERING 2

Risk Management Plan Outline

A. INTRODUCTION

• **Description**: Provides an overview of risk management objectives and scope.

Example:

 This plan outlines the process for identifying, analyzing, responding to, and monitoring risks associated with the development of the e-commerce mobile application.

B. OBJECTIVES OF RISK MANAGEMENT

• **Description**: Explains why risk management is being performed.

Example:

- Minimize potential project delays.
- Control cost overruns.
- Ensure software reliability and quality.

C. SCOPE OF RISK MANAGEMENT

• **Description**: Defines which risks will be considered (technical, organizational, external).

Example:

Covers risks related to project schedule, cost, resources, technology, and compliance.

D. RISK MANAGEMENT APPROACH

• **Description**: Explains the methodology or framework used.

Example:

- Risks will be identified during planning, tracked throughout execution, and managed using a risk register.
- Techniques include brainstorming, expert judgment, and SWOT analysis.

E. RISK IDENTIFICATION

• **Description**: Process of identifying risks that may affect the project.

Example:

- **Technical**: API integration failure, software bugs.
- **Organizational**: Resource turnover, unclear requirements.
- External: Regulatory changes, vendor delays.

F. RISK ANALYSIS

- Qualitative Analysis: Ranking risks based on probability and impact (High/Medium/Low).
- Quantitative Analysis: Estimating numerical impact (time lost, cost added).

Example:

• Risk: Payment gateway failure \rightarrow Probability: Medium \rightarrow Impact: High.

G. RISK RESPONSE PLANNING

- **Description**: Defines strategies to address risks.
- Strategies:
 - Avoidance: Change the project plan to eliminate risk.
 - o Mitigation: Reduce probability/impact.
 - o Transfer: Shift responsibility (e.g., insurance, outsourcing).
 - Acceptance: Acknowledge and monitor the risk.

Example:

 Risk: Key developer resigns → Mitigation: Maintain backup developer, document code thoroughly.

H. RISK MONITORING AND CONTROL

• **Description**: Continuous process of tracking risks, reviewing triggers, and updating responses.

Example:

• Weekly risk review meetings, risk register updates, and new risks logged when discovered.

I. RISK REGISTER

• **Description**: Central document tracking risks, owners, probability, impact, and responses.

Example:

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	Risk ID	Risk Description	Probability	Impact	Risk Owner	Response Strategy	Status
	R1	Delay in requirements	High	High	PM	Mitigation: Agile iteration	Open
Ī	R2	Payment API failure	Medium	High	Dev Lead	Mitigation: Use a mock API	Open
Ī	R3	Budget overrun	Low	High	Finance	Acceptance + monitoring	Open

J. ROLES AND RESPONSIBILITIES

• **Description**: Defines team members' responsibilities in risk management.

Example:

- Project Manager Oversees risk process.
- QA Lead Identifies quality-related risks.
- Developers Report technical risks.

K. Tools and Techniques

• **Description**: Tools used for risk tracking and management.

Example:

• Jira (risk tracking), MS Project (schedule impact), Risk matrix charts.

L. Approval and Sign-off

• **Description**: Lists stakeholders who must approve the RMP.

Example:

Project Manager, Client, Risk Officer