**Risk Assessment and Management Plan (RMP)**

**Purpose of the Risk Management plan**

The objective of the Risk Management plan is to outline a strategy for identifying, assessing, and prioritizing potential risks that could affect a software development project. This document aims to assist project managers and team members in foreseeing, preventing, or mitigating any adverse impacts these risks may have on the project's schedule, budget, and overall success. Having a RMP enhances project planning and decision-making. In addition, it provides project visibility and tracking of issues. Finally, it decreases project costs through proactive risk mitigation

**Identification of risks and assessment**

Implementation during Sprint 1 involved the team effectively identifying and assessing potential risks through a combination of brainstorming sessions and a checklist-based approach. In these collaborative sessions, team members discussed and identified potential risks based on their individual knowledge and past experiences. These methods enabled the team to comprehensively identify and document potential risks that could impact the project during Sprint 1.

**Risk charts**

| Impact  Probability | Low | Medium | High |
| --- | --- | --- | --- |
| Low | 6 | 3, 15, 20 | 12, 13, 19 |
| Medium |  | 1, 4, 5, 9, 14, 16 | 7, 8, 10, 13, 18 |
| High |  | 11, 17 | 2, 10 |

**Table 1:** Risk management chart

| **Risk ID** | **Risk Name** | **Risk Type & Description** | **Risk Score** | **Resolved in Sprint** | **Strategy & Effectiveness** |
| --- | --- | --- | --- | --- | --- |
| 1 | Change of Requirements | Requirements-related change may occur during the project lifecycle, impacting deliverables and timelines. | Medium | Sprint 1, 2, 3, 4 | Accept |
| 2 | Unclear Requirements | Lack of clarity in project requirements leading to misunderstanding and rework. | High | Sprint 1, 2, 3, 4 | Avoid |
| 3 | Mobile & Web compatibility | Compatibility issues between mobile and web platforms leading to usability and functionality issues. | Low | Sprint 2, 3, 4, 5 | Mitigate |
| 4 | Resource Restrictions | Insufficient resources (e.g., budget, team members) causing delays and quality compromises. | Medium | Sprint 1, 2, 3, 4 | Accept |
| 5 | Rapid Technology Changes | Rapid changes in technology trends impacting project delivery | Medium | Sprint 1, 2, 3, 4 | Accept |
| 6 | Change in the Leadership Role | Change in project leadership leading to disruption in decision-making and project direction. | Low | Sprint 1, 2, 3 | Accept |
| 7 | Lack of Proper Planning | Inadequate planning leading to missed deadlines, scope creep, and budget overruns. | High | Sprint 1 | Mitigate |
| 8 | Poor Documentation | Incomplete or inaccurate documentation leading to misunderstandings and rework. | High | Sprint 1 | Mitigate |
| 9 | Insufficient Training | Lack of training for team members leading to inefficiencies and errors. | Medium | Sprint 1 | Mitigate |
| 10 | Lack of Proper Testing | Inadequate testing leading to undetected defects and poor software quality. | High | Sprint 2, 3, 4 | Mitigate |
| 11 | Miscommunication & No Communication | Poor communication leading to misunderstandings, conflicts, and delays. | High | Sprint 1, 2, 3, 4, 5 | Mitigate |
| 12 | Lack of Familiarity with Technology | Limited knowledge and experience with technology stack leading to inefficiencies and errors. | Medium | Sprint 1 | Mitigate |
| 13 | Poor Risk Management | Ineffective identification, assessment, and mitigation of risks leading to project failures. | High | Sprint 1 | Mitigate |
| 14 | System Performance | System performance issues leading to user dissatisfaction and decreased productivity. | Low | Sprint 1, 2, 3, 4, 5 | Mitigate |
| 15 | Vulnerable Security | Vulnerabilities in system security leading to data breaches and loss of trust. | Medium | Sprint 4 | Transfer |
| 16 | External Dependencies | Dependencies on external factors leading to delays and project bottlenecks. | Medium | Sprint 1, 2, 3, 4, 5 | Accept |
| 17 | Escalation of Complexity | Project complexity leading to difficulties in understanding, implementation, and maintenance. | High | Sprint 1, 2, 3, 4, 5 | Avoid |
| 18 | Code Scalability | Inability of the system to handle increased workload leading to performance degradation. | High | Sprint 2, 3 | Transfer |
| 19 | Regulatory Law Compliance & Actions | Failure to comply with regulatory laws leading to legal actions and penalties. | Medium | Sprint 4 | Avoid |
| 20 | Poor Data from User Feedback | Receiving unreliable user feedback leading to unnecessary or useless feature adoptions. | Low | Sprint 2, 3, 4 | Mitigate |

**Table 2:** Risk management chart