**Risk Management**

* **Introduction:-**

Risk is an uncertain event that may have positive or negative impact on project. Risk Management is the process of identifying and mitigating risks. If risks are not identified before, it can cause adverse effects on the project completion & its quality. So it is better to identify risks & specify a mitigation plan that can again take back our project on track if anything uncertain happens during any phase of development.

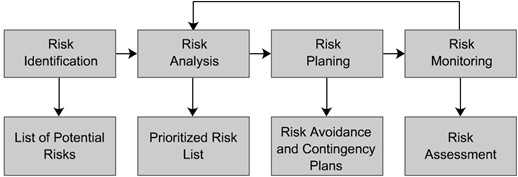
* **Purpose:-**

The purpose of this document is to describe the strategy on how risks are associated with our project will be identified, analysed, and managed. This document describes how the risk management activities will be performed throughout the lifecycle of development & how the roles and responsibilities will be played by our team members if it occurs.

* **Scope:-**

The scope of this document is up to the internal and external risks of our project. Risk affects different entities participating in our project includes Client, Our team, Users and many more passive entities.

* **Risk Management Process:-**



1. **Risk Identification-** Identify risks and their impacts.
2. **Risk Analysis-** Assess the likelihood and consequences of these risks.
3. **Risk Planning-** Draw up plans to avoid or minimise the effects of the risk.
4. **Risk Monitoring-** Monitor the risks throughout the project.

* **Risk Analysis Table:-**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Risk category | Description | Probability of occurrence | Impact | Priority | Mitigation Plan |
| 1 | Client | Misunderstanding Client requirements | 0.5 | 3 | 1.5 | We will communicate with more details & use pictorial representations if required. |
| 2 | Client | Lack of Cooperation from client | 0.3 | 4 | 1.2 | We will inform about the negative effects that can occur on their required project if they don’t cooperate us. |
| 3 | Client | Failure to manage client or user expectations | 0.5 | 3 | 1.5 | We will continuously take their feedback for improvement. |
| 4 | Team | Lack of communication among team members | 0.5 | 4 | 2.0 | We will arrange meetings twice in a week if required to resolve everyone’s problems & take appropriate actions. |
| 5 | Team | Lack of specialized skill required in the project | 0.5 | 3 | 1.5 | We will identify new skills beforehand and give more time to learn & implement new skills. |
| 6 | Team | Team Management Risks | 0.8 | 3 | 2.4 | We will divide work properly among team members and if someone faces the issue then others will divide his/her work. |
| 7 | Planning | Incorrect plans or estimation | 0.8 | 2 | 1.6 | We will consider the experience of every team members by their past projects & ask outside if required. |
| 8 | Resource | Inadequate estimation of required resources | 0.5 | 3 | 1.5 | We will discuss multiple possible options & allocate resources as and when needed. |
| 9 | Technical | Server Crash | 0.5 | 4 | 2.0 | We will keep a backup server if the existing server fails. |
| 10 | Technical | Payment issues | 0.3 | 2 | 0.6 | We will provide multiple third-party payment options if required. |
| 11 | Technical | Security or Performance issues | 0.5 | 3 | 1.5 | We will develop the application using proper coding standards and testing will be done more effectively to remove all flaws. |
| 12 | Other | Unpredictable Risks | 0.5 | 3 | 1.5 | If any unpredictable situation occurs then work will be done separately at home if we cannot meet. |

**Probability:- Impact:-**

|  |  |
| --- | --- |
| **1** | Negligible |
| **2** | Marginal |
| **3** | Critical |
| **4** | Catastrophic |

|  |  |
| --- | --- |
| **0.3** | Low |
| **0.5** | Medium |
| **0.8** | High |

**Priority = Probability \* Impact**

* References:-
* Image source- <https://slideplayer.com/slide/7054252/>
* http://www.iaeng.org/publication/IMECS2011/IMECS2011\_pp732-737.pdf
* <https://www.guru99.com/how-precaution-becomes-cure-risk-analysis-and-solutions-in-test-management.html>