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HOSPITAL MANAGEMENT SYSTEM

RISK MANAGEMENT:

Impact (1-4): 1-Catastrophic, 2-Critical, 3-Marginal, 4-Negligible

RMMM: M1-Mitigation, M2-Monitoring, M3-Management

Risk Exposure: RE<0.3 = low, RE>0.2 and <0.7 = medium, RE>0.6 = high

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| **S No.** | **RISK**  **SUMMARY** | **RISK**  **CATEGORY** | **PROBABILITY** | **IMPACT**  **(1-4)** | **RMMM** | **RISK EXPOSURE** |
| 1. | The HMS does not meet the expectations/  requirements | Project  Risk | 15% - 20%  As a misunderstanding between the customer and the developer may involve as each person has a different way of thinking and natural language is known for its ambiguity. | 3 (Marginal)  The system may not perform as requirements/ expected. It is not critical because it could be solved before the development. | **M1:** Meetings should be conducted with the customer regularly in order to prevent such a risk (problem). As well as, making use of prototyping to collect the feedback if changes are required.  **M2:** Validation and Verification (V&V) process must be taken into account to ensure that the system works as expected. As well as, the understanding between the developing team and the customer must be verified.  **M3:** Investigate the possible reasons that may lead to such a problem. Meetings could also be conducted to discuss the problem and decide what actions should be taken. | RE = 20% x 3  = 0.6  RE = medium |
| 2. | Late delivery of the project. | Schedule  Risk | 35% - 45%  Estimations are done before the project and it cannot be 100% accurate. | 3 (Marginal)  The delivery can be late but it is not critical because our project is organic and we have analyzed everything like historical data, repeated features, etc. | **M1:** Proper steps and plan have to be set earlier before the implementation of the project to ensure timely delivery by evaluating the project scope on the basis of the production deadline.  **M2:** Monitoring the schedule of the project to ensure that each team is working at a planned rate. The project managers or developers can check this.  **M3:** Investigate the possible reasons that may lead to such a problem like changing of requirements. In worst cases, an extension to the deadline may be asked to form the customer. | RE = 45% x 3  = 1.35  RE = high |
| 3. | Computer Crash | Technical  Risk | 5% - 10%  Our project is not that complex and chances of computer crash is very minimal but it can happen. | 1 (Catastrophic)  The chances are minimal but if this happens it could be catastrophic because all the data could be lost which is very important. | **M1:** Performing regular data backup on the project as well as associated documentation in multiple locations. Hosting the project on GitHub or Azure may also help in avoiding data loss.  **M2:** The staff members should always be aware of the reliability and stability of the computers, which they work on. Any adjustments in the environment's stability should be noted and taken seriously.  **M3:** Investigate the problem to find the causes of it and ensure that it is not a flake. Checking for backups and then recovery should be done in case of such a problem occurred. | RE = 10% x 1  = 0.1  RE = low |
| 4. | Out of Budget | Financial  Risk | 20% - 30%  It happens because costumer mostly change or add requirements as the project progresses which makes our budget out. | 3 (Marginal)  It is marginal because in organic mode, most of the features are repetitive and estimations are précised. | **M1:** Use effective cost estimation techniques, along with the use of historical data. A buffer amount of money should be maintained for extra costs.  **M2:** Track expenses and make budget decisions to keep up with changes during the project.  **M3:** Investigate the possible reasons that may lead to over-budgeting and or discover appropriate ways to reduce costs without affecting the performance or the quality of the system. | RE = 30% x 3  = 0.9  RE = high |