**1. Risk Analysis :**

*1.1 Background*

Risk identification is the first stage of risk management process. It looks to identify potential sources of risk along with the probability of these risks occurring. The second stage is to calculate the impact of these risks. The third and final stage is the remedial action as to how to avoid this risk from happening.

6 pre-defined risk types provide a good base that helps to identify the risk and ensures that a certain process is followed in order to deal with the mentioned risks.

After identifying and categorizing a risk, it is documented.

1. *Staff Risks*

Risks that are related to the members of the Group involved in the project.

1. *Technical Risks*

Risks that are related to the software and hardware aspect/limitations of the group project.

1. *Accessibility Risks*

Risks that are linked to the availability of the code for the various group members.

1. *Organizational Risks*

Risks that emerge from the organizational environment including the commerce side of things where the software is made and where its used.

1. *Estimation Risks*

Risks that are derived from management of time, i.e., the parts of the project and the project itself to be completed on time.

1. *Security Risks*

Risks that are related to the security of the code and the threats of it being attacked by viruses, along with the theft of the software/code.

*1.2. Documentation*

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| **Risk ID** | **Risk**  **Type** | **Risk** | **Probability** | **Impact** | **Remedial Action** |
| RID1 | Staff | Lack of group arrangement | Moderate | Tolerable | Any meetings should be scheduled in advance AND with every group member’s say taken in account. Roles and tasks should be clear to anyone who has been assigned one. |
| RID2 | Technical | Code unclear to some | High | Tolerable | Any piece of code written down should have a reasonable amount of comments written to avoid confusion from within the group members. |
| RID3 | Staff | Poor communication | High | Serious | Group members should be notified whenever there is any change in plans or objectives regarding the project. |
| RID4 | Technical | Unexpected outcomes and errors | High | Serious | Functions should be implemented and tested in singles to allow for easier tracking of error outcomes. |
| RID5 | Technical | Software limitations | Moderate | Serious | Code should be written in a way such that it allows for future expansion for extra features. |
| RID6 | Accessibility | Lack of accessibility | Low | Tolerable | Anything involving this project should be posted in a place accessible and possibly updateable by all group members of the group, possibly GitHub. |
| RID7 | Technical | Loss of content/information | Moderate | Tolerable | Keep all files organized and double-check before deleting work. |
| RID8 | Technical | Most of functional and non-functional requirements are not met. | Low | Serious | Teams members can keep track of all the requirements as they go ahead with the project. One of the members can create a checklist of all the requirements that have been met. |
| RID9 | Staff | Inconsistent costumers | Moderate | Serious | Have regular meetings with the customer, thereby we get a clear assurance of what is to be implemented.  Providing them with prototype and progress at every stage of the project. |
| RID10 | Organizational | Financial problems | Moderate | Serious | project costing should be done realistically and cleverly. Once the budget is fixed, it should not be exceeded. |
| RID11 | Staff/  Technical | Team members may not have sufficient knowledge to do certain aspects of the project. | High | Serious | Assign tasks to the members based on their strengths and team members who are familiar with the topics should help the rest overcome obstacles. |
| RID12 | Technical | Server failure | Moderate | Serious | If the server fails for any reason whatsoever, there is a high risk of losing valuable data. We can avoid that by using incremental data backups, which work on backing up data only when data is added or modified and adds that to the previous backup. |
| RID13 | Technical | Ill-fitted photos posted | Moderate | Serious | Constant monitoring to make sure any unsuitable photos do not exist on the feed, consequently giving out warnings and possibly temporary account limitations to users who belong to that criteria. |
| RID14 | Estimation | The project targets not met by a certain time | Moderate | Tolerable | We should set realistic timings as for when goals are to be met. We should observe our previous behavior to learn from any mistakes or bad decisions made, and possibly prioritize our timings better for more future productivity relative to the project. |
| RID15 | Security | DDOS attacks | Low | Serious | DDOS attacks can’t be predicted, but we can reduce the chance of it happening by having someone monitor the firewall for any suspicious activity. |
| RID16 | Staff | Team lacks motivation | Moderate | Tolerable | The team members should constantly motivate each other. |
| R1D17 | Organizational | Illegal documentation | Low | Serious | Team members should access only legal documents. |
| R1D18 | Technical | User experience is poor and User interface is not aesthetically pleasing. | Moderate | Tolerable | Assign UI/UX to the designers in the group. Polls may be put up to see which interface Staff prefer more. |
| R1D19 | Organizational | Unable to raise extra capital if cost exceeds budget. | Low | Serious | The group members must try to raise money for the project via various sources such as private/government banks, individual asset lenders, |
| R1D20 | Organizational | Copyright/Patent issues. | Low | Moderate | Sometimes when the final product is done and dusted, there are issues with the copyright/patent where someone has already made a similar product, or the name of our project is in conflict with others projects. |
| R1D21 | Staff | Team member’s inability to understand a spoken language. | Moderate | low | The group members can easily communicate with each other in native English language using third party apps for translation verbally and text. |
| R1D22 | Staff | Team members can have problems with their workload | High | Moderate | Group members should let others know if they are having problems with their workloads as this can cause failure to produce work. Hence work needs to be split amongst members equally for productivity. |