**Risk Management**

**Types of Risks**

General Risks

* 1. Communication between the Team Members
     + Lack of communication, causing lack of clarity and confusion.
  2. COVID 19 Risk
     + Team members catching COVID 19 (could result in serious illness)

Project Specific Risks

1. Coding/Merge Errors Risk
   * There might be some conflict or merge errors in the final code before phase deployment.
2. Technical Skill Insufficiency Risk
   * Some Team members don’t have much professional experience, or they are not technically sound in some of the technologies/frameworks.
3. Security Risk
   * User personal data (like passwords, name, address, contact number might get compromised)
   * Data Inconsistency Issue
4. Scalability Risk
   * How the system behaves, after the sudden increase in user-base.

**Plans to monitor the risks:**

* Conduct multiple meetings between team members to understand their concerns and to avoid any confusion concerning their tasks.
* Encourage team members to not attend in-person meetings if there are not feeling well. Get there Covid Test Done and remain in isolation for a few days as per the CDC Guidelines.
* Members like TL or Scrum Master will monitor Repo Commits on a randome basis to avoid any conflicts in the final codebase.
* Peer to Peer Code Reviews and Code inspections will be scheduled after the development phases. More focus will be given to the quality aspect.
* Coding guidelines documents will be shared with the team before the actual development starts.
* Testing will be performed at every phase of development as an end-user.
* In-house training or technical talks will be organized between the team members to improve their technical expertise.
* Utilized adequate and extra time for each module and include additional time for end-to-end testing after each phase.

**Reevaluation of risks:**

* After fixing the bugs that occurred at the end of every phase, we will be re-evaluating them before starting a new phase.
* Backlog items will also be monitored from the Trello Board to check design/requirements risks.
* Walkthrough and Inspection of source code will be done.

**Contingency plans for the risks:**

* We do the testing considering every possible scenario(risks) that could occur.
* Workload will be allocated accordingly between the team if someone catches Covid 19.
* Sprint Review meetings will be organized to resolve functional and non-functional issues related to the application.
* A separate clone of the existing branch will be created in the repo to handle code conflicts and other merge issues. Git operations like Rebase or Cherry Pick will be performed to fix merge conflicts.
* To handle scalability issues, Load Balancer will be used on the deployment server.