# 6. RISK MANAGEMENT

## 6.1. Risk Management Approach

The project manager working with the project team and ensure that risks are actively identified, analyzed, and managed throughout the life of the project. Risks will be identified as early as possible in the project so as to minimize their impact. The steps for accomplishing this are outlined in the following sections. The PM will serve as the Risk Manager for this project.

## 6.2. Risk Identification

## The following methods were used to assist in the identification of risks associated with Secret Social Network Application:

## Brainstorming

## SWOT (Strengths, Weaknesses, Opportunities and Threats)

Project team identify various risks. Finally, PM chose top risks with high impact or most likely to happen.

## 6.3. Risk Monitoring

Risk monitoring will be a continuous process throughout the project. Avoidance plan should be taken carefully from start of the project. In case a risk is about to happen, PM will apply contingency plan to prevent risk. If risk is already happen, PM apply fall back plan to minimize impact.

## 6.4. Risk Register

### 6.4.1. Risk description

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Rank** | **Risk** | **Description** | **Category** | **Root Cause** | **Triggers** | **Probability** | **Impact** |
| **R1** | 3 | Lack of team member | The number of members decreases and not enough for work | People | Member out team | Dissatisfied with other members, have unexpected trouble | Low | High |
| **R2** | 1 | Conflict among team members | Team member disagree with others and refuse to work or work below their ability | People | Unclear requirement specification. Team members do not unify on solutions | Has issue inside team | Medium | High |
| **R3** | 2 | Lack of skill and knowledge for a specified work | Team member don't have enough skill, knowledge to do their task. Example: can't control new technologies in project | People | Member don't have enough time to learn/improve needed skills | Member inform that they don't know how to do. Low productivity. | Medium | High |
| **R4** | 4 | Requirement change | The scope may change, some requirements may be added | Requirement | SRS not good (not realistic, not feasibility, not meet customer needs) | Project team cannot develop the system as description in SRS. | High | Medium |
| **R5** | 5 | Team member distraction | Team members don't pay enough time for working in the project, productivity is low | People | Undisciplined and habit of team member, loose management | Team members does not spend time for work and tasks are not completed on time | Medium | Medium |
| **R6** | 7 | Inability to verify/validate products with requirements. | Can't verify/validate the deliverable products whether meet the requirements or not | Process | Problem in product quality control | Inability to verify/validate products against requirements. | Medium | Low |
| **R7** | 6 | Can’t commit work because internet connection | Internet connection is down and team members can't submit work, merge code, ... | Technology | Can’t connect to the git repository server | Internet connection is down | Low | Medium |
| **R8** | 8 | Product doesn’t meet requirement | Some functions doesn't satisfy the requirement in SRS | Process | Team member not understand requirement | Function doesn’t meet the requirement | Medium | Low |

### 6.4.2. Probability – Impact matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Probability** | **High** |  | R3, R4 |  |
| **Medium** | R6, R8 | R5 | R2, |
| **Low** |  | R7 | R1, |
|  | **Low** | **Medium** | **High** |
|  | **Impact** | | | |

### 6.5.3. Risk response plan & Risk status

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Risk** | **Avoidance plan** | **Contingency plan** | **Fallback plan** | **Risk owner** | **Status** |
| **R1** | Lack of team member | PM need to have a meeting with this member and suggest him/her still be there. | Resolve the problems inside team. For example: PM has some methods to motivate members | reduce scope | HoangLVQ | Not yet active |
| **R2** | Conflict among team members | Plan some team building to improve teammate | Have a meeting to solve conflict problem | Team create meeting to secret vote for choices | HuyTDH | Activated / Solved |
| **R3** | Lack of skill and knowledge for a specified work | Have detail training plan.  All members must know what skills and what kinds of knowledge they must have. | Team members help each other improve skill and ability | Working over time | HoangNK | Activated / Solved |
| **R4** | Requirement change | Requirement should be paid a lot of attention. SRS should be peer reviewed, reviewed carefully by PM and the supervisor. | With each requirement changes, the project team should have a meeting to analysis the change requests and take actions. | Re-estimate and update plan. | HoangLVQ | Not yet active |
| **R5** | Team member distraction | Setting rule and minus of do not meet the deadline: punish money and named at meeting minute. | Punish the member do not meet the deadline. | Working over time | HoangLVQ | Activated / Solved |
| **R6** | Inability to verify/validate products with requirements. | Create detail testing plan. Research to find out suitable test method | Print out the result to check by eyes. Debug into code to see how the code is running | Ask for help from supervisors | NhungNTH | Not yet active |
| **R7** | Can’t commit work because internet connection | Have a backup local repository | Manage resource via local repository while can't connect to the internet one. | Copy resource by using USB | HuyTDH | Not yet active |
| **R8** | Delivery project doesn’t meet requirement | PTL have to review source code and follow requirement | Fix bugs | Assign other members doing those functions | HoangNK | Not yet active |