#### Risk Assessment Document

**Risk Identification**

| Risk | Description |
| --- | --- |
| Late Delivery | The project isn’t turned in by the due date. |
| Cloud Software Equipment Failure | The online software that we use fails ,and our files end up corrupted. |
| Team Members Not Available | One of the team members is not able to work on anything for the project or attend the group meetings for an extended period of time. |
| Project Idea Changes | The team decides to change the project to something that isn’t Settlers of Catan. |
| Hardware Equipment Failure | One of the team members’ personal device has a major failure and is unable to be used. |
| Presentation Can’t Be Completed | The presentation is unable to be finished by the due date. |
| Local Software Equipment Failure | The software used to build the project fails, resulting in either the software unable to be used or the project files being lost. |
| Can’t Meet Outside of Class | The team is unable to find a time outside of class to meet together. |
| Proper Graphics Aren’t Made | The final project doesn’t contain quality visual graphics. For example, the animation looks off, the colors don’t complement each other, or the images don't fit well in the game. |
| Coding Becomes Too Much For Allowed Time | Some of the functionality isn’t completed by the due date. |
| Debugging Can’t Be Completed | Some of the errors can’t be solved by the due date. |

**Risk Analysis**

| Risk | Probability | Effect |
| --- | --- | --- |
| Late Delivery | Low: The due date is very clear ,and we’ve known it since the start of the class. | Catastrophic: We will all receive a 0 on the project. |
| Cloud Software Equipment Failure | Low: Sites like Github and Google Drive will most likely be secure. | Catastrophic: We will lose all of our files online. |
| Team Members Not Available | Low: There is a low chance one of us will have an accident. | Serious: This will slow down the work on our project by quite a bit. |
| Project Idea Changes | Low: We will most likely stay with Settlers of Catan. | Serious: This will set us back to square one. |
| Hardware Equipment Failure | Moderate: Our personal devices could malfunction. | Serious: This will leave one of our team members without the ability to work on the project, at least for a little bit. |
| Presentation Can’t Be Completed | Moderate: Finishing the actual game is the most important priority ,so we might run out of time for the presentation. | Serious: This could hurt our grade on the final project. |
| Local Software Equipment Failure | Moderate: The files or applications we use might run into an error or stop working. | Tolerable: Smaller files can be recreated ,and applications can be redownloaded. Plus, we’ll upload files for the project to the cloud. |
| Can’t Meet Outside of Class | Moderate: Troublesome Weather, technology issues or other plans may lead for the group being unable to meet outside of plans | Tolerable: We can remeet on a different date to catch up on what we originally planned for the meeting. |
| Proper Graphics Aren’t Made | Moderate: We might run out of time to have everything looking high quality because of the time constraints. | Tolerable: The game doesn’t need to look like it was made by a professional company. |
| Coding Becomes Too Much For Allowed Time | High: There is a ton of functionality that has to be completed ,and the time to complete all of it is small. | Serious: Depending on what we don’t get finished, this could hurt our grade. |
| Debugging Can’t Be Completed | High: Testing everything in the game will take time that we might not have. | Tolerable: As long as there isn't anything game breaking, our grade should still be fine. |

**Risk Planning**

Schedule Risk: To mitigate any scheduling risks, team red will develop a reasonable project schedule and ensure that all parties understand it. The project will be monitored closely as the project progresses versus the planned schedule. Corrective actions will be taken if the project falls behind schedule.

Technical Risk: For technical risks, team red will make sure all necessary technical expertise and resource s are available to execute the project at a high level. Testing and quality assurance processes will be conducted to mitigate any technical issues.

Resource Risk: Resources will be allocated based on the project's needs. Monitoring of resources will take place regularly and adjustments will be made to ensure that the project completes successfully.

Scope Risk: Team red will have the project’s scope clearly defined and ensure that all members of the team understand said scope. A manager will be in place to delegate any changes to the project’s scope and communicate any changes to all team members in a timely manner.

Financial Risk: To manage financial risks, team red will put in place a realistic project budget and monitor actual costs against the pre-planned project budget. Clear financial reporting and accountability measures will be put in place to ensure all parties are aware of the project’s financial status. If a financial risk arises, the team will take appropriate corrective action immediately to avoid further losses.