Risk Management Plan

Risk 1: Short-term absence

Category: Productivity Issue

Description: Someone has a school trip/event, doctor's appointment, or gets sick for a day or two, and must miss school as a result**.**

Risk Probability: 0.9 **Risk Impact:** 0.2 **Risk Score:** 0.18

Response Plan: Mitigation; inform at least one person in advance, and arrangements made. IF this cannot be arranged, the group will have to work on other tasks in the meanwhile.

Risk 2: Long-term injury or sickness

Category: Employee Turnover

Description: Someone gets sick or injured for an extended period of time.

Risk Probability: 0.1 **Risk Impact:** 0.8 **Risk Score:** 0.08

Response Plan: Transference; make sure all work has comments and descriptions, and that other team members are fully aware what the user is doing, so that the remaining members may continue in their absence. Some content/levels may be reduced in length and/or complexity.

Risk 3: Insufficient time

Category: Estimation and scheduling

Description: The project takes more time than expected

Risk Probability: 0.7 **Risk Impact:** 0.8 **Risk Score:** 0.56

Response Plan: Acceptance or mitigation; expectations must be held low, and the team must be prepared to eliminate previously conceived ideas. The team-set due date will be set days before the hard deadline to give some leeway.

Risk 4: Fatal technology failure

Category: Unavoidable risks

Description: Power goes out/network crashes/computer breaks, documents are wiped.

Risk Probability: 0.5 **Risk Impact:** 0.4 **Risk Score:** 0.2

Response Plan: Avoidance; all documents and progress must be saved in at least 3 locations: Google Drive, each individual's computer, and a USB flash drive, after every successful work day. Frequent saving while working must be done.

Risk 5: Insufficient skills

Category: Technical risk

Description: Material assumed to be taught turns out to be insufficient to successfully create the project.

Risk Probability: 0.3 **Risk Impact:** 0.8 **Risk Score:** 0.24

Response Plan: Mitigation; if it is suspected that material will not be taught in time/at all, independent research must be done to learn necessary skills.

Risk 6: Unexpected challenges

Category: Estimation and scheduling

Description: An aspect/task in creating the game turns out to be much more challenging than anticipated.

Risk Probability: 0.7 **Risk Impact:** 0.4 **Risk Score:** 0.28

Response Plan: Acceptance or mitigation; if someone is genuinely stuck for an extended period of time, all group members must work on task together. If it is still seemingly unsolvable, then an alternate plan will be created.

Risk 7: Unfamiliarity with new technology

Category: Technical risk

Description: New software/computer will have to be used because old system lacks necessary features. Possible use of Eclipse as an alternative compiler.

Risk Probability: 0.1 **Risk Impact:** 0.2 **Risk Score:** 0.02

Response Plan: Acceptance; work hard to become familiar with new system.

Risk 8: Difficulty learning

Category: Technical risk

Description: A team member has trouble learning a new concept.

Risk Probability: 0.3 **Risk Impact:** 0.4 **Risk Score:** 0.12

Response Plan: Mitigation or transference; more time will have to be allocated per day to learn the concept. If difficulty persists, a team member with a better grasp of the material may have to trade tasks.

Risk 9: Coding issues

Category: Procedural risk, technical risk

Description: The code does not work as anticipated, bugs are in the code.

Risk Probability: 0.7 **Risk Impact:** 0.8 **Risk Score:** 0.56

Response Plan: Acceptance or mitigation; if someone is genuinely stuck for an extended period of time trying to fix the bug, all group members must work on task together. If it is still seemingly unsolvable, then an alternate plan will be created, to eliminate the section of the code altogether.

Risk 10: Computer damage

Category: Unavoidable risk

Description: The computer system gets infected with a virus.

Risk Probability: 0.1 **Risk Impact:** 0.8 **Risk Score:** 0.08

Response Plan: Avoidance; the team members should all be aware of the risks involved with browsing suspicious websites, and know how to safely navigate the web. In the event that malware is installed onto a computer, that computer will not be used, and no connections will be made with that system. One of the backups will be used instead.

Risk 11: Team conflict

Category: Productivity issues/ breakdown of specifications

Description: The team members have disagreements towards the best course of action.

Risk Probability: 0.5 **Risk Impact:** 0.2 **Risk Score:** 0.1

Response Plan: Mitigation or acceptance; a compromise will be made to try to satisfy everyone's desires as fully as possible. If that is not possible, a vote must be taken. Each member cannot be overwhelmingly attached to a single idea, and must realize that nothing is set in stone.

Risk Analysis Matrix

Probability					
0.9			Risk 1		
0.7				Risk 6	Risk 3, 9
0.5			Risk 11	Risk 4	
0.3				Risk 8	Risk 5
0.1			Risk 7		Risk 2, 10
	0.05	0.10	0.20	0.40	0.80
	Impact				