Risk Summary

	Insignificant	Minor	Moderate	Major	Catastrophic
Certain					
Likely			**R3**	**R4**	
Moderate				**R2**	
Unlikely	**R1**				
Rare					

R1: Weather Delay

Risk Statement

If the weather becomes too intense on a day where the team is scheduled to meet, then the group will not be able to join together to discuss the project and become fully updated in the timely manner that had been predetermined.

Likelihood

Unlikely

Winter is a limited time, yet fairly unpredictable, variable. Since it is only going to be a threat for the next month or two, the window of another weather delay grows smaller each day with warm weather approaching, yet it still remains a possibility.

Consequence

Insignificant

It would be inconvenient to push the meeting from in person to over the phone or online, but either way the information can be shared and everyone in the group will be able to be updated.

Mitigation

Google hangouts, Skype, and phone conversations are safe backups in case of a weather delay. Since Spring will be here soon, the risk is growing smaller and the consequence is easily solved by exchanging information digitally.

R2: Server Crash

Risk Statement

If the server crashes or a hardware failure causes database entries to be lost, then student submissions may be compromised and the server will not accurately reflect the student's assignment status

Likelihood

Moderate

Hardware failures occur for a multitude of reasons and can lead to the loss of current database information. The server is also more likely to crash during peak traffic hours where significant CPU resources are being consumed

Consequence

Major

Students would be unable to submit assignments and data might be lost

Mitigation

Hardware upgrades, database backups, server resource scaling system, possible extension on assignments

R3: Insufficient Staff Hours

Risk Statement

If the software engineering team does not have sufficient hours to work on the project, then particular design goals might not be met

Likelihood

Likely.

It is difficult to foresee how the staff's schedule will evolve over the course of the semester, due to the fact that each member's schedule can change unpredictably and workloads separate from the project can increase unpredictably. The staff also lacks software engineering experience and deadlines may be underestimated.

Consequence

Moderate.

The project could be left incomplete or with extra features missing leading to an unpolished or unfinished product

Mitigation

Setup a descriptive schedule laying out tasks and priorities for each week / month

R4: Insufficient Understanding of Technical Requirements

Risk Statement

If the software engineering team can not understand the pertinent APIs and technical requirements then implementation of core functionality for the project will not be possible.

Likelihood

Likely

The majority of the staff has limited to no web server experience, so understanding the scope of each requirement and what will be necessary to fulfill the requirements will be difficult. Most of the development will fall under new territory for the staff and create additional, unforeseen adversities

Consequence

Major.

The project will be incomplete and unusable.

Mitigation

Researching similar tasks, ensuring each team member has a full understanding of how requirements will be met and how technical aspects of the project are implemented inside the automatic grading pipeline