Project Management Plan

This project hinges on the operation of an SQL Database. The first step in finishing the Use Cases is to properly set up the Extended Entity Relationship Diagram for the database. Following this, the below iteration diagram will be implemented. During this time, the UI for each of the Use Cases will be developed and proofed for usability.

Use Case	Name	Priority	Depends On	Iteration 1 (20 days)	Iteration 2 (20 days)	Iteration 3 (20 days)	Iteration 4 (20 days)
UC1	Create Account	9		10			
UC2	Login	8	UC1	10			
UC3	Request Checkout	8	UC2, UC4, UC6				10
UC4	Adding Users to DB	7	UC2	5	5		
UC5	Removing Users from DB	4	UC2, UC4			5	
UC6	Adding EQ to DB	6	UC2	5	5		
UC7	Removing EQ from DB	3	UC2, UC6				5
UC8	Reviewing Requests	10	UC2, UC4, UC6		10	10	5
UC9	Check-in Equipment	5	UC2, UC6			5	

Risk Management

Below is a diagram of the potential risks and their mitigation plan, as well as associated probability, cost, and cleanup values. Please note that more risks will be added once they are discovered, and this may change the overall cost of risk value.

ID	Event	Likelihood	Costs of Risk	Cost of mitigation	Total Score	Mitigation Strategy	1 = Low
1	Lose funding on site	3	1	2	6	Switch to local computing	2 = Medium
2	Lose Equipment Funding	3	1	1	5	Manual Input of Equipment IDs	3 = High
3	Network Security Problems	2	1	3	6	Communication Check with IT	
4	PWA issues	1	1	1	3	Documentation	
5	SQL database issues	3	3	1	7	Clean inputs	
6	Security	2	3	3	8	Check	
7	Network Outages	2	1	1	4	Server Safeguards	

Implementation Plan

IDE's:

1. Visual Studio Code: This is the primary coding software that we have used for coding ever since we started coding, and it works pretty well.
2. MySQL Workbench: This is the software that we will use for specifically schemas and SQL coding because it is the best option for that.
3. LAMP: This is a virtual machine OS that allows for testing the code we have written, and it works well in that regard.

Languages:

1. HTML: Since we are building a website, HTML is necessary for creating web elements.
2. CSS: On top of that, CSS is necessary for the styling of HTML to make it look nice.
3. PHP: Again, since we are building a website, PHP is necessary for making those elements interactable and dynamic.
4. JavaScript: Since we plan on wrapping our work into an app, JavaScript is necessary to make the app. It also helps with making HTML elements interactable and dynamic.
5. SQL: This is necessary for the database parts of the website. Specifically, storing user data from both students and professors and keeping track of various information about the college's cameras to better keep track of availability and check-outs.