

Requirements document

[Back-End Bois]: Alex Assante, Thor Madsen, Marco Stetich, Jasper Ladkin

(This is a numbered list of user stories that are the features of the system to be implemented. Each user story is an operation that a user can perform on/with the system. For each user story, provide a fairly detailed description so you know what to build and so you can build a test case to demonstrate that your system provides that feature. For each user story, you will identify (during release planning) the release in which it will be implemented: R1, R2, or R3 and assign a number of story points based on your estimate of the time that will be required to implement. Typically, your system will have 10–20 features.) 21`

R1 Velocity:15

R2 Velocity: 21

R3 expected velocity:18

#	User story name	Description	Release	Points
1	Web-app	The user can run the game off of internet browsing services Google Chrome, Safari, and Firefox. Does not work on mobile.	R1-R3	2
2	Adding equations	Users will be able to customize problem sets. This can be achieved by entering their own problems into the database. This will allow users to expand the problem set for their game, allowing for a tailored user experience.	R3	5
3	Controls	The user will use the wasd keys to control the character in the game.	R1	2
4	Certificates	Users (teachers) will be able to generate certificates of proficiency/completion for students with their highscore.	R4	5

5	Progress	Progress is calculated by the high score of the game. These are saved and compared for every game played.	R4	3
6	Progress Pt2	Users (teachers and students) will be able to track their (or their students) overall progress., which should help motivate users to get better.	R4	3
7	Gameplay	Users will encounter obstacles within the game and to clear the obstacles the users will be tasked with answering math problem(s). If the users correctly answer the questions, they will progress past the obstacle and the game will continue. If they get the question(s) wrong they lose the round and are forced to restart the level or quit the game.	R1-R3	8
8	Account Creation	Users will be asked to login/or create an account upon loading the game. If the user selects to create an account, the program prompts the users to select if they are a student or a teacher. Then their first and last name must be entered. After inputting their name the user will be asked to, if a student, enter a class code. They can skip this part and add it later so that they can play the game without being part of a class.	R2/R3	8
9	Controls Pt 2 (Answering Questions)	Users will answer the equations by inputting the correct answer. All math questions will be answered using the number row on the keyboard press. They will then press enter to submit the answer.	R1	3
10	Settings	This will allow users to change personal account settings(level difficulty). It also can toggle sounds and music on or off.	R2/R3	5
11	Settings pt2	The teacher view users can create new class codes and manage old ones.	R3	5

12	minigame	Add lives	R4	3
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