

Introduction

The What:

- An educational math game for students to develop and understand their skills in the subject.⁴
- Done through creating a game with Unity that sees the user face against different math subjects represented by various “bosses”

The Why:

- Technology, specifically games, used in classrooms has created beneficial learning environments, especially amongst younger students.^{1, 5}
- We decided to chose math due to it being easy to implement and best suited for a video game.²

The Game

- In *Tournament of the Vextors*, battle and rise through the ranks of the world’s most prestigious tournament by harnessing the power of mathematics, eventually becoming the most powerful Vextor of all.

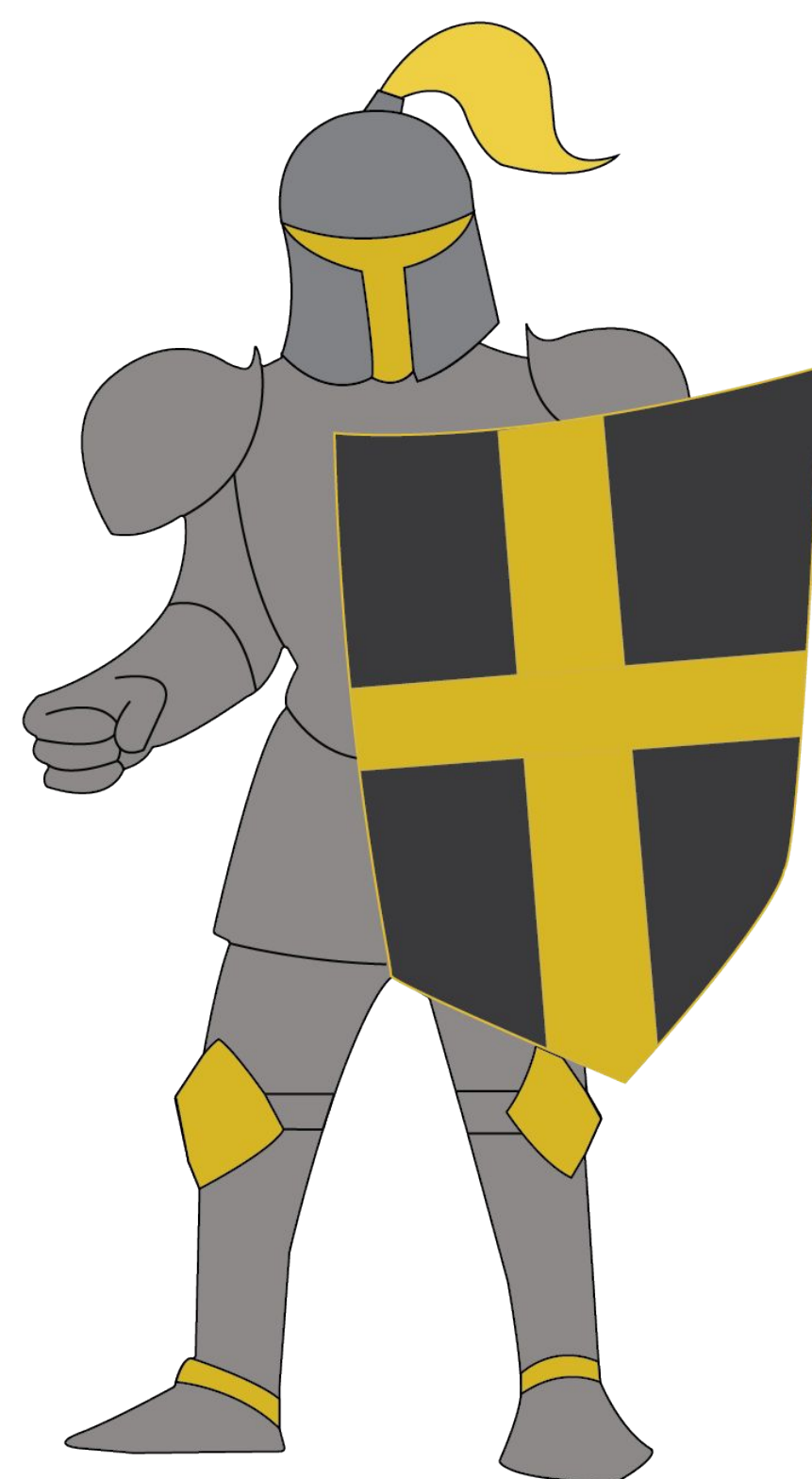
Character Art:



Great Dragon of the Divide



Mad Hydra



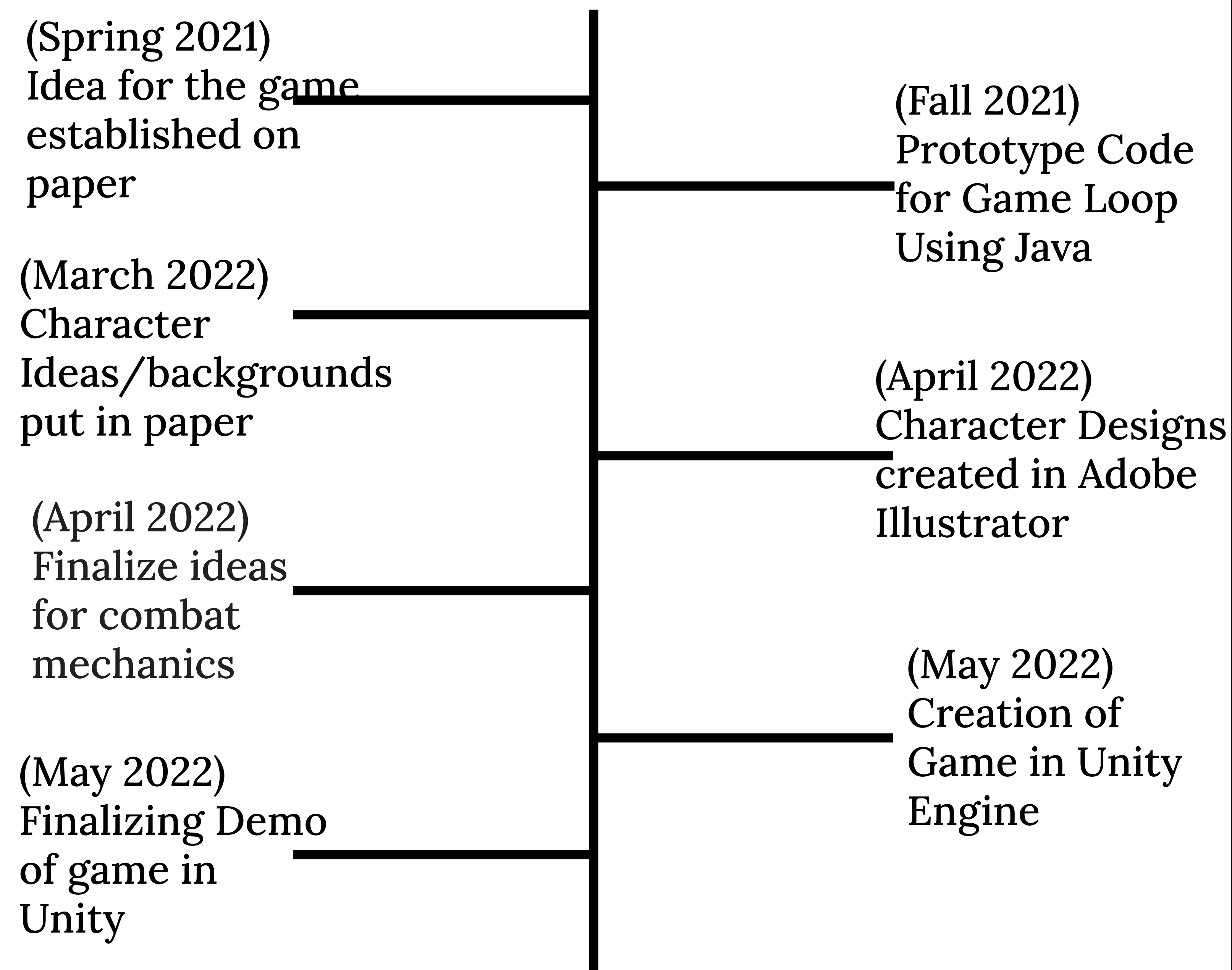
Sir Add-a-Lot

Improving Math Education Through Games



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Development Process



Acknowledgements

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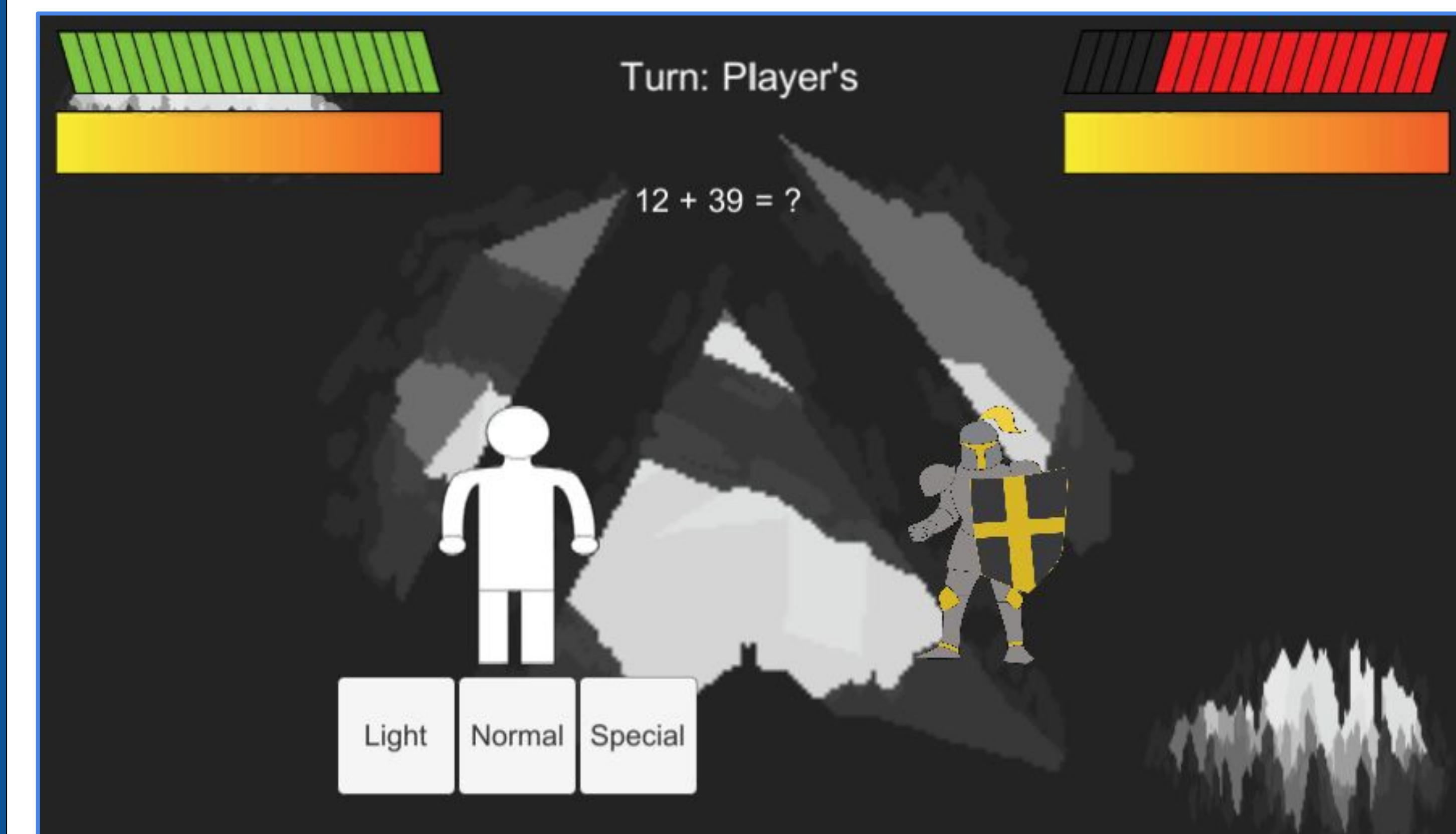
Expected Results

- Students who play this game will potentially be more engaged in their studies of simple mathematics and will thus improve in the subject.²

Broader Impacts

- Young students who play the game will become more invested in learning, specifically with technology.³
- Students will also have better compatibility with technology used in workplace.¹
- Supervised educational leisure will further strengthen student-instructor relationships.³

Example Game Scene



References

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4. Liao C-W, Chen C-H, Shih S-J. 2019. The interactivity of video and collaboration for learning achievement, intrinsic motivation, cognitive load, and behavior patterns in a digital game-based learning environment. Computers & Education. 133:43–55. doi:10.1016/j.compedu.2019.01.013.
5. Squire K. 2003. Video Games in Education. International Journal of Intelligent Simulations and Gaming. 2:49–62.