Initial Ideas

Idea 1 - Tower Defence Game

A blackboard with white text and drawings

AI-generated content may be incorrect.

* Objective: Tower is being attacked; user must answer questions to maintain their defence and protect their tower
* Pros:
* Easy to implement within Unity with an educational element, ideal for our target audience.
* Potential to create multiplayer option
* Fun and engaging with the opportunity to have a variety of question types
* Cons:
* Potential to become repetitive with not much room for level progression.
* High pressure if user gets incorrect answers, potential to become stressful for the user

Idea 2 - Puzzle based game

A blackboard with white chalk on it

AI-generated content may be incorrect.

* Objective: Puzzle based game, such as flipping cards to match card. Option to add an educational element such as fun facts depending on the card.
* Pros:
* Flexible for however we want to implement
* Ability to replay multiple times
* Cons:
* Difficult to maintain user’s interest, no competitive element
* Potential to become too difficult for users to complete
* Can become boring with
* Only one objective

Idea 3 - Creative Building Game

A drawing of a town

AI-generated content may be incorrect.

* Objective: User to build their own version of a decided theme, such as creating and designing their own village
* Pros:
* Creative freedom for the user
* Many features can be added to scale up the game or scale down
* Ability to replay multiple times without becoming boring
* Flexible for us to implement
* Cons:
* Difficult to implement as well as time consuming, can become a large and complex project
* No clear objective for the user
* No educational feature

Idea 4 – Maze game

A drawing of a maze

AI-generated content may be incorrect.

* Objective: User explores a maze, coming across collectable items and doors where they must answer a question to progress
* Pros:
  + Educational element
  + Easy to implement levels
  + Variety of options for questions
  + Easy to keep user engaged with multiple objectives and levels, ideal for the target audience
* Cons
  + Predictable game outcome

Our decision:

* Tower defence was a good option. However, as a team, we decided the multiplayer option was out of scope.
* We decided on a maze game as it has more opportunities for level progression, less likely to be repetitive. It is ideal for our target audience. There is also an opportunity to add a learning element to further tailor out game towards the target audience.
* While there is software development and games development experience within the team, experience with Unity is a weakness point. We decided to go with an option that is easier to implement to match with the skill set of the team