

Backlog

Must:

- As a user, I am able to play the game both singleplayer and multiplayer (at least 2 players), because I want to learn about energy consumption both alone and with my friends.
- As a client, I am able to update the questions in real-time from the database where the cards are stored (so they should be stored in the database) because I want everyone's app up to date and to not lose questions when the server closes.
- As a user, I will enter a unique username before joining a multiplayer game and put my username to keep my high scores in the personal leaderboard (in the database), because I want to be recognized by my friends and also to look through my progress.
- As a user, when I press the button to start a multiplayer game, I am assigned to a waiting room with other players until a game starts by anyone pressing a start button
- As a user, I am forced to wait for the other players to select an answer or for the timer to run out before proceeding to the next question- the game is played synchronously

Should:

- As a client, I want the game to be fast-paced with around 20 multiple choice questions with 3 possible answers, and the time limit for each question should be ~ 10 seconds
- As both a client and a user, I want all games to be played on the same server because it will avoid data loss due to the hosts' internet connection problem.
- As a user, I should get points based on if I answered correctly as well as how quickly I answered
- As a user, I am able to see my current score during the game
- As a user, I should see everyone's score in a leaderboard every X rounds
- As a user, I should be able to get at least 3 types of questions:
 - Compare two things that use energy and choose which uses more
 - How many times can you do X with the same energy needed to do Y once?
 - Estimate how much energy something uses (open question, award points based on how close the player got)
- As a user, I should be informed of the number of players currently in the waiting room
- As a user, I am able to use emotes (like an emoji that other players can see) to communicate in some way with my friends.
- As a user, I should be able to use jokers (out of at least three jokers) to make the game more dynamic and interesting.
- As a user, I want to see some kind of image for each question for a better UI.

Could:

- As a user, I am able to rate questions beyond just emoji (such as submitting feedback that is stored in the database)
- As a user, I am able to see an all-time high leaderboard to see the people with the best knowledge in the energy-consumption area
- As a user, I am presented semi-random questions with answers/numbers that are different each time and present several types of values: e.g. a correct value, a value that is close, and a wrong value
- As a user, I have the ability to create a private room to play with friends
- As a user, I want to see a bigger variety of jokers to make the game more interesting.

Won't:

- As a user, I don't want anyone to be able to kick other players from the game
- As a user, I am not able to directly chat with other players, just emote to the current question
- As a user, I am not able to rejoin a game I left due to different problems.

Notes

- It's possible players might not time out at the same time because of one of the jokers, so there should be 2 separate events to account for this. One for timing out that disables your ability to answer and one for ending the round, which will send all players to the next round. Players should all receive new questions at the same time.
- We're free to do whatever we want for the design
- If someone is disconnected, they're out of the game