OOPP'22, version: Mar 2, 2022

Quizzzz User Stories

Stakeholders:

- Player: Any person that is able to start the game
- Admin: A person that manages the server, e.g., starts the server locally or imports questions into the DB

Terminology:

- Activity: an energy related activity that requires a certain amount of energy to be performed
- Question: One step in the game that requires an "Answer" or "Estimate" from the player
- Question Style: Questions can have different styles, as discussed in the Q&A, please consider the mocks in the appendix to get an idea of the different question styles

Mocks:

You will find several mocks of the application in the appendix. These are not meant as definitive requirements for the final form of the UI, they only exist to illustrate the intention for the different features. We explicitly **do not expect that you simply clone** the mocks, you have **artistic freedom** to design your quiz application as you see fit. **Go wild!**:)

MUST Requirements (needed for passing)

Note that ALL minimal requirements have to be met to pass the course.

As a player, I want ...

- to be able to play a solo quiz, so I can increase my awareness of energy efficiency
- to pick a nickname before playing, which is then used to identify me (e.g., in the leaderboard)
- to include the "What is more expensive" (see mock) question style in the game, so I learn how different activities compare to each other in terms of energy consumption
- that the different activities are always described in a one-sentence title, so I can better understand what an activity means
- to answer different questions in every game, for example, through a randomized selection of activities, so the game stays entertaining
- to play games with a fixed 20 rounds, so results of different games can be compared
- to have a very brief transition between two questions, so I can relax for a short while, before I need to concentrate again
- to see the correct answer after I have provided my guess, so I can learn
- to earn points for correct answers, so I get a feeling of accomplishment
- to see my current score all the time, so I know how well I am doing
- to see a leaderboard of the TOP-N previous games that have been played on that server, so I can compare my result to the best runs (*1)

As an admin, I want ...

- to import activities from a shared activity bank into my DB, so I can make the game more engaging through many questions
- to host activities only on the server, so I do not have to update all clients when I add/edit activities

- to restart the server without losing the leaderboard or imported questions, so updates are easy
- that the server does not crash when a client drops out, so I can just leave the server running in the background

(*1) We leave it up to the group to decide whether better scores will update the results in the leaderboard for that particular nickname or whether the new score will be added as an individual run.

SHOULD Requirements

Note that no SHOULD/COULD requirements can substitute mandatory requirements.

As a player, I want ...

- to play with other players on a server
- to be able to specific the server I want to connect to, so I can play with different people
- to join a waiting room to gueue for the next game to start, so I already get in the mood
- to see how many other players are in the waiting room, so I know how many people I will play with
- the server to tell me when my nickname is already taken, so a name is unique per game (*2)
- want to see the scores of other players in the current multiplayer game, so I can compare myself to the other players
- to include the "How much does it take" (see mock) question style in the game, so the quiz is more varied
- to include the "Guess X?" (see mock) question style in the game, so it is more unlikely that people end up with the same score
- that activities are always shown with a picture in addition to the title, so the game looks nicer
- questions to have a time limit, so the game becomes fast-paced and engaging
- to see how much time I have left to answer a question, so I can keep thinking when I am unsure
- that the amount of points that I acquire depends on the time it takes me to answer (the slower I answer, the less points I get), so there is a bit of time pressure that makes the game fun.
- that the progress between all players is synchronized, so everybody sees questions at the same time
- to be able to "send" a predefined set of emojis to other players at all times in a quick and easy way, so I can express my emotions during the game
- to see the emotions of others in a clear, but non-obtrusive way, so I can stay focused
- to be able to send emojis in quick succession, so I can emphasize how I am feeling

As an admin, I want...

- to inspect and edit all questions that exist in the database in the regular client, so it is easy for me to access (*3)
- to reach the administrative interface from the overview, so I do not have to start a game for admin tasks (*3)
- that everybody can access the administrative interface for a server without any authentication, so people can contribute activities (*3)
- (*2) This point apparently needs clarification: The intention is that in a multiplayer game, it must not be allowed that two players pick the same name. We leave it up to the group to decide on the game's behavior in single player. See also (*1).
- (*3) This is a new requirement that has not been covered in the Q&A. The grading of your backlog will not be affected by this.

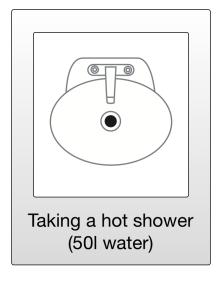
COULD Requirements

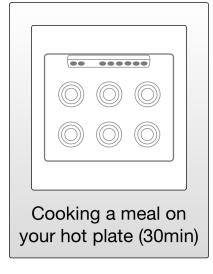
Finish the SHOULD requirements before starting with COULD.

- to join the next waiting room directly from the "end screen" of a game, so I can save the time of going through the initial form
- to be able to start the next game from the waiting room. Every waiting player should be able to do that.
- that I need to confirm closing the application, so I do not accidentally close the window and drop out of the game
- that questions are composed in a "smart" way, so the game becomes more engaging, i.e., for some questions, a similar, but sufficiently different consumption is preferred, for other questions maximizing the difference could be interesting.
- to include the "Instead of X, how much Y?" (see mock) question style in the game, so the quiz is more varied
- to use joker cards, so I can bend the rules of the game in my favors (once :))
- to be able to use every joker only once in a game, so it does not become too strong
- that jokers that I have used already are clearly disabled, so I do not try to use them again
- to have a joker that allows me to eliminate an incorrect answer in an applicable question type
- to have a joker that allows me to earn double points, so I can earn extra points, when I am sure
- to have a joker that removes time for all other players, so I can increase the pressure on them (*4)
- to see whenever one of the other player uses a joker
- to be able to use a joker after I gave my answer, as long as the time is still running, so I can focus on answering the question first.
- to have a visual leaderboard that includes bar charts to indicate the scores in addition to just showing numbers
- the client application to remember my name, so I do not have to type it again the next time I start the game

(*4) Please note the valid concern raised in the Q&A that for games with a high number of players, this might become problematic. It would make sense to avoid the situation, where people do not have any time left for answering the question. Possible solutions are to subtract a percentage or to limit the amount of time-jokers that can be played in a single question.

What requires more energy?







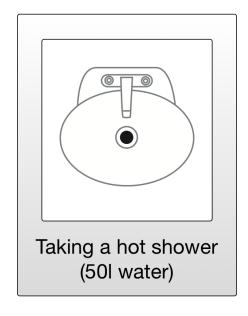
- Playing a game on your Playstation for 4h
- Vacuuming the house (45min)

- Driving to work (15km)
 Charging your phone (4h)
 Keeping a fridge on for two days

N.R.G. Quiz

Name:	
	Start!

How much energy does it take?



- 500Wh
- 75Wh
- 0 150Wh

Answer

Instead of ..., you could do instead...



- Oook a meal ten times
- Light my entire house for a week
- Keep the fridge on for 3.5 days

Answer

How much energy does it take?

	Your guess:	Ok
Taking a hot shower (50l water)		

All Time Leaderboard

	1) Anna	245
	2) Berry	237
	3) Catherine	216
	4) Daisy	199
	5) Eric	187
	6) Fred	163
	7) Ginny	154
Your points:	123) Herbert	39
	Play another round!	
	Back to Start Screen	

N.R.G. Quiz 2.0

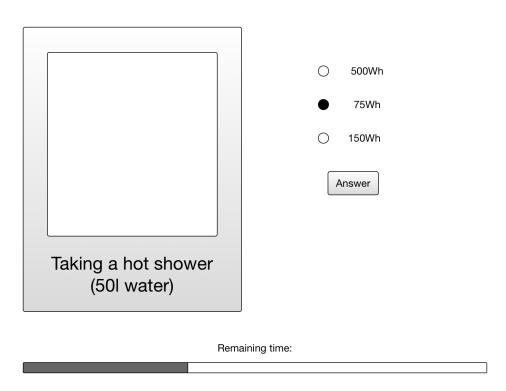
Name:	Quizmaster123	Play alone
Server:	http://localhost:8080	Play with others

Waitingroom

Currently, there are 7 other players in the waiting room.

Start

How much energy does it take?



How much energy does it take?

