Backlog OOPP - Group 24

Must

General
- As a user I should be able to play a functioning quiz application with 20 questions.

Questions
- As a player, I want to have a time limit of 15 seconds per question, so that the game is fast paced and exciting.
- As a player, I want to at least have a comparison question type (get one activity, see how it compares to others) so that the game is playable. I want to be able to select an answer from 3 possible answers. The question should be in the format of "If I do X, what could I do instead? (answer 1) (answer 2) (answer 3)".

General gameplay
- As a player, I want to be prompted with 20 questions per game so that I am able to answer a good amount of questions, while also making the game not too long.
- The game should be divided into two game phases. As a player, I would like to see the leaderboard after 10 questions and at the end of the game so that I get an idea of how my score compares to others. The game phases are as follows: 10 questions, leaderboard, 10 questions, leaderboard.
- As a player, I want to see my on-going score during the whole game so that I know how I am doing in the game and to make it more interesting.
- After each question, I as a player want to see whether I answered the question correctly or not so that I can learn new things and improve on my mistakes.

Game modes
- I, as a user, should be able to choose between solo and multiplayer modes upon entering the game so that I can play the game alone and with a group of people together. It is more interesting if there are different game-modes. *(multiplayer depends on finishing the waiting area/starting game aspect, see below)*

Waiting area/starting game
- I, as a user, want to enter a waiting area upon selecting the multiplayer mode. This waiting area is where I wait for the whole group to connect so that I can

play with random people or with a group of friends. When all people are gathered in the waiting area, any of us can press the button to start the game.
- As a user, I want to be able to play the game with at least 6 people in multiplayer mode so that the game gets exciting and so that I can play with a group of friends.

Usernames
- At the beginning of the game I, as a future player, should be able to insert my name so that I can recognize it in the leaderboard (in both game modes). In case the name is already taken in multiplayer mode, an error should pop up asking me to insert some other name. This ensures that I will not get confused if there are multiple players with the same name in one game round.

Leaderboard
- As a user I want to be able to see a leaderboard in both game modes so that I can compare myself to others:
    - In solo mode, I should be able to see a general leaderboard of all scores that have been achieved by players in past games, the data should persist through server reboots. The scores should also include games which were played in multiplayer mode.
    - In multiplayer mode, I, as a player, should be able to see my results and be able to compare them to other players of that round. This makes the game more exciting for me and makes me more ambitious to achieve a higher score than the other players of that round.
- Even if multiple players have the same name, they should all be displayed in the leaderboard. This ensures that I, as a player, am visible in the leaderboard even if I chose the same name as someone else in the past.

Database usage (background)
- A database should be used to store data for the application:
    - Activities or questions with answers for them
    - Single player leaderboard information, that persists through server reboots, so the player could see its playing history.
- As a player, I want there to be a lot of different activities that I can get questions about, so that the game does not feel repetitive.
- As a player, I would like the questions to be different every time I play so that I am not prompted the same questions again.
- I, as a user, want the single player leaderboard information to persist through server reboots, so that I can see my (and others') playing history.

Should

Jokers
- During the game I, as a player, should be able to use Joker (Power) Cards so that the game play gets more interesting and interactive. I should be able to use each Joker type once per game. These are the Joker types that I would want to be able to use:
  - Remove incorrect answers - this card removes one incorrect answer for my current question.
  - Decrease time for others - this card reduces the play time for my current question for the other players by percentage.
  - Double points - this card doubles my points for the player for my current question.
- When the decrease time for others card is used, the answer should only be shown to me when the original time for the question has passed. I would like the game to differentiate between 2 types of states: "Time ran out" and "Question is over".

Images
- As a player I would like to see an image for each question so that the game looks nicer and has a more appealing user interface.
- In the multiplayer mode I should be able to react to the questions with emojis so that I can convey my emotions to my fellow players. For example: 'Happy', 'Angry', 'Sad' etc. I should be able to choose from 2 to 5 emojis.

Could

Disconnection
- I, as a player, would like players that are not active anymore in multiplayer mode to be disconnected from the game. This should be done if they don't answer multiple questions in a row so that I know who is still playing with me. It would also be nice if it would be displayed to me if a player dropped out.

Question types
- Among the 20 questions there should be at least one estimation question, where I have to slide a bar and approximately estimate the answer so that the game is more interesting to me. The points would be distributed by the accuracy. (*This depends on the point system*)
- Some other types of questions should be created as well:
  - Choose energy consumption for an activity, which is multiple choice;

- - Comparison between activities: "If you do X, what could you do instead?"
- These different types of questions make the game for me as a player more interesting and give a variety of questions.

Number of players
- I, as a user, would like the multiplayer mode to handle "infinitely many" players so that I could play with larger groups of people together. This would make the gameplay more flexible and interesting.

Point system
- As a player I would like there to be a certain point system for all the questions so that I get rewarded if I answer "better" than other players. For multiple choice questions, the faster I answer, the more points I should get. For estimation questions, the higher the accuracy, the more points I should get.

Would

Types of games
- It would be nice, if I as a player could choose from multiple types of games. For example, categories for questions (kitchen, transportation, etc.), and difficulty of questions (easy, medium, hard). This would give me more variety when playing the game and more control over how hard the questions are.