

Web Assignment 2

Student Names/Numbers:

Danae Savvidi / 5457769

Ilias McAuliffe / 5481996

Group ID: CSE 2-34

2 - Client-side JavaScript

2.1) Plan of action:

- A game is started.
- Player waits to be matched to someone else.
- Possibility to cancel during waiting time.
- Match is found – New game is started.
- Timer starts and two players compete to see who will finish first.
- If one player quits the game or closes the window their opponent wins and the game ends.
- When someone finishes first their opponent is informed and the game ends.
- To win players need to find all matching cards before the other player.

2.2) Use of design patterns:

We used a basic constructor pattern which saves the two players and the current state of the game. Every time two players are matched up, we create a new game instance.

3.3) WebSocket communication pattern between clients and server. Create a list of message types (e.g. game-start, game-move, player-type, abort-game, ...) and work out who (server, client-A, client-B) communicates it to whom:

Message Types:

- 1. Queued**
Server sends it to client-A.
- 2. Game Start**
Server sends it to client-A and client-B.
- 3. Join**
Client-A or client-B send it to the server.
- 4. Leave**
Client-A or client-B send it to the server.
- 5. Score Update from Client**
Client-A or client-B send it to the server.
- 6. Score Update to Client**
Server sends updated scores to the client.
- 7. Victory**
Client sends it to server.
- 8. Loss**
Server sends it to client.
- 9. Play Again**
Client sends it to server.
- 10. Quit Game**
Client sends it to server.
- 11. Game Finished**
Server sends it to client.
- 12. Update Statistics**
Server sends it to client.
- 13. Abort Game (Cancel)**
Client sends it to server.