Milestone 1 Report

Team

SoPra Group 12

Members:

- Stevania Eilyn Frutiger
  - stevaniaeilyn.frutiger@uzh.ch
  - 23-731-748
  - GitHub: stevaniaeilyn
- Dominique Heller
  - dominiqueoliver.heller@uzh.ch
  - 17-918-566
  - GitHub: dominiqueheller
- Borislav Rakic
  - borislav.rakic@uzh.ch
  - 21-923-610
  - GitHub: borislav-rakic
- Dieter Andreas Studer
  - dieter.studer@access.uzh.ch
  - 00-719-823
  - GitHub: diderot5038

Project title

Hearts Attack

Project description

We are designing an online version of the card game "Hearts", in which players can meet online for a match or complete their group with virtual players. Our aim is to provide players with detailed statistics of previous wins/losses so they can track their progress and compare their skills with other players. The project is a suitable web application for this course, because it uses the given technology stack with client-server architecture, interaction with REST API and a persistence layer.

User stories

ID: S1	Category: Rulebook
Story:	As a player, I want to be able to read the rules used on this website case I've never played Hearts before.
Acceptance Criteria:	1. On the landing page, I can click a button saying "Rules" to access the page containing the rules that are used in matches on this site.
Estimate	4h

ID: S2	Category: User Management
Story:	As a player, I want to be able to play matches as a guest (without creating an account) to see if I like the game.
Acceptance Criteria:	1. On the landing page, I can either log in, register, or start/join a match as a guest. 2. Statistics for the guest player will not be saved, and guest players do not appear on the leaderboard.
Estimate	8h

ID: S3	Category: User Management
Story:	As a player, I want to be able to set up an account by providing username and password that saves my Play History (matches played, wins, losses, points) in a Leaderboard, to see my progress as a player.
Acceptance Criteria:	1. Starting from the landing page, I can click buttons to register or login and either set up or log into my account. I can also create a simple avatar. 2. I can log in and out and in logged in state change my settings (username, password, avatar).
Estimate	12h

ID: S4	Category: User Management
Story:	As a logged-in user, I want to be able to look at a leaderboard with all players and their achievements, to compare myself to other players.
Acceptance Criteria:	1. After logging in or registering, I can access the leaderboard by clicking on the button saying "Leaderboard". 2. On the leaderboard page, I can see the statistics of every player in paginated form (players 1 to 10 on page 1, players 11 to 20 on page 2, etc.). 3. I can search for specific players (by username) to find their spot on the leaderboard. 4. I can set the kind of leaderboard I want to look at (e.g. who is the best player against computer opponents, who is the best player against human players, etc.).
Estimate	16h

ID: S5	Category: User Management
Story:	As a logged-in user, I want to be able to inspect each user's profile page and find out additional (optional) information, like their birth date, friends list, etc.
Acceptance Criteria:	1. On the leaderboard, I can access each user's profile page by clicking on their entry in the leaderboard. 2. On a user's profile page, I can see more detailed information, like their birth date, friends list, etc.
Estimate	8h

ID: S6	Category: User Management
Story:	As a logged-in player, I want to be able to add friends (other logged-in players) to my friends list, so that I can compare my skill-level with them.
Acceptance Criteria:	1. On a player's profile page, I can press a button to send them a friend request, which the receiver can either accept or decline. 2. If the receiver accepts the friend request, the sender is notified and each player's friends list will contain the respective player in their friends list (sender has receiver in friends list, receiver has sender in friends list). 3. If the receiver declines the friend request, the sender is notified of such and there is no change to the friends list.
Estimate	8h

ID: S7	Category: Settings
Story:	As a logged-in player, I want to be able to edit some settings to customize my experience
Acceptance Criteria:	1. I can open the settings menu at any point (except during a match) by clicking on the settings icon. 2. In the settings menu, I can set several options, e.g. the deck design and the design of the playing surface/card mat.
Estimate	20h

ID: S8	Category: Match settings
Story:	As a player, I want to be able to set the difficulty of the computer opponents and the number of rounds to be played before a match starts, to customize matches.
Acceptance Criteria:	1. When starting a new match, I am asked to set the difficulty of computer opponents and the number of rounds in the match. 2. After setting everything up, I can start the match.
Estimate	20h

ID: S9	Category: Quick settings
Story:	As a player, I want to be able to adjust visual settings during a match to provide customizability even during a match.
Acceptance Criteria:	1. During a match, I can click on the settings icon, which opens a pop-up menu where I can set the design of the deck and playing surface.
Estimate	16h

ID: S10	Category: Matchmaking
Story:	As a player, I want to be able to play by myself against computer opponents, human players, or a mix of both, so that I don't need exactly 4 people at once.
Acceptance Criteria:	1. I can initiate a game and meet up with people by means of a game ID/QR-code-URL, or directly invite logged in users to join. 2. I can either wait for more people to join or start a game with computer opponents completing the party.
Estimate	20h

ID: S11	Category: Gameplay
Story:	As a player, once a game of hearts has started, I want to play 13 rounds according to the rules of the game until a winner is established.

Acceptance Criteria:	1. I find myself seeing my 13 cards of this round at the bottom of the screen and the back of the 13 cards of each of my opponents on the other three edges of the playboard.
	 2. Before the first round starts, I must choose three cards of mine that I pass to another player, then I get three additional cards back from one of the other players.
	 3. In the first round, it is the player on the right to whom I pass my cards.
	 4. In each successive round, it is the player to the right of the previous recipient of my cards to whom I pass my selection of three cards.
	 5. The cards that I am currently allowed to play are always highlighted in color and when I click/press on them, they are moved to the center of the playboard where all 4 cards are displayed, before added to the heap of the player with the highest card in the lead suit.
	 6. Hearts specific rules apply, including:
	    a. The player who holds the Two of Clubs must lead in the first round.
	    b. Players must always follow suit if they can.
	    c. The player who wins a round must lead the next round.
	    d. Players are allowed to play Hearts only if at least one Heart has already been played or if they cannot follow suit.
	 7. At the end of round 13, game points are added up
	    a. The Queen of Clubs counts as 13 points.
	    b. Each card of Hearts counts as 1 point.

Estimate	40h

ID: S12	Category: Gameplay
Story:	As a player, I want to be able to leave the match at any point, which leads to it being counted as a loss to ensure fair play.
Acceptance Criteria:	1. The match will be counted as a loss for the player that left the match prematurely. 2. The missing player will be substituted by a computer opponent in case there were other human players present.
Estimate	8h

External API

We will utilize an external API, which provides services for a deck of cards (e.g. shuffling, drawing random cards, etc.).

https://deckofcardsapi.com/