Product name & Team name: PokerAI

Release date: 23 July, 2023

Revision Number: 1.0.1

Revision Date: 9. July, 2023

High Level Goals:

- Create a poker AI model that stores data for the optimal preflop actions in specific, limited situation and outputs the optimal action based on the user input
    - Model will be based on game theory optimal (GTO) strategy
- Create a user interface designed to visually asks user input and represent a chart to output the optimal action
    - Implement a functional poker game
    - Mobile App
- Connect the front-end and backend together

Sprint 1 Plan (2/07/2023 - 9/07/2023)

User Stories:

User Story 1: As a poker player, I want to input the hand that I have [20]
User Story 2: AS a poker player, I want to customize the situation such as position and whether it is the first raise or facing a previous raise [13]

Tasks:

Back-end Development Team

- Learning CFR
- Setting up basic poker environment/game state/player module/information set/Flask routes
- Be ready to start implementing deep learning method

Front-end Development Team

- Learn React
- Build ideas of how to display the result (creating chart vs showing individual result)
- Be ready to output the result

Sprint 2 Plan (10/07/2023 - 16/07/2023)

User Stories:

User Story 1: As a poker player, I want to know which action I should take with the single hand provided (MVP) [13]
User Story 2: AS a poker player, I want to learn other possible hands to take the same action in the same specific situation (MVP) [20]

Tasks:

Back-end Development Team

- Develop AI with CFR
- Test the result with GTO Wizard or any other AI models
- consider what factors would help AI to output more accurately
- Finish MVP

Front-end Development Team

- Get simulation feedback from at least 10 other people and collect data
- Develop UI more to make it more user-friendly (especially for beginners)
- Finish MVP

Sprint 3 Plan (17/07/2023 - 23/07/2023)

User Stories:

User Story 1: As a poker player, I want to practice the knowledge of what I have learned in the study tool [20]

User Story 2: AS a poker player, I want to learn the practical theory that can be applied to other situations when playing poker without AI [13]

Back-end Development Team

- Develop simulation functions to create a Trainer Tool
- Develop testing function based on user's choice

Front-end Development Team

- Create a poker table view for Trainer Tool
- show the result based on the user's choice
- show the hand range and percentage of the action frequency

Sanity check your release plan:

Total Story Points : 99

Points for spikes, challenges, risks: 33

Total Expected Ideal Work Hour: 264

Days to Finish Work: 21 Days

Work Hours per Days per a member: 2.1 hrs/day/member

Product Backlog:

1. Be able to take user input on the situation that a user is currently facing (hands, facing a raise)
2. Be able to decide the optimal action based on the user input
3. Be able to output the optimal option with a chart
4. Be able to demonstrate an imaginary situation
5. Be able to test user on the demonstration and check if the user understands the optimal action

6. Be able to learn the practical poker theory that the user can use in real life situations