ReadMe for simple Card Playing Game

By Sajjad Saleem

Unity Version: 2022.3.34f1 LTS

Time Taken to do the test:

 It took me approximately 12 hours to complete the test. Due to my current responsibilities as a game developer at Playdew, I had to carve out time from my busy schedule to work on it.

Some Terms used in a code:

- Value: It is the value of the card like the value of 2 number cards of any suit is 2, Value of King is 13 and value of Ace is 14.
- Rank: Rank represents the suit 4 rank is the highest and given to Spades and 1 is the lowest given to Clubs

Work done in the project:

- Used ScriptableObjects to hold the data for the cards, this way every object has access to the data even if in future games it has multiple scenes.
- Optimized texture size by using crunched compression.
- Researched free assets for card games, downloaded and added them in the project.
- Used player portraits from one of my old projects, downloaded "win" and "remaining card" icons from the internet.
- Constructed UI code that can easily be expanded if required.
- Disabled raycast from Ui elements that don't require any interaction examples: Texts, Images that don't require any interaction from the user.
- Used a single update in MenuController.cs that calls all the child menus instead of multiple updates in each class derived from BaseMenu.cs.
- Avoided using Dotween because it allocates garbage. Thus, I preferred to use code to handle simple Ui Animations.
- Bots functionality is expandable to give even more competition to the user.
- No cards are being destroyed or repeatedly spawned, minimizing garbage collection overhead.
- Added debugPanel to view the turn of current player, that helps to see that which player is currently playing.

*Please let me know if you have any confusion or want to ask any questions. Thanks!