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RMIT University Vietnam
Course: COSC2659 iOS Development
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Introduction

"Mậu Binh" or "Chinese Poker" is one of the most played card games in Asia. It is a very well-liked offline card game in several nations, including Vietnam, Hong Kong, Thailand, and Indonesia. The "Mậu Binh" iOS app provides a user-friendly and visually thus aurally appealing gameplay to Apple users. Although it is easy to pick up, the game's strategy and thought-processing are necessary for each round. Because of this, "Mậu Binh" will provide players with the greatest experience.

Rationale of Topic Choice

"Mậu Binh" is a very well-liked offline card game in several nations, including Vietnam, Hong Kong, Thailand, and Indonesia, and is a very effective game to earn money in casinos. This app simulates a picture-perfect gameplay compared to real-life and the bots are programmed with different levels of difficulties which can help users to practice.

Gameplay Explanation

Deck of cards is drawn to 4 players, including user player and the other 3 bots. Each player must sort their cards (by range/suit) in 3 hands in order 5/5/3 cards. Your mission is to arrange your cards in a best hands of range/suit in order to win the game. For further information of game rules, please access the following link:

https://www.pokerlistings.com/poker-rules-chinese-poker (English), https://ngonaz.com/cach-choi-mau-binh/ (Vietnamese)

Main features and extra features

Main features:

- Four views included:
 - Menu view:
 - From this view, users can navigate these below views:
 - Game view
 - Leaderboard button.
 - How to play view
 - Leaderboard view:
 - List of high scores (or past scores)
 - o Game view:
 - The view where users can play with your game.

- Show current score/status of the game.
- User can take some actions to progress the game.
- Contains some animations during the game.
- How to play view:
 - Show user rules/how to play this game.
- Background music for more than two views.
- Effect sounds when users at least:
 - Take action.
 - Winning with that action.
 - Losing with that action.
 - o Result at the end (Ultimate win or lose).
- User Interface (UIs) of your game should be fit in the screens for all iPhone >= 11, which are the devices I will test your game on.

Extra features:

- Users can exit totally from the app during the game, when they open the app again, they can have an option to resume by click on "Continue" button on the menu view
- Users can register for different username before playing so the leaderboard will show different names for each score
- The leaderboard shows different user achievement badges when you reach new milestones in the game
- Add a setting menu for difficulty settings which actually modify the difficulty of the game
- Instead of games based on pure random number generators, please create a simple AI game agent with some simple rules if-else or switch (rule-based decision) to play as an opponent to users
- The app also works on iPads and MacOS
- UIs works well on the iPhone light mode and dark mode

Features – How I do it.

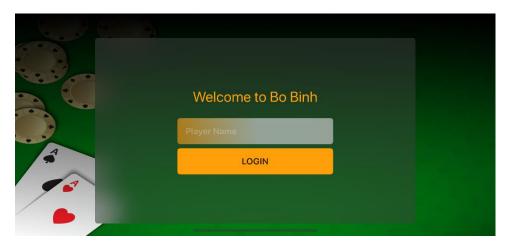


Figure 1: Login Screen

This is a modal view which allows users to enter the name. If user types in a new name, an account will be created and if it matches one datum on the database (under json file), it will continues with corresponding account. The button will be disabled if the textfield is left empty.



Figure 2: Menu Screen

This screen will redirect user to the corresponding screen by using the combination of navigation view and changing the state. From this view, users can go to the start the gameplay, view the leaderboard, how-to-play view and change account.

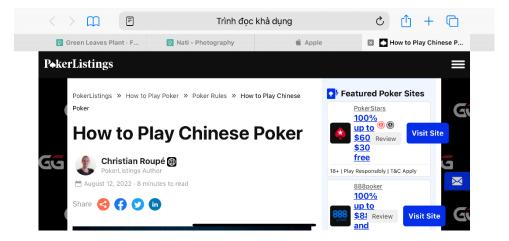


Figure 3: Poker guide 1

User guide for poker when using click on How To Play game

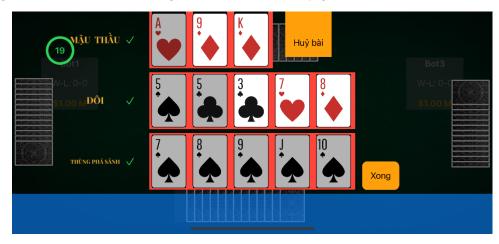


Figure 4: Deal card

The game engine will deal the corresponding card to the last hand that was dealt by the most recent opponent. Then, the Al will compare the dealt card from all of the hands. It will calculate all the possible hands that can be given out. Next, it will play the card according to the specified game rules.



Figure 5: Gameplay view

The game engine will check user score. If user wins against the bots, they will receive the money reward. If user loses, the game engine will deduct the user's money.



Figure 6: Leaderboard view

Leaderboard will fetch the data from the json file sort and display the user with highest scores.

Additionally, the game UI will work with dark/light mode and play mode of the OS. The UI of this game can also respond perfectly to all dimensions including all iPhone, iPad models and Mac computers.

Links to animated picture/GIF/Video of the app

Demo video: https://rmiteduau-

my.sharepoint.com/:v:/g/personal/s3757937_rmit_edu_vn/ER5d3zuYNtJFkwpTjrq_IN4BmQ3B8z0HGrnLB2R6xOKb6A?e=JV2Rne