**Ex 02:**

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**a little about our choices in the game:**

-to start the game press on the yellow play button.

-to end the game press on the red X button.

-when score board is displayed you can press “Replay” button to watch the game moves .

- to stop the replay and restart new game press “End Replay” button.

- when score board is displayed you can press “New Game” button to restart new game .

-the player represented as a picture of Morty and the Computer as Rick.

-when a “change color” card played we change the colorful to the picked color card.

-popups for choosing color and for announcing the winner

-when in Taki mode you can only change color once.

**App:**The main component in the game holds the logic and sub components as board, players etc.. The app component hold in the state all the values that need to be pass to the (children) sub components and update them by calling to setState in every change.Also app holds some other values that important to the logic as data members and not in the state.

**History :** This data member is an array of the state of every turn in the game.

**ShowReplay + displayTurn:**

This function activates the replay mode in which you can go through all the moves of the last game played.  
The displayTurn function uses the history of the app to get the relevant state of the selected turn and by using setState() it updates all the components.

**onClickCard**

This function handle the player click on his card  
The function checks if the click is valid (if it’s the player turn/ valid card) by using information from the App and Using the logic object that functioning as the game rules.

**switchTurns**

This function is responsible of the switches of turns between the player and the computer

* checks if there is a winner and handle this scenario
* update the statistics
* update the App data members

**makeBotPlay:**

This function is the logic behind the computer player

**Board:**

This component holds all the elements of the game and organize them on the game board on the screen

**GameObject:**

This component holds the players, deck and pile.

**CardCom:**

This component responsible of converting card data to card element

**PlayerCom:**

This component responsible of managing the player elements mainly on the player hand (list of card elements)

**Logic:**

**isMoveValid**

This function checks if the move is valid

**cardPlayed**

This function is responsible on the game rules and its bind to the App

**Deck:**

Create the game cards (data cards and not components) and manage them in a deck.

**createDeck**

This function creates the deck of cards for the App ( logic creation)

**Player:**

This object represents the human player and holds the data of his cards and statistics.