## 'Concentration' Pseudocode

- 1. Define required constants:
  - 1.1. Define the pairs in the deck of cards in an array. 30-50 cards (15-25 pairs) in total depending on board size and display appearance
- 2. Define required variables used to track the state of the game
  - 2.1. Board variable to keep track of which card has been clicked
  - 2.2. Score variable to keep track of pairs the user has found
  - 2.3. Flipped card variable to return a boolean to check if the card was selected or not
  - 2.4. The first card and second card variables selected
  - 2.5. Time variable
- 3. Store elements on the page that will be accessed in code more than once
  - 3.1. Board tiles
- 4. Initialize state variables to null, cards are "faced down", call reset function to reset the board, set time to null
- 5. Render the board, call the shuffle function to shuffle the cards, and use a random algorithm to place cards in random board tiles. Wait for the user to click a board tile
- 6. Game Handlers
  - 6.1. When a card is clicked, an event listener will call a cardHandler function that will update the first card from null to card selected
  - 6.2. The same will happen when the second card is clicked
  - 6.3. In the cardHandler function when both firstCard and secondCard status are updated, cardCompare function will be called to compare the two values
  - 6.4. In the cardCompare function,
    - 6.4.1. If firstCard === secondCard then call removeCard function else call flipCard function
  - 6.5. removeCard function
    - 6.5.1. This function will remove the value from the array and clear off the tile space
  - 6.6. flipCard function
    - 6.6.1. secondCard value becomes firstCard value and secondCard goes back to null until another selection has been made
  - 6.7. Reset Function
  - 6.7.1. Set variable to null and set the board to null Z index for pop up dialog