**CODING CONVENTIONS**

* **Declaring Variables**
  + Use camel case for everything
  + Name variables based on what they represent or do.
* **Separation of Concerns:**
  + As much as possible keep code in different languages separate.
  + Keep php code at the top, JavaScript in JS folder, css in css folder, etc.
* **Use comments:**
  + Lay out what functions or lines do in explanations that are short and concise.

**PREGAME LOBBY**

**Friday 20, 2018 5:45 PM**

* **Ready Menu: Ryan**
  + User opts in to ready pool
  + User chooses a Suspect to play as
    - If Suspect is already selected the must pick another player
  + Once 2 users are ready the game can begin.
  + Hit ready start game button to begin playing.

**STARTUP**

* **Set up player Assignment: Bryce**
  + Get all players playing to correct spots on the board
* **Set up cards for New Game: Ryan**
  + Separates cards into three different decks by type (Room, Player or Weapon)
  + Shuffle each deck
  + Save one card from each deck in Case File CONFIDENTIAL
  + *Consolidate the remaining cards into one deck and shuffle again.*
  + Disburse remaining cards in the deck to each player going from player 1 (Miss Scarlet) clockwise.
  + Store the cards assignments on the database.
* **Set up Detective Notebook for each player: Angie**
  + Store a detective notebook for each player playing the game.
  + Detective notebook contains all cards for rooms, suspects and weapons.
  + Best option is likely to make an html table like this:



* + Detective notebook automatically crosses off any cards the player owns on startup
  + Detective notebook automatically crosses off any cards the player is shown by another player after making a suggestion.
* **Set up Turn Tracker: Justin**
  + Game always begins with Miss Scarlet and moves clockwise around the board.
    - In the case where none of the players pick Miss Scarlet start with the player closest to the left of Miss Scarlet.
    - The order will be: Mrs. Scarlet, then Mr. Green, then Mrs. Peacock, then Colonel Mustard, then Professor Plum, then Mrs. White.
  + Tracks whose turn it is.

**GAMEPLAY**

* **Set up Dice Logic: Bryce**
  + Simulate two different die being rolled.
  + Add the sum of the two dice values.
  + Return the value of each die and the sum of the two values.
* **Set up Move Logic: Bryce**
  + Allows player to move from one position on the board to another
  + Logic must track direction of each move and number of spaced moved.
    - Players can only move horizontally or vertically, not diagonally.
    - If in a corner room, players can use a secret passage INSTEAD of rolling the dice.
    - Players MUST move the total amount of spaces rolled.
      * The only exception to this rule is if a player reaches the desired room before using up all possible moves. So, if a player rolls a *seven* but only needs to move *six* spaces to get into the room they want, they can stop once they enter the room.
      * When a player enters a room, they stop moving and are automatically assigned a space in that room.
    - Players cannot land on the same square twice on the same turn.
      * Players re-enter the same room on the same turn.
    - Players cannot land on a square already occupied by another suspect.
    - If a suspect is in front a door to a room, that door is blocked off. Players cannot enter or exit a room through that door.
      * If all doors are blocked to a room, player’s options to enter or exit that room must be eliminated/muted.
    - Store player location in session variable array.
* **Set up Suggestion Logic: John**
  + Allows player to make a suggestion on what room, suspect and weapon are in the Case File CONFIDENTIAL.
  + Only one suggestion can be made after entering a room.
    - To make a new suggestion, the player must enter a different room.
    - If a player wants to make another suggestion for the same room. They must exit the room and, on another turn, re-enter the room.
  + The room suggested MUST be the room the player is currently in, but the player can choose the suspect and weapon.
    - It can be ANY suspect and weapon.
  + The character pawn of the Suspect and Weapon that is being suggested is moved to the room being suggested.
    - There is no limit to the number of Suspects or Weapons that may be in one Room at one time.
    - The Suspect and Weapon stays in that room.
  + When a suggestion is made, the opponents, in turn, try to prove it false. The first to try is the player to the immediate left.
    - If the player has any card(s) suggested:
      * A modal will pop up, prompting the owner of the card(s) to choose a card to show the player making the suggestion.
      * This card must then be displayed.
      * This card must be recorded in the detective notebook. (Player has card).
    - If the player does not have any card(s) suggested:
      * Record results in the detective notebook (That player does not have any of those cards).
      * Repeat the process for the next player to the left.
    - If no player has the cards suggested:
      * Record results in the detective notebook (None of the players have those cards).
  + The suggestion string:
    - ‘I suggest the crime was committed in the Lounge by Mr. Green with the Wrench.’
    - ‘I suggest the crime was committed in the ‘ + room + ‘ by ‘ + suspect + ‘with the ‘ + weapon + ‘.’;
  + Store player and weapon location in session variables.
* **Set up Accusation Logic: Justin**
  + Accusations can be made in for any suspect, weapon or room in any room.
  + A player can ONLY MAKE ONE accusation per game.
  + If an accusation is incorrect:
    - Accusation does not match all three cards in the Case File CONFIDENTIAL
    - Loss for that player is recorded in the database.
    - Player continues to try to prove their opponents' suggestions false by showing cards when asked.
    - If that player’s character pawn is in front of a door to a room. That player’s character pawn is moved into a room.
  + If an accusation is correct:
    - Accusation matches all three cards in the Case File CONFIDENTIAL
    - Win is recorded for player who made the accusation in the database. A loss is recorded for all remaining players.
    - The three cards in Case File CONFIDENTIAL are displayed on screen.
    - Return to Pre-Game Lobby.
  + The accusation string:
    - ‘I accuse Mr. Green of committing the crime in the Lounge with the Wrench.’
    - ‘I accuse ‘ + suspect + ‘ of committing the crime in the ‘ + room + ‘ with the ‘ + weapon + ‘.’;