

Whack a Cat

Win Condition:

The user has a certain number of hits in 30 seconds if not reached then the game is over and the player loses.

User Stories:

1. As a user, I want to click a “Play” button so that I can start the game.
2. As a user, I want to see cats appear randomly in the grid so that I can try to click them.
3. As a user, I want the timer to count down for 30 seconds so that I know how much time I have left.
4. As a user, I want to see my score update when I click a cat so that I feel rewarded.
5. As a user, I want the game to end if I don’t reach the goal in time so that I know I lost.
6. As a user, I want the game to display a “You Win!” message if I reach the score before time is up.
7. As a user, I want to restart the game by clicking a “Play Again” button so that I can try again.
8. As a user, I want cats to appear and disappear faster as the difficulty increases so that higher levels are more challenging.
9. As a user, I want the game to place dogs occasionally so that I must avoid clicking them.

Pseudocode:

```
// WHEN user clicks Play button
```

```
// INIT score = 0
```

```
// INIT timer = GAME_TIME
```

```
// INIT strike = false
```

```
// START countdown timer
```

```
// START interval to show/hide cats
```

```
// FUNCTION countdownTimer():  
    // DECREASE timer every second  
    // IF timer reaches 0  
        // CALL endGame()  
        // SHOW "Game Over" message  
  
// FUNCTION randomCatPlace():  
    // REMOVE any existing cats  
    // CHOOSE random cell  
    // ADD cat class to cell  
    // SET timeout to remove cat  
  
// FUNCTION clickHandler(e):  
    // IF strike is true, RETURN  
    // IF e.target is a cat  
        // INCREMENT score  
        // REMOVE cat  
        // IF score >= WINNING_SCORE AND timer > 0  
            // CALL endGame()  
            // SHOW "You Win" message  
    // ELSE IF e.target is a dog  
        // CALL addStrike()  
        // Temporarily disable clicking
```

```
// FUNCTION addDog():  
  // RANDOMLY place a dog in grid where cat is not located  
  // SET timeout to removeDog()  
  
// FUNCTION endGame():  
  // STOP all intervals  
  
// FUNCTION restart():  
  // RESET all variables  
  // CALL play()  
//RENDER the game message to the DOM
```