



# 243 Project

👤 Assign	 Avid Eslami  Jae Gwan Park
📌 Status	This Week
📅 Due Date	@April 10, 2023 23:00
Σ Days Left	Due in : 55 hours
☰ Category	ECE243 School

## Project Operation

1. Load the program onto the DE1-SoC board with the monitor program
2. Upon boot, there is a main menu screen where the user can select a difficulty range using the key switches. key 1 is easiest, key 3 is hardest. Key 0 does not do anything.
3. Once a difficulty level is selected, the user is loaded into the game. The user will guess letters by clicking on the letter on the PS2 keyboard.
  - a. If the input letter is in the hidden word, that letter's position will be revealed. Repeating letters will also be shown.
  - b. If the input letter is not in the word, the letter will be shown in red under a "incorrect guess" list in red. The snowman will slowly deteriorate for every incorrect guess. At 5 incorrect guesses, the snowman will melt, and the user loses the game
4. Upon winning (by guessing all the letters correctly), or losing (incorrectly guessing 5 times), the user will be given either a win/lose screen with audio. The user is prompted to return to the main menu with key0.
5. The user can exit the game level at any time using the key0 button.
6. Total win/loss is not tracked.

# Attribution Table

Jae (50%)	Avid (50%)
<ul style="list-style-type: none"><li>- main menu logic - character drawing helper functions (mapping A-Z in bitmaps) - animation for snowman drawing - show guessed letters - snowman design - draw letters and make it update w r t user input - draw letters that aren't correct to keep track of guesses - add sound to the win/lose scenarios</li></ul>	<ul style="list-style-type: none"><li>- difficulty setting using the key switches on the De1 board (3 difficulties) - restart button - animation for snowman drawing - show guessed letters - game logic (checking characters, filling in the word) - edge capture to make buttons work better - draw letters that aren't correct to keep track of guesses - add sound to the win/lose scenarios - fix snowman not rendering fully when restarting into a different difficulty level</li></ul>