

Simon - TDD

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Summary

This game is based on Lenny Cotes toy, Simon, where a sequence of lights is played and the player has to press on the buttons that correspond to the sequence. The game is played in rounds and the higher the round, the more points scored.

Controls

In the start of the running application the user needs to press **SPACE** in order to start the game.

The **ARROW KEYS** correspond to the on screen buttons.

Objective

Reach the highest round without making a mistake.

Fail

When a key is pressed that was not queued to be pressed, or the timer is up, the game ends the round.

Game States

State	Description	Exit
Start	Prints on screen to tell the user to start the game by pressing "Space". Also prints to the screen text telling the player that they can exit the game by pressing the "ESC" Key.	Main Game - Player presses Space. Exit Game - Player presses the "ESC" Key.
Main Game	Game starts with a timer. For how ever long the timer goes on, the buttons share the timer in playing the sequence. Another timer starts and waits for the players input. If the player does not press the correct sequence of	Exit Game - Player presses the "ESC" Key. Fail State - Player does not press the correct sequence of buttons within the time limit.

	buttons, the game goes into fail state. The user can also get to the exit state by pressing the escape key.	
Fail	The score is tallied by how many rounds had been successfully completed. Player can proceed to the exit state by pressing the escape key. Player is also prompted to press space to restart the game at round 1.	Main state - Player presses the spacebar. Exit State - Player presses the escape key.
Exit	Quits the application.	No getting out of this one.

Implementation Plan & Actual Times

	UI	Coding	UI(Actually Finished)	Coding (Actually Finished)
Start State	04-05-2019 17:00	05-05-2019 17:00	07-05-2019 17:00	07-05-2019 17:00
Main State	20-05-2019 17:00	20-05-2019 17:00	29-05-2019 17:00	29-05-2019 17:00
Fail State	20-05-2019 17:00	20-05-2019 17:00	29-05-2019 17:00	29-05-2019 17:00
Exit State	04-5-2019 17:00	04-05-2019 17:00	04-05-2019 17:00	04-05-2019 17:00