DA3 Shady

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TO Dr. Ruwayda Takchi

CSC 312

MIPS Project

Notre Dame University

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Story of the Game:

Shady is lost, he needs to find his family. He must jump through all the platforms to reach them.

Can you help him?

The game is inspired by Fayrouz's Hit song "Shady"

LINK: https://youtu.be/D7AjOZctfTA

Bitmap Configuration:

- Unit width in pixels: 8
- Unit height in pixels: 8
- Display width in pixels: 256
- Display height in pixels: 256
- Base Address for Display: 0x10008000 ($gp)

Running The Game:

Make sure to have the **bitmap display** connected to MARS with the configuration above along with the **Keyboard and Display MMIO simulator**.

Playing The Game:

- Press "D" to move right.
- Press "A" to move left.

IMPORTANT WARNING: Don't Hold/Long press A or D because MARS will crash.

- Don’t fall off the platforms or you’ll fall in the lava which will kill Shady.
- The platforms get smaller with time.
- Score will be displayed at the top left while in the game, and the end score will also be displayed at the end, along with the hit line of the song “Da3 Shady” with its music.

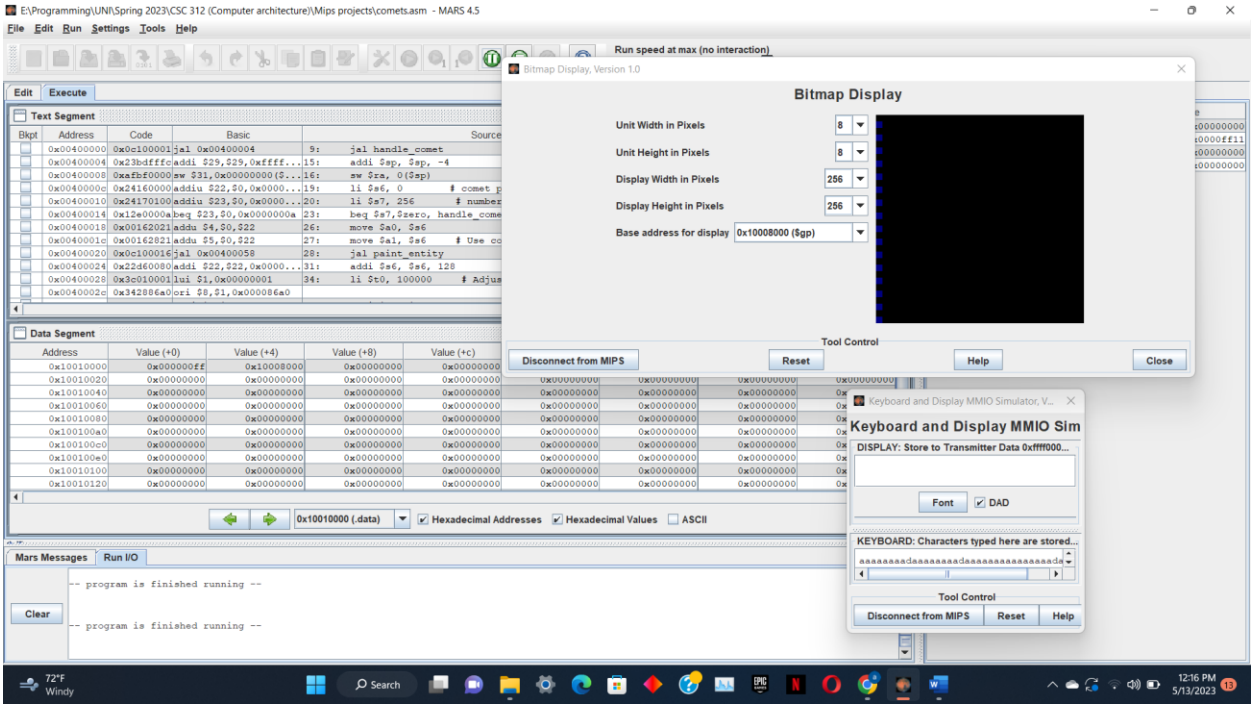
How the Work was split:

Difficulty updates with the related procedures was done by both of us.

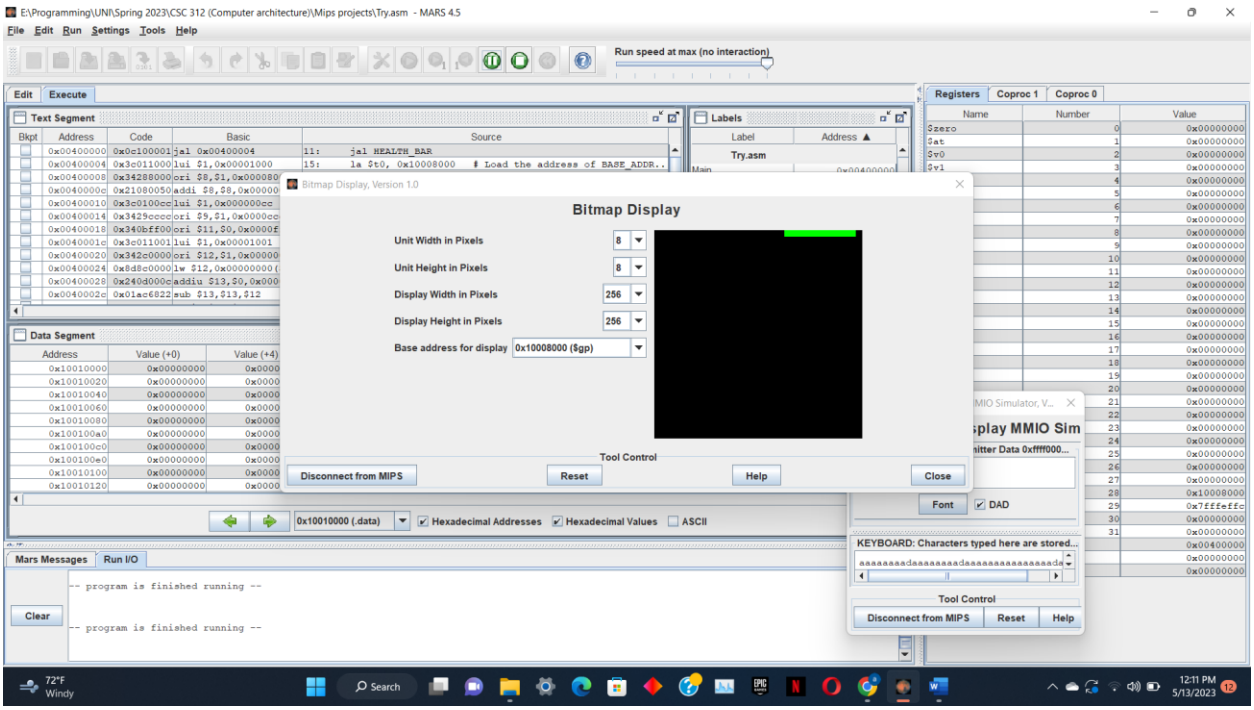
- Anthony Lahoud:
  - Game Score Display
  - Game Score Calculation
  - End score Display
  - End Message Display
  - Background Color
  - End of the program (Death of player)
- Anthony Nasry Massaad:
  - Sprite and its movement
  - Music
  - User Input
  - End Background (Lava)
  - Lava at the bottom of the screen
  - Platforms

Things we tried that didn't work:

- We tried to do comets that fall from random places, but We weren't able to erase their trace



- We tried making a health bar, we succeeded but we weren't able to add it to our program



- We made an animated background in which the lava's color is constantly shifting from red and yellow to their derivatives. We couldn't show it because the function that paints the background is continuously updating, therefore it isn't returning to the caller function, thus the program isn't reaching the functions that paint the sprite and platforms. If we include an exit condition, the background won't show but will paint the sprite and platform.