

NAME OF GAME : **Libre Jump**

## **Team Members (GROUP-17)**

1. Ayushmaan Singh (IMT2020126)
  2. Sriram Munagala (IMT2020030)
  3. Anand Prakash (IMT2020040)
  4. Sathvik I Bhat (IMT2020009)
  5. Yash Koushik Kocherla(IMT2020033)
- 

## **Contributions :**

### **1.Ayushmaan Singh :**

Implemented the game loop, including making the game window, rendering textures and updating it every cycle.

## 2. Sriram Munagala :

Implemented the main menu which appears at the starting of the game, rendering the main menu options and screen, and finally assembling all the classes of different members.

## 3. Anand Prakash :

Implemented the leader board feature, rendering leader board texture and stored the top scorer results into a file and updating it every time as the game ends.

## 4. Sathvik I Bhat :

Adding textures to main game loop, added sprites to different elements like ninja, walls and obstacles. Helped in rendering objects on the screen. Controlled game animations. Implemented Makefile and VSync functionality.

## 5. Yash Koushik Kocherla :

Implemented the main game loop in coordination with another team member (Ayushmaan Singh).

---

# **Features of the game :**

## **Main menu ( consists of 4 buttons )**

- 1.Play : Takes the user into the game.
- 2.Score : User can see the the top 3 scorers before playing the game and return back to game .
- 3.Settings : User can change the difficulty level of games as per convenience, user has leverage to choose between easy, medium and difficult levels.
- 4.Quit : User can exit the game.

## **Game :**

It has obstacles coming from above on both sides in random manner and player has to save himself from those obstacles by flipping sides. If the user hits any of obstacles then the game will be over.

## **Exit menu :**

Shows the final score of player .

---

# Instructions to run the game

- Download zip folder
- Use make command to compile
- Now run ./game to run the game.

```
amadeus@HP-Omen-15:~/_main_/LibreJump2.0-main/LibreJump2.0-main$ make
g++ -c -w -I ./inc ./src/main.cpp -o main.o
g++ -c -w -I ./inc ./src/Game.cpp -o Game.o
g++ -c -w -I ./inc ./src/GamePlay.cpp -o GamePlay.o
g++ main.o Game.o GamePlay.o -lSDL2 -lSDL2_ttf -lSDL2_image -o game
amadeus@HP-Omen-15:~/_main_/LibreJump2.0-main/LibreJump2.0-main$ ./game
NVD3D10: CPU cyclestats are disabled on client virtualization
NVD3D10: CPU cyclestats are disabled on client virtualization
```

Note: User need to have installed libraries such as SDL,SDL\_image,SDLTTF .

---

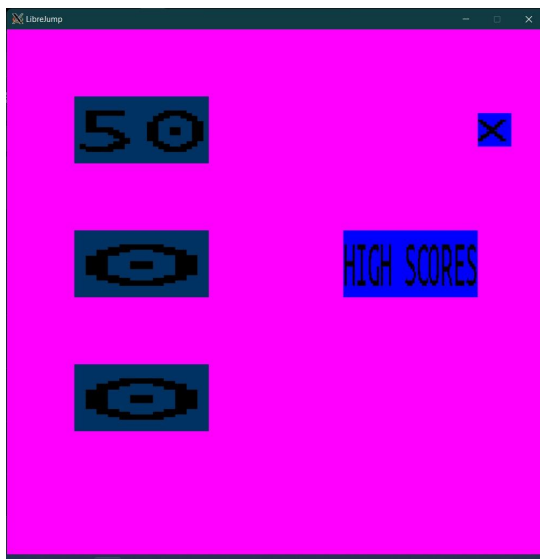
# Screenshots

## Main menu:(which appears first )



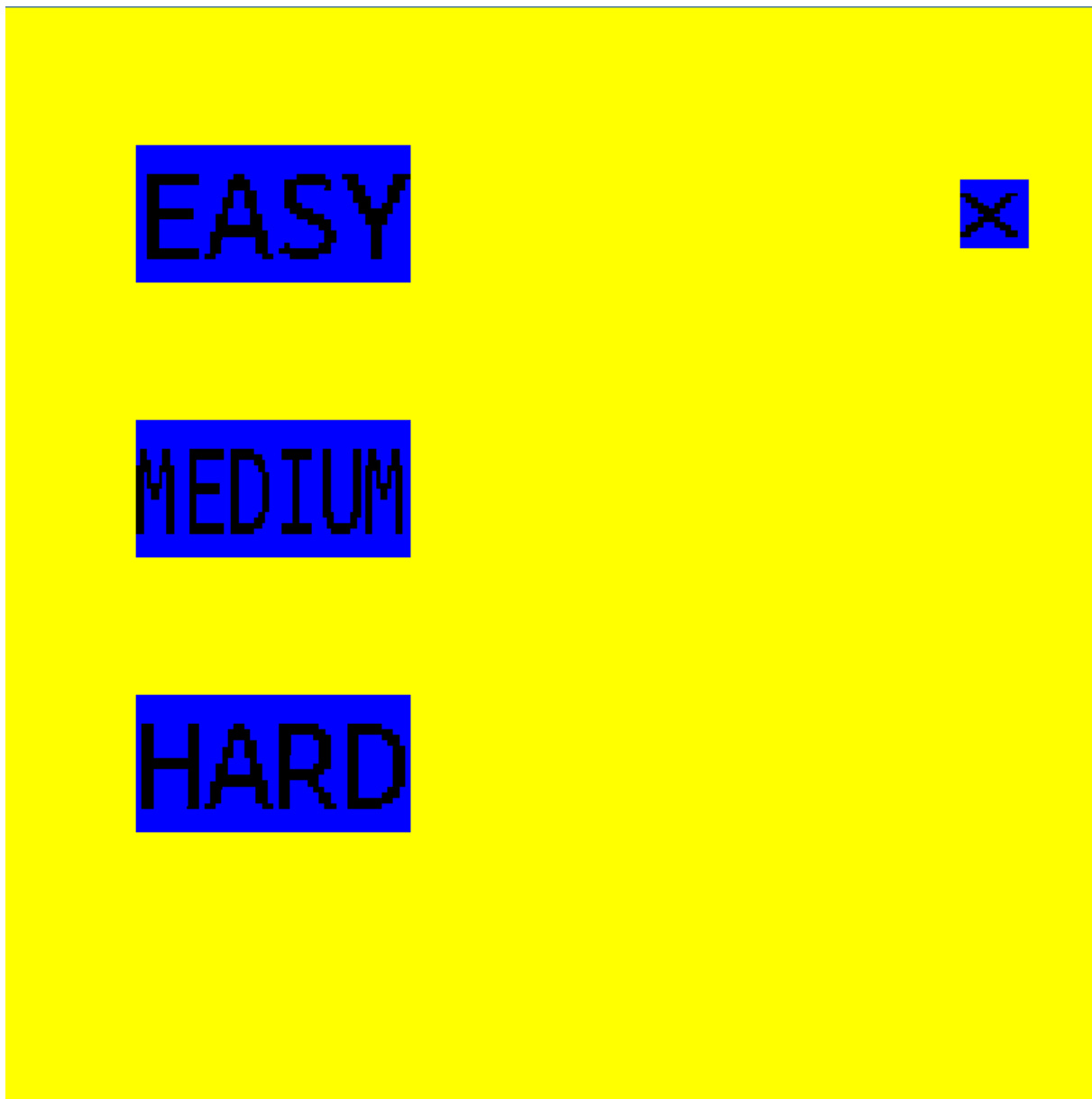
Note: x button corresponds to quitting the game.

## Score button :



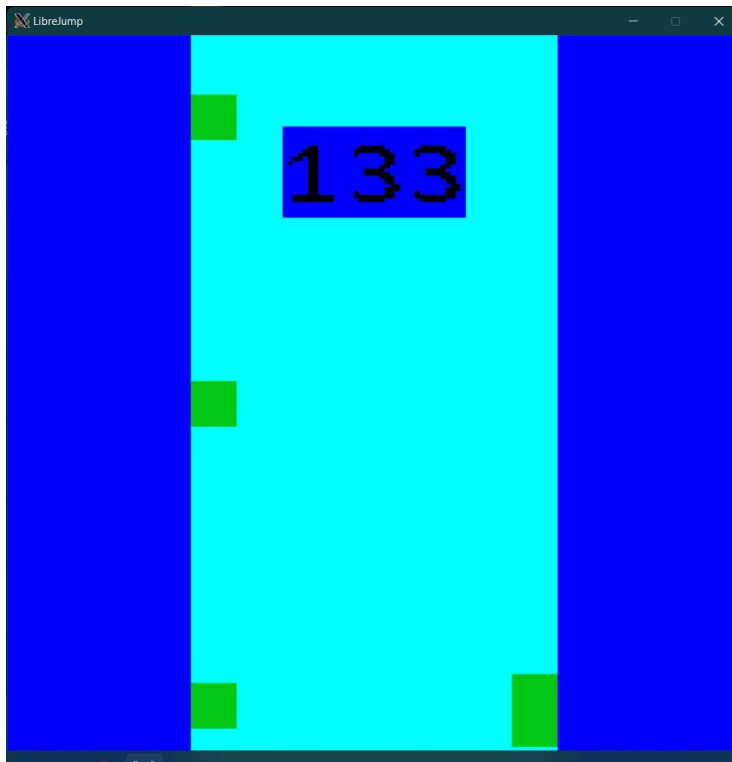
Top 3 scores in the game overall.

Settings button :



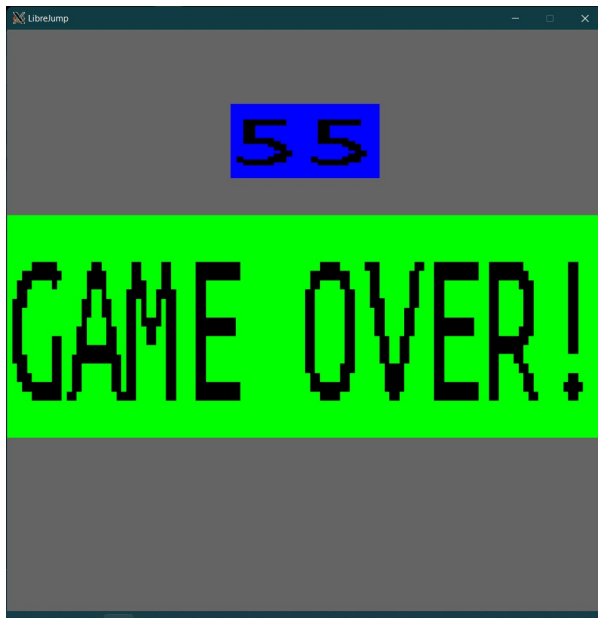
To choose the difficulty of the game.

GAME loop :(after pressing play)



Note: bigger block is our player and smaller blocks are upcoming obstacles.

**Final Screen (showing our final score):**



-----

# **Controls of game and instructions:**

**Main menu:** It has complete mouse interface, user can click on buttons as required to choose among 4 options.

**Game loop:** It has complete keyboard interface, user can flip the sides using the right and left arrow keys in order to dodge obstacles.