

# Deep Space User Manual

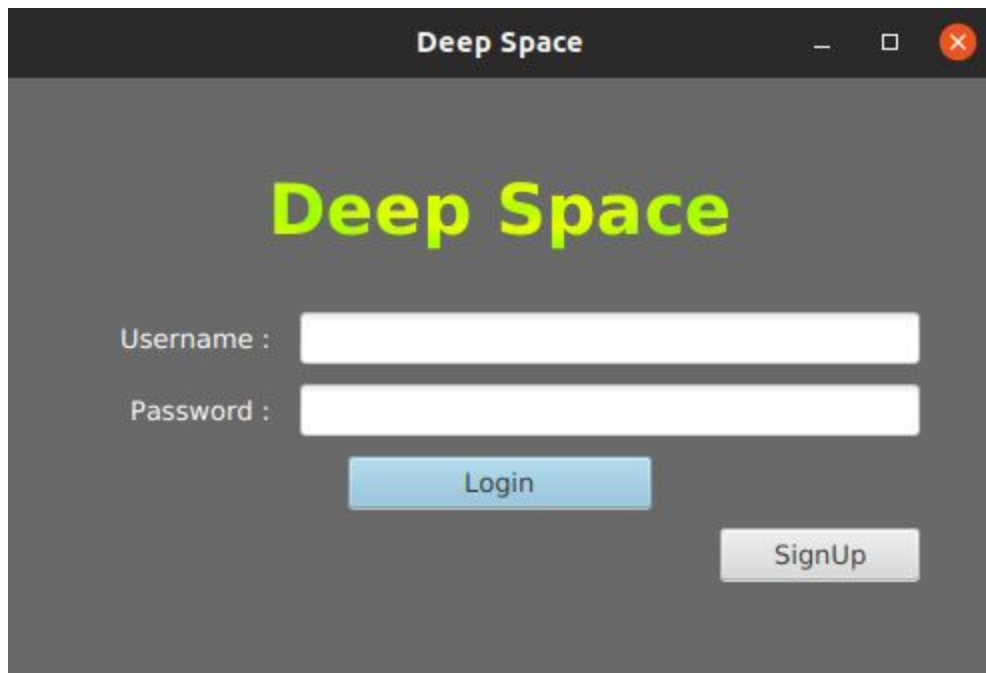
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# 1. Introduction

In this document, we'll basically explain the gameplay and specific properties of the game in a step-by-step manner. We'll try to cover everything including details about objects and game levels from beginning to the end. In other words, the user will be able to register the game and play it without any problem after following this guideline.

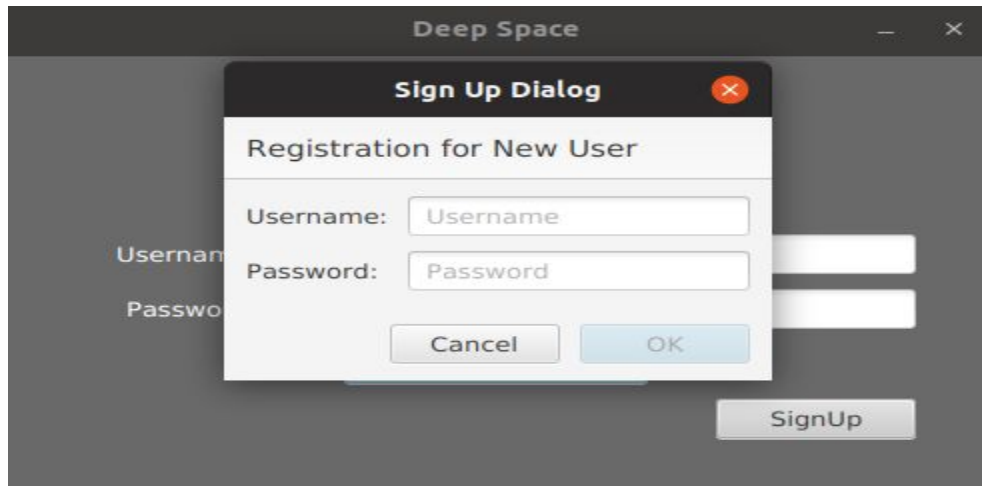
## 2. Login and Sign up Screen

The user will first encounter the login and sign up screen when s/he enters the game. If it is the first access to the game, s/he will have to sign up and get a username and a password for the future logins.



**Figure 1:** Login and sign up screen

The user can login the game by typing the username and the password as it can be seen in Figure 1.

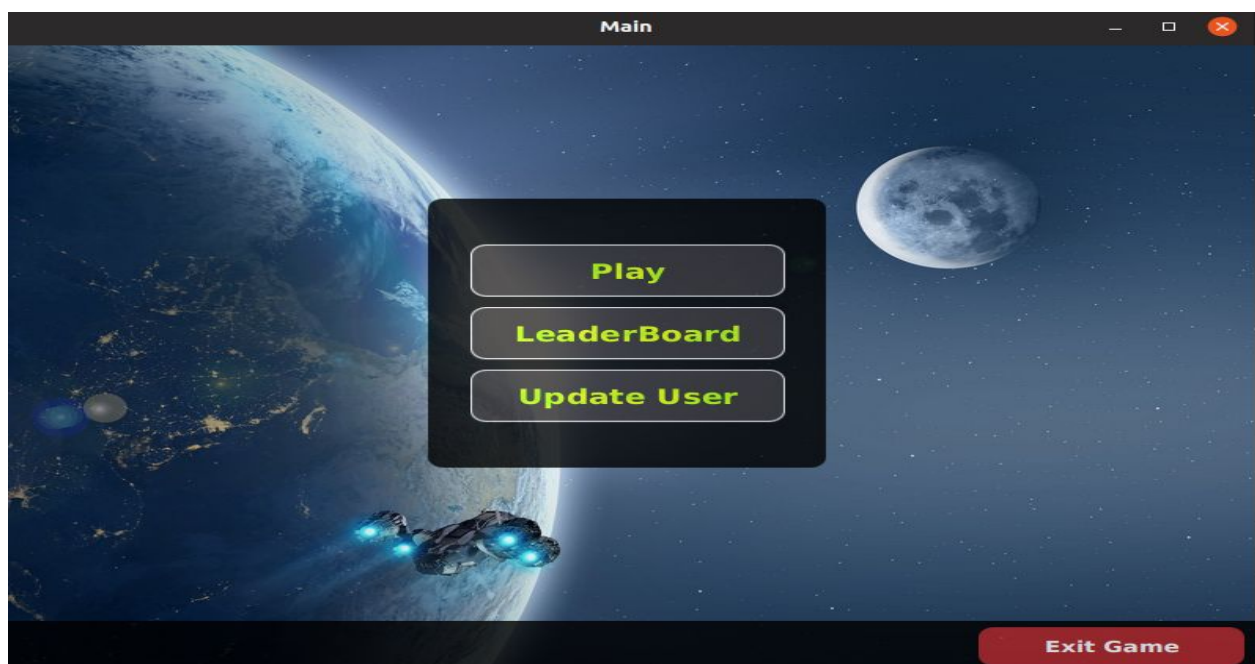


**Figure 2:** Sign Up Window

If the user clicks on the signUp button, a new window will be opened for registration. After typing the desired username and password, this user (username and hashed version of the password) will be saved to the database for upcoming logins.

### 3. Main Screen

After completing the registration process, the user will proceed to the main screen of the game.



**Figure 3:** Main Screen

As it can be seen in Figure 3, main screen has four buttons which are play, leaderboard, update user, and exit game button.

- **Play:** Starts the game.
- **LeaderBoard:** Opens the leaderboard screen.
- **Update User:** The user can change his/her password after clicking this button.
- **Exit game:** Returns to the login and sign up screen.

## 4. The Game

### 4.1. Objects

#### 4.1.1. Spaceship

It is the most important object of our game. The player controls it by moving it freely using a mouse. Its most crucial feature is auto-firing.

- Health points (HP) = 20, Damage = 10.

#### 4.1.2. Aliens

There are 4 types of aliens in the game which are:

- **Easy Alien:** Health points (HP) = 3, Reward = 10, No damage. Moves vertically.
- **Medium Alien:** Health points (HP) = 7, Reward = 30, No damage. Moves vertically.
- **Hard Alien:** Health points (HP) = 15, Reward = 100, Damage = 3. Moves vertically.
- **Boss Alien:** Health points (HP) = 500, Reward = 1000, Damage = 6. Moves horizontally.

Easy alien and medium alien don't have a shooting feature. On the other hand, hard alien and boss alien can shoot furiously (Careful with them!).

#### 4.1.3. Bullets

There are 2 types of bullets in the game:

- **User bullet:** Bullet of the spaceship.
- **Alien bullet:** Bullet of hard alien and boss alien. Boss alien's bullet has more damage.

### 4.2. Levels

There are 5 levels in the game. First four levels are single player levels and the last level is a multiplayer level played with two players.

A player has to destroy **all of the aliens** to pass each level. If it gets destroyed by the aliens, the game will be over. It will be directed to the leaderboard screen either wins or loses the game.

**Cheat:** If the user presses **ctrl+shift+9** combination, level will be passed regardless of the state of the game. (**NOT** valid in multiplayer level.)

- **Level 1:** Only easy aliens reside in this level.
- **Level 2:** Only medium aliens reside in this level.
- **Level 3:** Hard aliens reside in this level and they can shoot as we mentioned earlier.
- **Level 4:** Both hard and easy aliens reside in this level. It's a more crowded level because of the existence of easy aliens along with hard aliens.
- **Level 5 (Multiplayer):** A single boss alien resides in this level. Last and hardest level of the game. If the boss alien gets killed by either of the players or it kills **one of the players**, the game will be completed for both sides. If a player gets killed by the boss alien s/he loses the game **even if s/he has a higher score**. In addition, the scoring mechanism is implemented according to specifications given in the term project document. In other words, two players share the boss alien's reward according to the amount of hits made by each and the player who destroys the boss alien, i.e., who makes the last shot gets **extra 250 points**. Eventually, the player with the higher score wins the game.

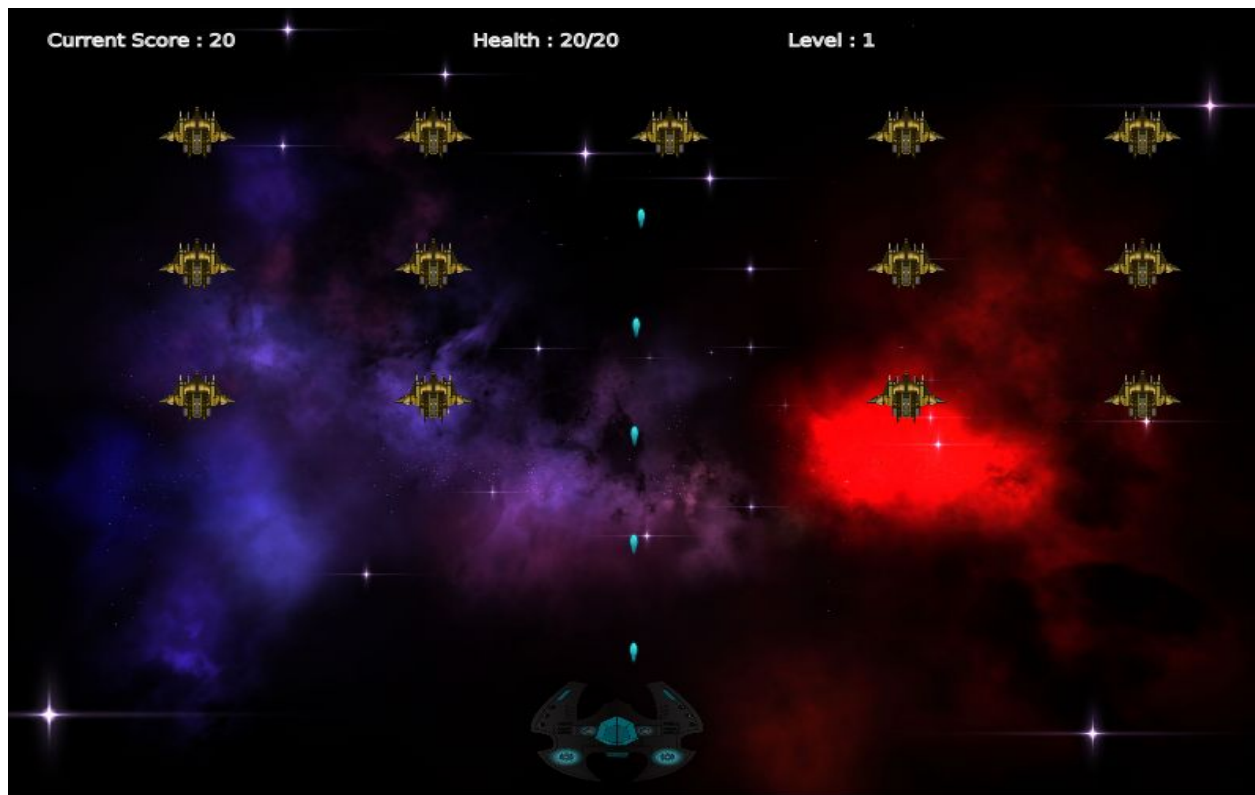


Figure 4: Level 1

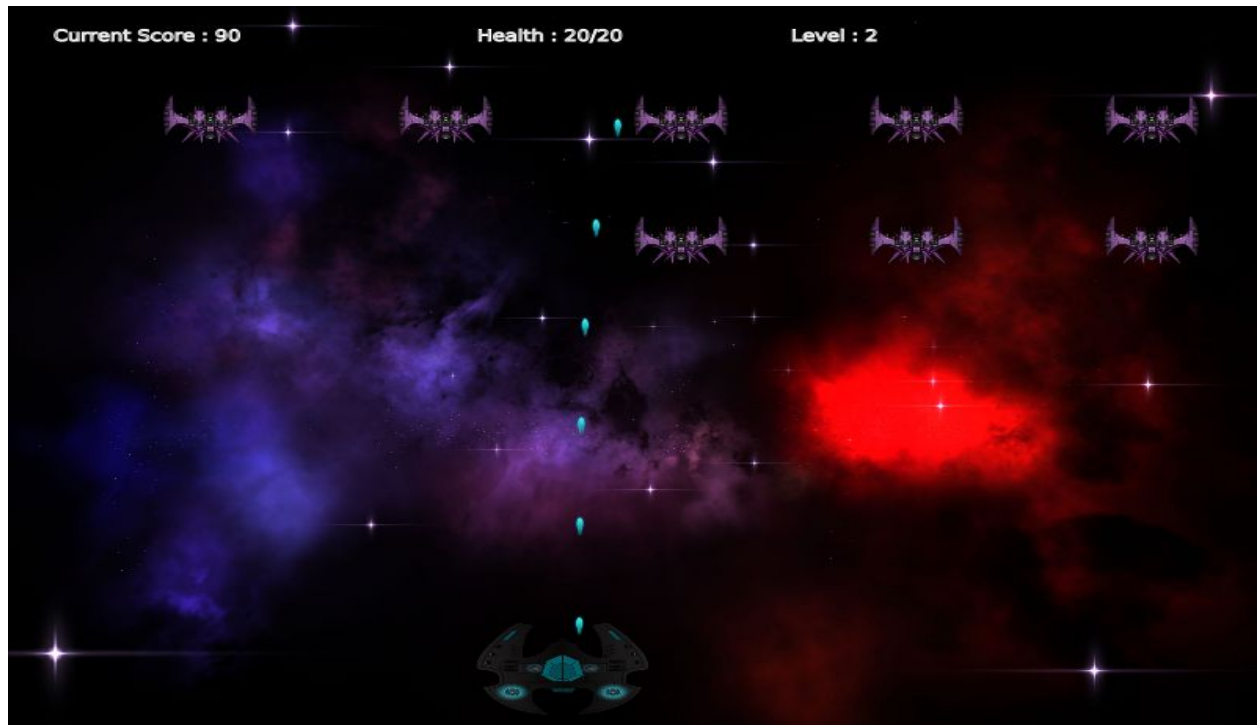


Figure 5: Level 2

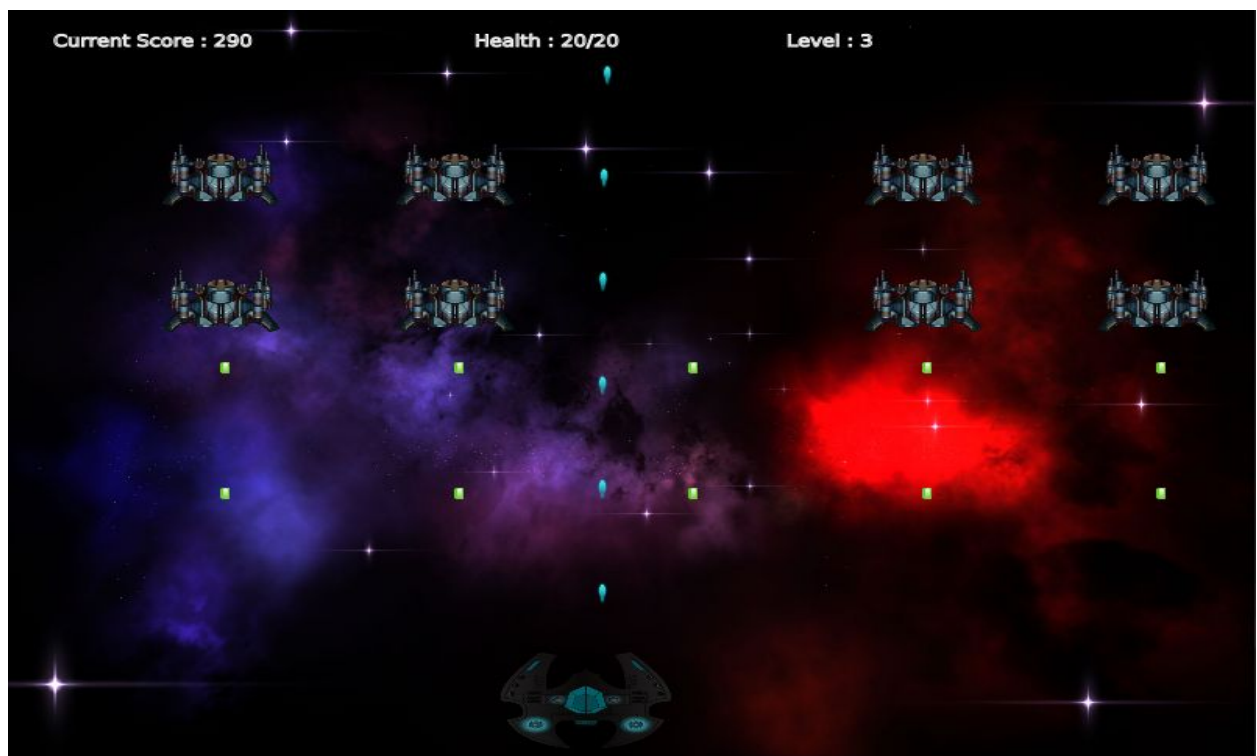


Figure 6: Level 3



Figure 7: Level 4

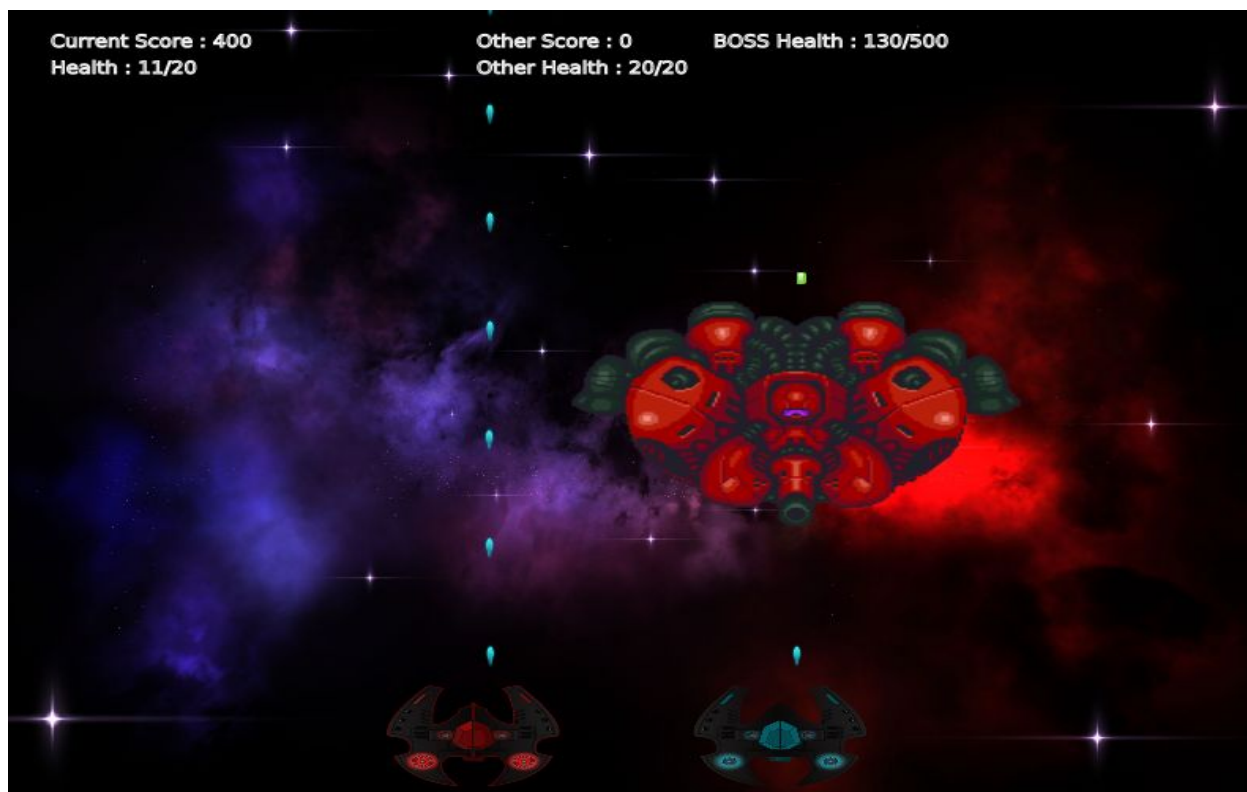


Figure 8: Level 5 (Multiplayer level)



### 4.2.1 Game Over Cases

Game is over, i.e., the user **loses the game** regardless of the game level if:

- An alien and the spaceship collides with each other.
- An alien reaches the bottom of the screen. (This item is valid for single player game levels.)
- The spaceship's HP drops below zero.

### 4.3. Leaderboard

As we have mentioned earlier, after completing the game levels the player will see the leaderboard and s/he will be able to see weekly, monthly and all time lists by clicking on the corresponding buttons as we can see in Figure 9, below. Only the **maximum score** of each user will be saved to the database for storage purposes. If s/he makes a new high score the database will be updated, otherwise it will stay as is.

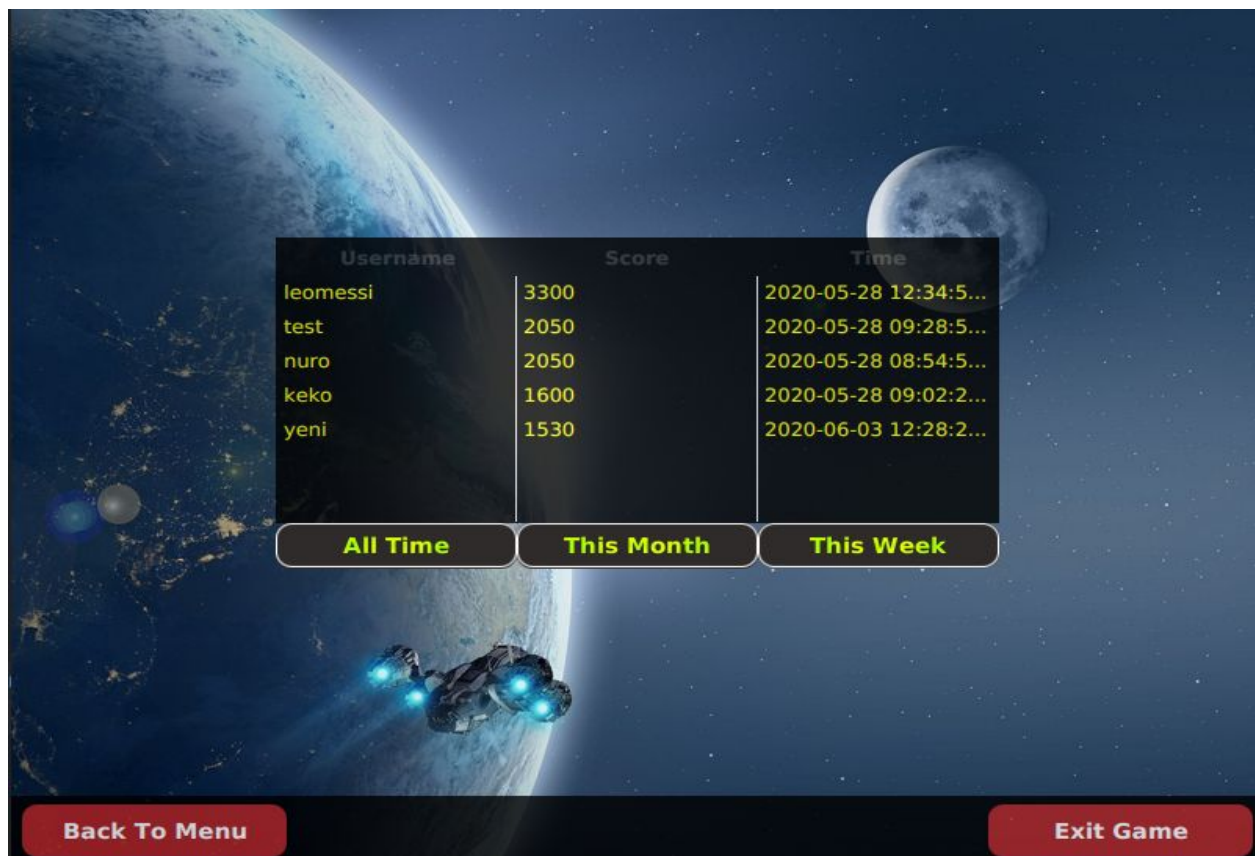


Figure 9: Leaderboard