

# Deliverable 03

## 1. Project Scope

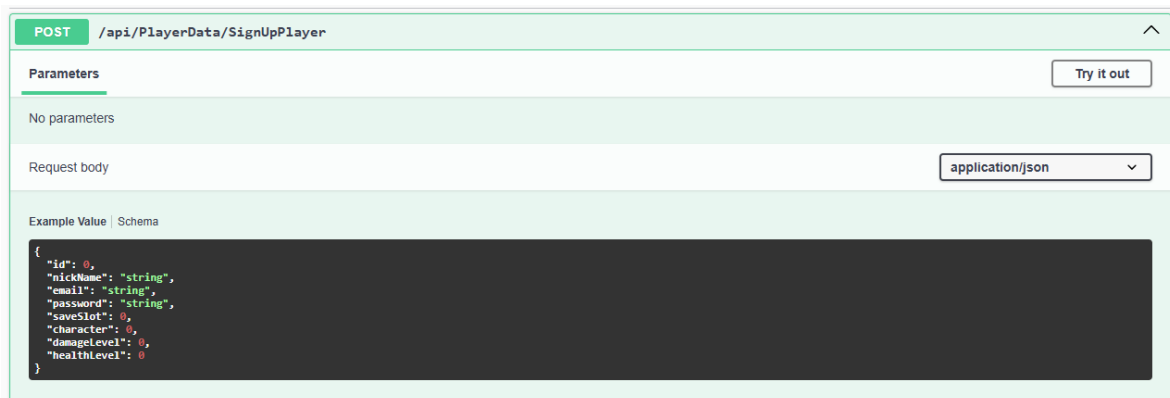
This game, even it's a playable game, it lacks good design so this game can be use more principally as a demo. I combine two unique game genders principally to see how they can work together so more than search for upload the game to the online stores, this game can be used to use as a speech to search for investors or as a good portfolio project. If searching for investors is the way, it'll be necessary to design the game correctly and work in the correct detection of the music.

## 2. Project Functionalities

### REST API

#### - SignUpPlayer

This command inserts 3 new rows in the database with the same login info from the player (nickname, email, password), the difference is the game data (save slot number, character selected, damage level and health level).



#### - GetAllGamesPlayerData

This is the command we used to obtain all the data from the player, a List of 3 save slots data.

GET

/api/PlayerData/GetAllGamesPlayerData/{email}

⌵

Parameters

Try it out

Name	Description
email * required string (path)	<input type="text" value="email"/>

## - SaveGameData

This is the command we used to save the data in the correct game slot. We updated just the info of the game (character selected, damage level and health level).

PUT

/api/PlayerData/SaveGameData

⌵

Parameters

Try it out

No parameters

Request body

application/json

Example Value | Schema

```
{
  "id": 0,
  "nickName": "string",
  "email": "string",
  "password": "string",
  "saveSlot": 0,
  "character": 0,
  "damageLevel": 0,
  "healthLevel": 0
}
```

## - DeleteGameData

This command more than delete the row in the database, delete the game data in the correct save slot. Returning the game values to the default values.

DELETE

/api/PlayerData/DeleteGameData

⌵

Parameters

Try it out

No parameters

Request body

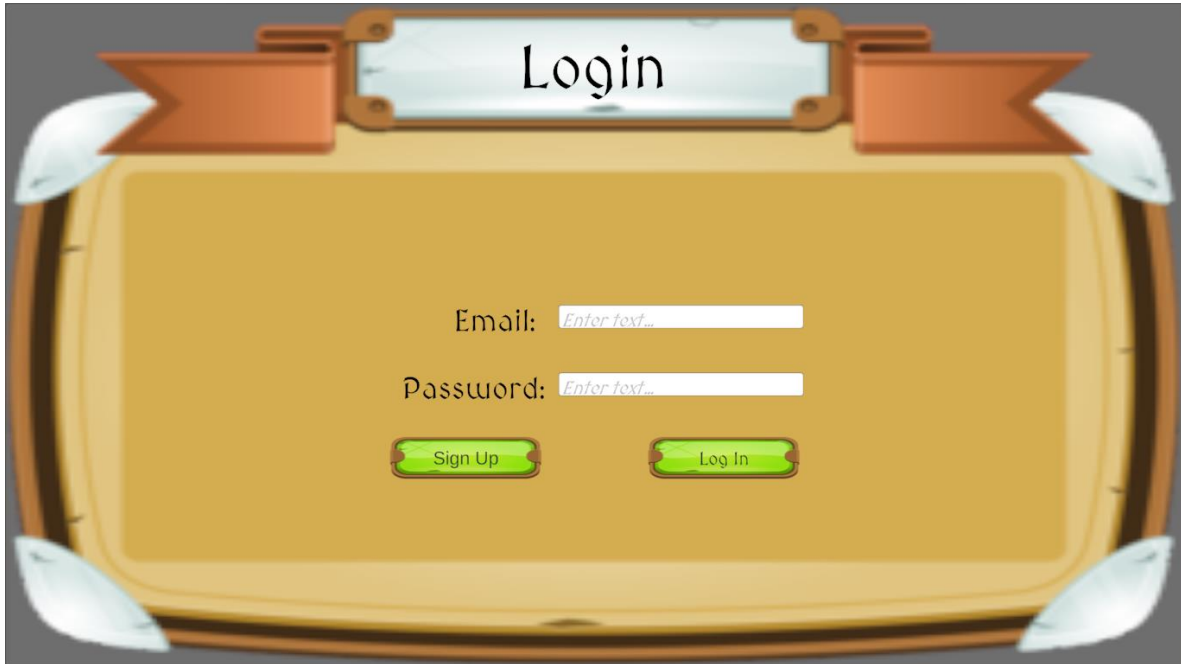
application/json

Example Value | Schema

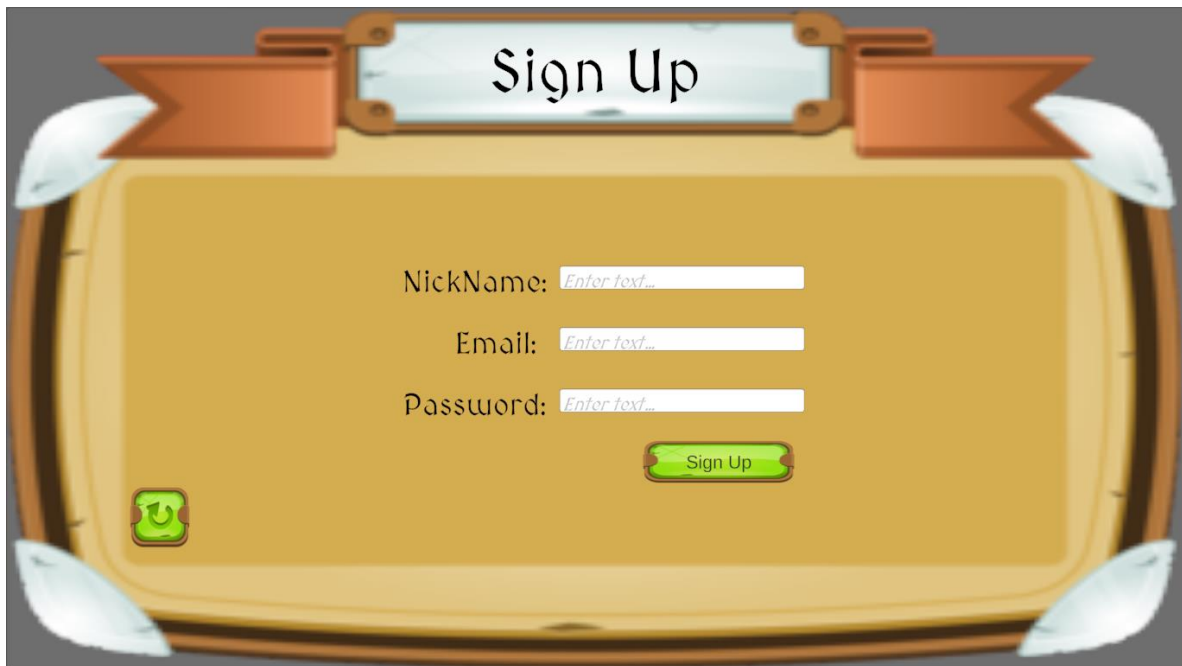
```
{
  "id": 0,
  "nickName": "string",
  "email": "string",
  "password": "string",
  "saveSlot": 0,
  "character": 0,
  "damageLevel": 0,
  "healthLevel": 0
}
```

## GAME

Our first screen in the game is the login screen, you need to write your email and your password to login in. If the player doesn't have an account, there is a sign-up button to go the sign-up screen.



The sign-up screen asks you for a nickname, email and password. There is also a return button to return to the login in screen.



Sign Up

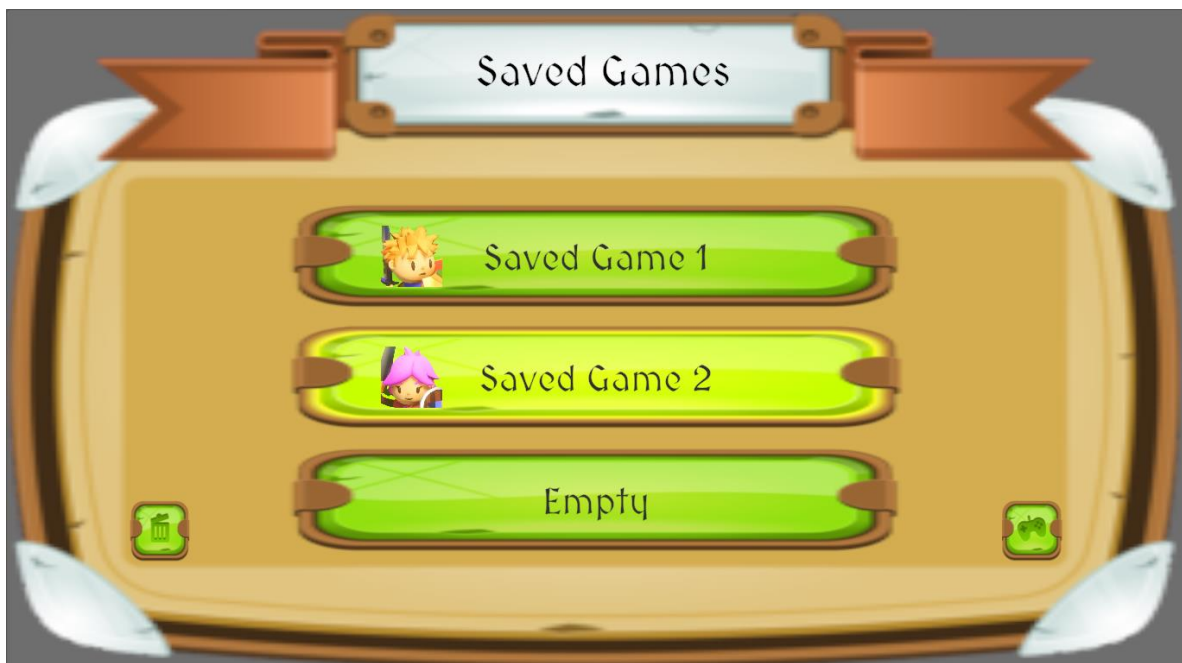
NickName:

Email:

Password:

The 'Sign Up' screen is designed to look like a wooden chest with a light blue title bar at the top. It features three text input fields for 'NickName', 'Email', and 'Password', each with a placeholder text 'Enter text...'. A green 'Sign Up' button is positioned below the password field, and a small green square button with a white arrow icon is located in the bottom-left corner.

When you insert your credentials correctly, you go to the save slots screen. Here depending in the data obtained from the database the button change. If you click in one game saved you get the option to load the game or to delete it. When you click in the empty slot it takes you to the character selection screen.



Saved Games

The 'Saved Games' screen also has a wooden chest aesthetic with a light blue title bar. It displays three green buttons representing saved game slots. The first two buttons, 'Saved Game 1' and 'Saved Game 2', each feature a small character icon on the left. The third button is labeled 'Empty'. In the bottom-left corner, there is a green square button with a white trash can icon, and in the bottom-right corner, there is a green square button with a white plus icon. A small green square button with a white arrow icon is located in the bottom-left corner.

In the character selection screen, you need to select one of the 2 characters available. There is a button to return to the save slots screen. Once you select the character it takes you to the main menu.



In the main menu, you have your character selected in screen with the basic controls. The play button starts the game and the quit button close the application saving the data of the game in the database.



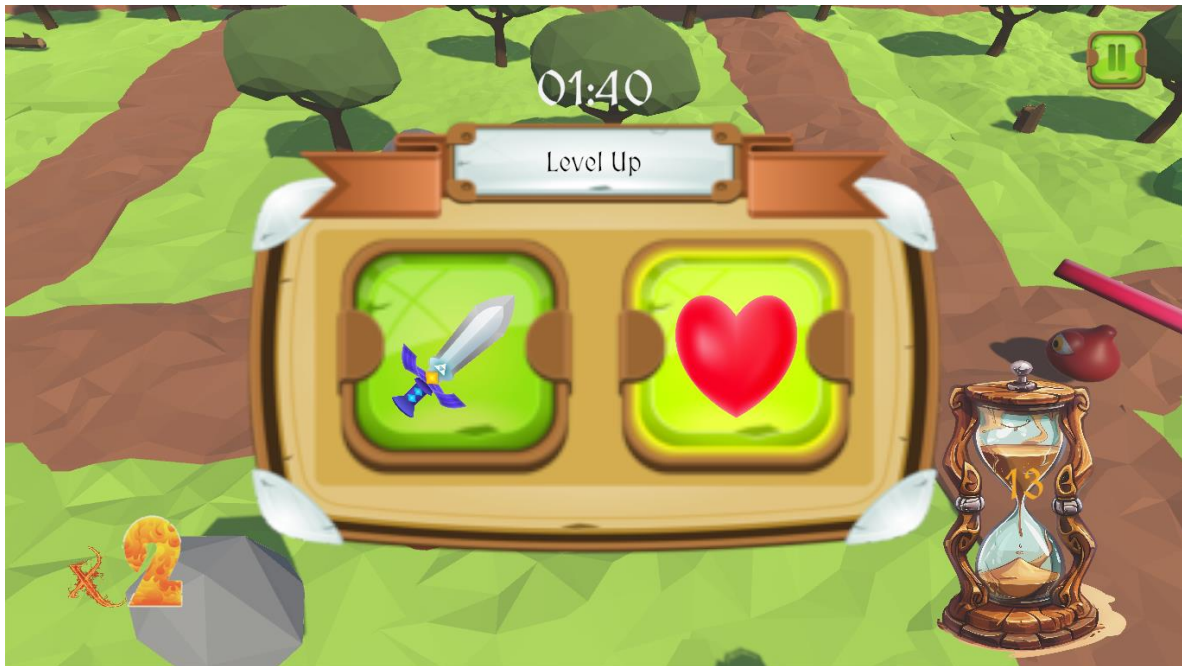
If you are starting a new game, a screen of little instructions appears. If not, the game starts immediately. In the game, you need to follow the rhythm of the music when you assert the tempo you augment your hit counter. The hit counter turns the multiplier exp depending on the total hits.







Every 100 exp, you level up and give you to options: level up your damage or level up your health. Level upping your health increase your max health and heals you the current health level you have.



When you reach the 5 min of the game, the final boss appears. This enemy has a lot of health and damage, it'll take the player multiple runs to defeat him.





When your health goes to 0 you lose the game, when you defeat the final boss, you win the game. In both screens your data is save in the database. Both screens have two buttons, one to return to the main menu to play again and other to close the game.



### 3. Project Setup

Setup the project isn't hard, but you'll need some software previously installed (Visual Studio and SQL Server).

First requisite is had ready the SQL Server and the table where the data is storage. For that in the project folder is a SQL folder with a query and a backup file to setup the database.

📁 RhythmicSurvivor	8/1/2024 10:57 AM	Carpeta de archivos	
✓ 📁 SQL	8/1/2024 12:21 AM	Carpeta de archivos	
📄 README.md	5/31/2024 5:58 PM	Archivo de origen ...	2 KB

Nombre	Fecha de modificación	Tipo	Tamaño
📄 AppDevDB.bak	7/31/2024 11:59 PM	Archivo BAK	5,812 KB
📄 TableQuery.sql	7/23/2024 1:25 PM	ssms.sql.20.0	1 KB

After this, you'll need to run the GameAPI Project using Visual Studio. This project will open a internet window with the REST API commands that the game going to use to get and save the data. It's important to let this project running in the background when you're playing the game because you won't be able to run the game.

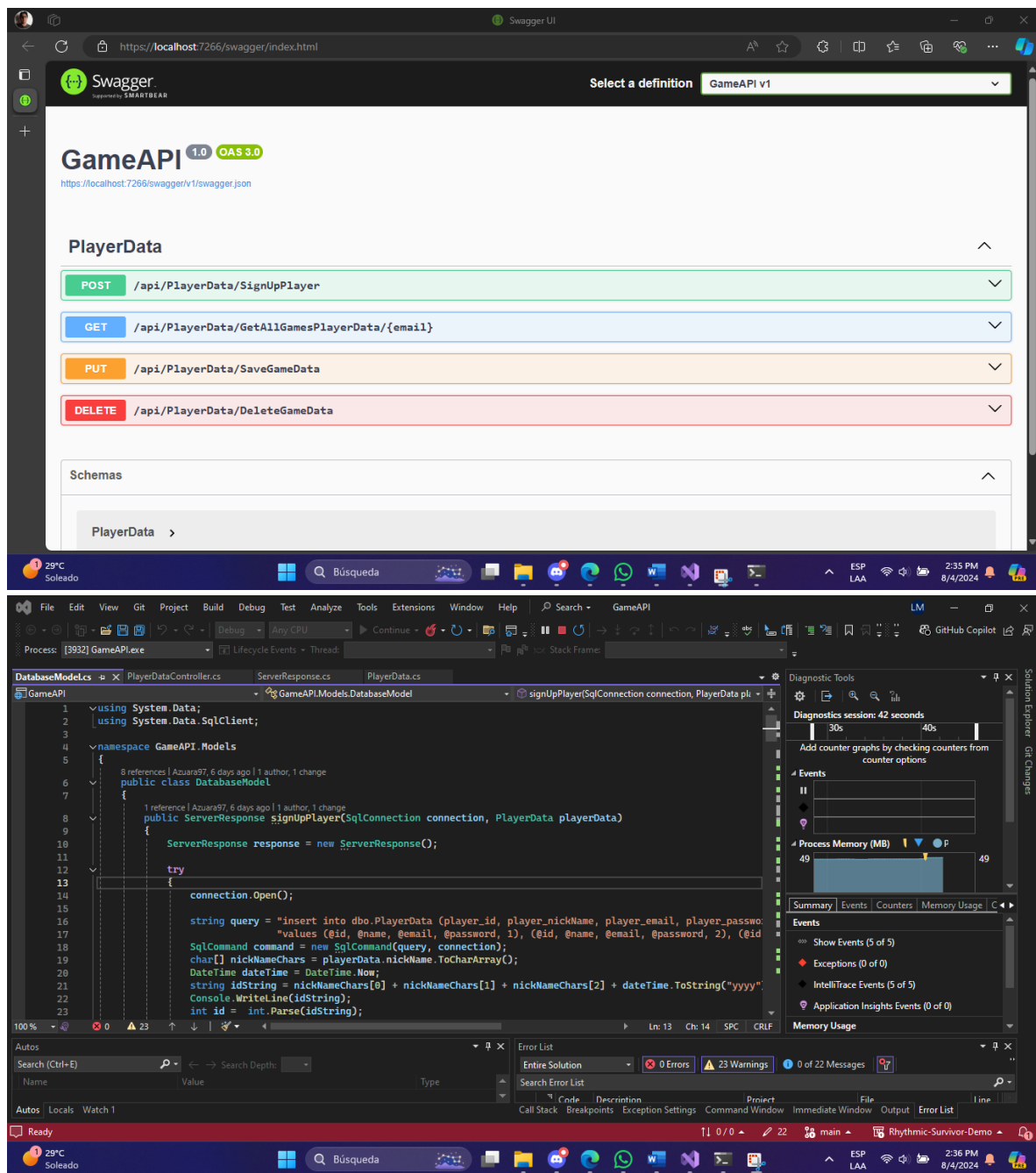
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GUIAssets	7/29/2024 4:13 AM	Carpeta de archivos	

.vs	7/25/2024 2:21 PM	Carpeta de archivos	
bin	7/25/2024 9:38 AM	Carpeta de archivos	
Controllers	7/29/2024 2:09 AM	Carpeta de archivos	
Models	7/29/2024 2:34 AM	Carpeta de archivos	
obj	7/25/2024 9:54 AM	Carpeta de archivos	
Properties	7/25/2024 9:38 AM	Carpeta de archivos	
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appsettings.json	7/25/2024 10:40 AM	Archivo JSON	1 KB
GameAPI.csproj	7/25/2024 11:42 AM	VisualStudio.Laun...	1 KB
GameAPI.csproj.user	7/25/2024 9:38 AM	Per-User Project O...	1 KB
GameAPI.http	7/25/2024 9:38 AM	Archivo HTTP	1 KB
GameAPI.sln	7/25/2024 9:38 AM	Visual Studio Solu...	2 KB
Program.cs	7/25/2024 9:38 AM	Archivo CS	1 KB

```
1 using System.Data;
2 using System.Data.SqlClient;
3
4 namespace GameAPI.Models
5 {
6     public class DatabaseModel
7     {
8         public ServerResponse signUpPlayer(SqlConnection connection, PlayerData playerData)
9         {
10             ServerResponse response = new ServerResponse();
11
12             try
13             {
14                 connection.Open();
15
16                 string query = "insert into dbo.PlayerData (player_id, player_nickname, player_email, player_password, pla
17                             "values (@id, @name, @email, @password, 1), (@id, @name, @email, @password, 2), (@id, @name
18                 SqlCommand command = new SqlCommand(query, connection);
19                 char[] nickNameChars = playerData.nickname.ToCharArray();
20                 DateTime dateTime = DateTime.Now;
21                 string idString = nickNameChars[0] + nickNameChars[1] + nickNameChars[2] + dateTime.ToString("yyyy");
22             }
23         }
24     }
25 }
```

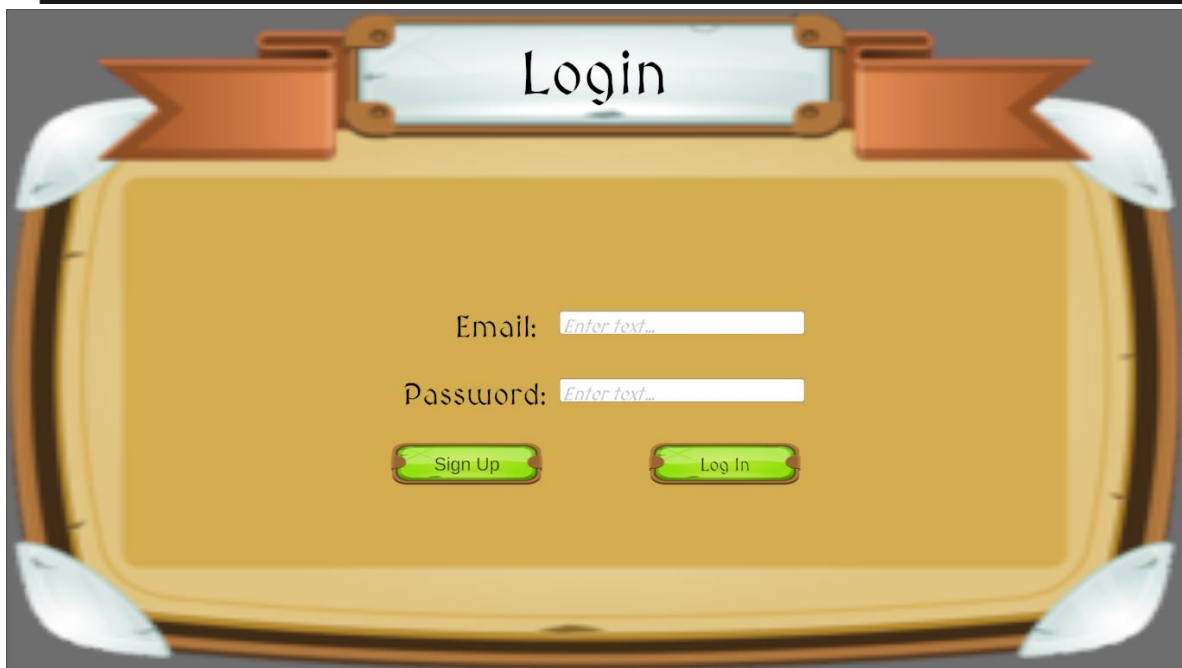
## REST API Running



Finally, when you have the REST API running you just need to run the .exe file of the game in the Builds folder. This will open the compiled version of the game without using the game engine Unity.

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	MonoBleedingEdge	7/31/2024 11:52 PM	Carpeta de archivos	
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	UnityCrashHandler64.exe	7/31/2024 11:52 PM	Aplicación	1,087 KB
	UnityPlayer.dll	7/31/2024 11:52 PM	Extensión de la ap...	30,258 KB



#### 4. Work Progress in the Future

This game has a lot of options to work in the future, especially in the game design. Implementation of more weapons, more characters, more upgrades are the principal options to take in consideration. Also adding more enemies, maps and sounds could bring the game to next step. More technically speaking, explore more options to work with the BPM of the music and how the input of the hit is programmed can be a big improve in the usability and experience of the player.