## **HAYDE BRE:**

# A WRESTLING MANAGEMENT SIMULATION GAME BY "ER MEYDANI" WITH PYTHON

#### PROJECT DETAILS

#### a. Content Details

Hayda Bre is a Wrestling Management Simulation Game like many other football and other sport management games except having its own features and gaming experience.

Game will start with choosing a team, with 5 wrestlers. After transfers and signing contracts with players, the season will start. Matches will be played with same weighted wrestlers. The player will manage team, arrange practices of players, and even may throw in the towel during the match.

Game will have features such as displaying the highlights of matches instantly, score history, fixtures, transfer lists, practices, saving/loading games.

#### b. Technical Details

Here are the features that will be used in project:

<u>Python:</u> The reason of using Python Scripting Language is its features such as being *relatively* new language, easy to research and to find resources and possibility to create Desktop applications.

<u>Qt Designer:</u> Qt Designer is a pliancy tool to create layouts for Desktop applications with features both writing code and drag-drop speciality. It is a part of the widely used UI framework Qt.

<u>PyQt</u>: PyQt is a Python binding of the cross-platform GUI toolkit Qt. It is used in the project to make connection between Python code and layout.

<u>SQLite</u>: SQLite is a lightweight relational database management system that can be used with many programming languages. It has lots of advantages such as requiring no server, hosting datas in a single file, being compact and tiny.

Each menu in the game will have its own layout that will be designed with Qt Designer. All datas and user profiles will be stored and processed in the SQLite database.

Simulation engine will produce the match results after analyzing the datas of properties of each players.

#### WHY IS THIS PROJECT CHOSEN?

Designing a desktop application with Python will be a new experience for each of us in the group. Simulation engine produces the result after analyzing the datas. We decided to create a simulation engine to gain experience about processing datas.

Football and many other sports management games exist for years. After realizing the lack of this game type, we decided to choose wrestling. Thinking of our ancestor sport to find a place in game world, and creating awareness will also caused us to choose this project.

#### **PROJECT GOALS**

<u>In Technical Perspective:</u> To learn and find a chance to use Python language which has a large area of usage, using this language with plenty tools and frameworks. Using this tools and frameworks in a flexible way and trying to solve the problems we will face.

<u>In Social Perspective:</u> To work as a team, distribution of tasks and roles and developing a software with this awareness.

Our project will be a brand new system. System will be working with these steps:

- At first, there will be a "Hayde Bre" welcome window, with menu buttons. Each button will redirect the player to the menus of game.
- All datas and user profiles will be stored in SQLite Database.
- Match fixtures will be generated random.
- Match results will be produced after processing datas.

As mentioned above, the resources will be:

- Qt Designer, to create the User Interface,
- PyQt, to bind frontend and backend sides of system

Apart from these; Python, Qt and SQLite documents which were published by their creators in the Internet will be widely used through our project. Informations about wrestling which include overview, scoring system, terms and contents of it will also constitute the large part of our requirements about resources.

#### **OUTPUT OF SYSTEM**

After finishing the project, our completed game will serve the player an experience to manage a wrestling team, orientate the team and players during the season, decide the practice planning of each players according the match results and see the position of his/her team's and players' in the league standings.

## **TEAM INFORMATION**

### **Team Name:**

Er Meydanı

#### **Team Members:**

Emrullah Tavlı, emrullahtavli@gmail.com, Group Leader, Analyst and Software Designer -Analyses the whole project with datas and informations, takes part in whole levels of the project.

<u>Can Yıldırım</u>, *mcanyildirim@gmail.com*, User Interface Developer and Software Developer -Designs the user interface of game for each menu of it, writes codes and develops features during the development.

Mustafa Ertürk, musert1121@gmail.com, Software Tester and Content Provider -Tests and debugs the whole system in each step of the project. Provides data and information for content of the game.

Yusuf Beyaz, yusufbeyaziu@gmail.com, Software Developer and Software Designer -Decides the itinerary of the project, researchs, manages, and develops the technical side of the system.

Giving the correct role to the right member in the group was determined as the key of accomplishment of a successful project. After settling the capabilities of members, the team roles were set by unanimous votes, both to take advantage of members' skills and to fill the deficiencies of the members.