TITLE: THE PROJECT REPORT

AUTHOR: CHINONSO WILLIAMS UBANI

DATE OF COMPLETION: 31 NOVEMBER 2022

Table of content

1. INTRODUCTION

This is a project report built on Python programming language. It was focused on the creation of an object-oriented program where it is possible to register and administrate handball teams of **11 players** for a handball event. This program will keep track of all the teams that a user of the program creates and administers. It keeps the teams that are supposed to participate in the event with their related data. Every team in the program is represented as an object. Three main classes were used in coding the interfaces in this program and will be discussed under the description section of this report.

2. DESCRIPTION

As stated earlier, this project is an object-oriented program with dependencies of a class. This section is to describe the definition of each class created in this project. There were three main classes that were used namely: class team_player, class Team, class UI.

2.1 Class team_player

The **"class team_player"** stores the player's information of a team such as the player's name and information. Data attributes associated with this class includes **player_name** and **info.** The methods associated with the team player class are:

- get_player_name(self)
- get_player info(self)
- Change_player_name(self)
- Change_player_info(self)

2.2 Class Team

The objects of this class store the teams' information. The attributes of this class are mainly the **name** of the team. Whilst the methods of the class include:

- get_team_name(self)
- Add_new_player(self)
- List_team_players(self)
- Remove_player(self)
- Change_player_name(self)
- Change_player_info(self)
- Get_player_info(self)
- Update_fee_status(self)
- Define_team_type(self)
- Set_id(self)
- Show_fee_status(self)
- Show_team_type(self)
- Show_team_id(self)

4

- Set_team_description(self)
- Show_team_info(self)
- Cancell_participation(self)
- Show_fee_paid_amount(self)
- Teams_loaded data(self)

2.3 Class U_I

This class represents the user interface with the menu option. Objects of this class hold the information of all teams for this event. The object methods include

- Create_team(self)
- Edit_team(self)
- Show_teams_ids(self)
- Show_team_info(self)
- Delete_team(self)
- List_all_teams(self)
- List_all_boys_teams(self)
- List_all_girls_team(self)
- Get_percent_teams_that_paid_fee(self)
- Get_all_teams_data(self)

3. USER GUIDE

The User.py file was built on the Team.py file. The user file provides the menu scripts with prompts the users to make choices to build teams. This user guide gives full details of main menu options and the sub menu option for clarity and understanding for the user. The Main menu interface is visualized in Figure 1 below:

```
HELLO!!
=============MAIN MENU==============
 ---------Select an option----------
 1: Create new team
 2: Edit team
 3: Show team information
 4: Update fields for a team
 5: Delete team
 6: List all teams names
 7: List boys/girls teams names
 8: Show percentage of teams that paid fee
 9: Show all teams information
 10: Exit
 ======================================

Enter option {main menu}:
```

Figure 1. Main menu

Step 1

From this the user can start by entering **1** to create a team, this will prompt the user to enter the name of the team and a player's name with information. Once a player has been added the player and the team information will be printed, that is only the team's name and the team Id. This is visualized in Figure 2

6

```
Enter option {main menu}: 1
Insert team name: Williams fc
CONGRATULATIONS!! YOUR TEAM {'Williams fc'} AS BEEN CREATED
GOOD JOB!
Add players to the team!

Enter player name: Juan
Enter player information: Defender
Team id : 7456 | name : Williams fc

Enter option {main menu}:
```

Figure 2.

Step 2

By enter **2** in the option, the user will be prompted to enter the team Id. A sub menu will be displayed where the user can edit the team to add more players, list team players, remove a player from the team, change a player's name and information, update fee status, define team type, set team description, cancel team participation, update fee paid amount and return back to the main menu. This can be visualized in figure 3.

```
Enter option {main menu}: 2
Insert team id :7456
Choose an options
 1: List team players
 2: Remove a player
 3: Change player name
 4: Change player information
 5: Update fee status
 6: Define team type
 7: Set team description
 8: Add player
9: Cancell team participation
 10: Change team name
 11: Update fee paid amount
 12: Back to main menu
--------------------------
 Enter an Option:
```

Figure 3.

Step 3

To add more players to a team the user can enter **8** in the user input. This can be visualized in Figure 4 below

```
 Enter an Option: 8
Enter player name: Modud
Enter player information: Striker
```

Figure 4

Step 4

To list all the players the user can enter **1** from this menu option. This can be visualized in figure 5

```
 Enter an Option: 1
Juan
Modud
```

Figure 5

Step 5

To change the name of a particular the user can enter **3** from this sub menu option. This will ask the user for the old name and the new name of the player. This can be visualized in figure 6

```
Enter an Option: 3
Enter old name: Modud
Enter new name: Will
```

Figure 6

Step 6

The user can input **4** to change the player information, this would prompt the user to enter the player's name and new information. This can be visualized in figure 7

```
Enter an Option: 4
Enter player name: Will
Enter information: Midfielder
```

8

Figure 7

Step 7

The user can enter **5** to update the fee status of the team. This will ask the user to enter True if the fee is paid or False if the payment has not been made. This can be visualized in figure 8

```
Enter an Option: 5
Enter fee status(True or False): True
```

Figure 8

Step 8

The user can enter **6** to define the type of team, whether it is a team of boys or girls. This can be visualized in Figure 9

```
Enter an Option: 6
Enter team type(boys or girls): boys
```

Figure 9

Step 9

The user can enter **7** to set the description of the team, in this guide the description will be handball team. This can be visualized in Figure 10

```
Enter an Option: 7
Enter description: Handball team
```

Figure 10

Step 10

The user can enter **9** to cancel the team from participating in the event, however this will not be visualized. The user can enter **10** to change the name of the team, this will immediately ask the user to enter a new name. This can be visualized in Figure 11

```
Enter an Option: 10
Enter new name: Williams handball team
```

Figure 11

9

Step 11

The user can enter **11** to update the amount paid for the team. Here the user would input the actual amount. This can be visualized in Figure 12

Figure 12

Step 12

To head back to the main menu, the user can enter **12.** This will take the user to the main menu list, this is visualized in figure 13

Figure 14

Step 13

The user can enter **3** from the **main menu** to see team information, the user would be prompted to enter the team id in order to access the team information. This will display the team's name, date it was created, the fee status, amount paid for the fee, participation status, team description and the names of players. This can be visualized in Figure 15

```
 Enter Option {main menu}: 3
Insert team id: 1252
team id : 1252
team name : Williams handball team
created : 2022-11-02
fee status : True
team type : boys
fee amount paid : 5000 sek
participation status : Participating
team description : Handball team
Player Name: Juan
Player Information: Defender
```

Figure 15

Step 14

The user can enter 4 to update the fields for a team, this will take the user to the sub menu. This can be visualized in Figure 16

```
 Enter Option {main menu}: 4
Insert team id:  1252
Choose an options
 1: List team players
 2: Remove a player
 3: Change player name
 4: Change player information
 5: Update fee status
 6: Define team type
 7: Set team description
 8: Add player
9: Cancell team participation
 10: Change team name
 11: Update fee paid amount
 12: Back to main menu
```

Figure 17

Step 15

Once the user is finished updating the team fields, the user can input **12** to return to the main menu. The user can input **5** from the main menu input to delete a team. After this, the user can **6** to list all the team names in this sport event. This can be visualized in Figure 18

```
 Enter Option {main menu}: 6
Williams handball team
```

Figure 18

11

Step 16

The user can input **8** to show the percentage of the teams that paid fee. This can be visualized in Figure 19

```
Enter Option {main menu}: 8
Total number of teams: 1
Percentage of teams that have paid fee: 100.0
```

Figure 19

Step 17

The user can input **9** to show all the team's information for this event. This can be visualized in Figure 20

```
Enter Option {main menu}: 9
team id : 1252
team name : Williams handball team
created : 2022-11-02
fee status : True
team type : boys
fee amount paid : 5000 sek
participation status : Participating
team description : Handball team
Player Name: Juan
Player Information: Defender

Player Name: Will
Player Information: Midfielder
```

Figure 20

Step 18

To close or exit the whole program, the user can input **10.** This can be visualized in Figure 21

```
Enter Option {main menu}: 10
Goodbye!!!
```

Figure 21