**Chapter three**

**3.5 system model**

**3.5.1 Scenario**

Scenarios are real life example of how a system can be used. It can describe the starting situation and normal flow of events.

Uses pre-conditions

1. They must have pc or desktop computers to launch our web
2. The have to enter our address www.ASTUfootballcup.edu.et
3. Then the user can get our homepage

Scenario 1 – see notification

Flow of event

1. Fan must go to our address and then select the cup tab
2. Select the cup that they want to get notification about
3. Then they will get another tab that say notification
4. They can see all the information about that cup, the recently played games, score of the games and other announcement

Alternative conditions

-the game in the ASTU are seasonal games, so they will open in the given time period only

Scenario 2 –Register

Pre-condition – this visitors must be the student of ASTU , they must register on the time period of the registration, must give the correct information about them selves

Flow of event

1. After they chose the type of cup they see the register tab
2. Then they see the register form
3. Fill the form and click ok button

Alternative conditions

-if he fills the form incorrectly then the system generates an error message

-if he has been registered already the system generate already registered message

Scenario 3- login

Pre-condition – both the coach and players must have the correct user id, name and password

given by the admin

* The admin should be the real member of the administration team

Flow of event-first launch to a web

-for admin click the admin button on the home page

-enter the user name and password click ok

-select the cup tab then click ok

-enter user name and password

Alternative condition – if the user name and password they entered is wrong then the system will generate error message

-if they forget the password will click forget password button

Scenario 3-see news

Pre-condition—first the player should register and chosen for the team, and the admin send username and password that the player can access the system

Flow of event

1. First they have to choose the cup that they are member off
2. Then select the login tab
3. Then they have to enter their name and password and press enter
4. Then they click the news tab and get the updated information about their team and other related information

Alternative conditions

- If the username and password they enter are incorrect the system must generate error massage

-If they forget the password they can recover their password using **Do you** **forget** button

Scenarios 4-view and edit profile

Pre-conditions- they have to be one of the members of the team,

Flow of event

1. Chose the view profile tab
2. See the form that contain his profile
3. Click the edit button and edit the form
4. Click the save button after you edit
5. Click cancel if you don’t want to save the updated form

Alternative condition

-Some of the forms can’t be changed by the player or the admin must check for the changes that are made

Scenario 5-choose players

Pre-conditions- the coach have all the list of players that register for team,

Flow of event

1. After choosing the tab the coach
2. Choose the icon that say login as a coach
3. Enter the username and password click ok
4. Click the tab that say view list
5. Select the players that are good for the team and click submit

Alternative conditions – if they enter incorrect password they will receive error message from the system.

Scenarios 6-notify training schedule

Flow of event

1. Login using username and password
2. Write on the newsfeed about schedule of the training
3. Write the time, date and place

Scenarios 7-manage account

Pre-conditions- they have to be chosen for the team, so the admin login and signup them and give username and password to the players. They have to be members of the coach staff

Flow of event

1. Admin go to the home page and select the admin tab
2. They can select the login button
3. Enter username and password and click ok
4. In the next interface click the signup button
5. Fill the signup form for each the players and coach
6. Click save and they have username and password that they can login too
7. Admins can send this username and password by their emails.

Scenarios 8- see fixture and score board

Pre-conditions- login to the web and select the cup

Flow of event

1. Launch our web
2. Select the cup you want to see fixture and score board
3. Select the fixture tab and see the schedule of the match
4. Select the score board and see the result of the recently played game

Scenarios 9-manage schedule

Pre-condition-login to the web, select admin button and login

Flow of event

1. After launching the web and login to the system
2. Select the manage schedule button
3. Select the time and place of the game
4. Assign referee for a particular game
5. Save and post into the fan page

Alternative condition- while setting the schedule chose the available time and date so as there is no overlapping of schedule

**3.5.2 Use case mode**

Use case model is a scenario-based technique in UML which identify the actors in an interaction and which describe the interaction itself. A set of use cases should describe all possible interactions with the system.

**Actor identification**

Actors are some people that accomplish use case up on a system

Name; fans / visitors

Description-visitors are students of ASTU that want to get information about ASTU cup and visit the page

Rule-see notifications, see the result of the game, see schedule, and apply to be player

Name; player

Description-student of ASTU that are member of different team in ASTU cup, which has user name and password in order to login

Rule –see announcement made by the coach, see the playing position for the game, view their own personal profile and edit

Name; coach

Description-this are society of sport that can guide and coach other teams. Coaches also have user account to access the system

Rule –select members of team and assign position, announce training schedule,

Name –admin

Description- the top authority of ASTU football cup federation that can grant access to the system by giving user name and password,

Rule – assign referee, assign coach for every team, prepare the game schedule, and conduct the result of each game

Name-System

Description-the system that contain all the database of the players, team, coach, referee and other administration staff members

Rule-save the registration form, has the profile of all the players, coach, and refree. Give the members their own special user name and password

**Use case description**

**Table for use case description for seeing notification, fixture and score board**

|  |  |
| --- | --- |
| Use case name | See notifications, fixture, score board |
| Use case ID | 1 |
| Use case description | To see announcements, schedule and result |
| Actor | Visitors /Fan /player/coach/ any society of ASTU |
| Pre-conditions | Visitors must launch our system |
| Post-conditions | The system provide information |
| Main flow | A, visitor open the home page of our system and chose the cup  B, the visitor go to the notification page  C, system display the desired notifications  D, the visitor select the fixture and scoreboard tab  E, see the announcement |
| Exceptional flow | -May be the visitors enter incorrect URL  -if the visitor request information about a cup which is not held in that moment. |
| Include | View , comment |
| Frequency of use | Depend on the visiting of the user |

**Table for use case description for register**

|  |  |
| --- | --- |
| Use case name | Register |
| Use case ID | 2 |
| Use case description | To register and fill the form into the database |
| Actor | Visitor/fans |
| Pre-conditions | Visitors must launch our system |
| Post-conditions | The system register the personal information in to the database |
| Main flow | A, visitor open the home page of our system and chose the cup  B, the visitor click the register button  c, system the register form  D, the visitor fill all the asked question  E, click ok button |
| Exceptional flow | -May be the visitors enter incorrect information  -if the visitor is already registered |
| Include | Fill the question and comment personal experience |
| Frequency of use | They are registered only one time but can depend on the user |

**Table for use case descriptions for players see news**

|  |  |
| --- | --- |
| Use case name | See news |
| Use case ID | 3 |
| Use case description | To see announcements made by coach and admin |
| Actor | Players |
| Pre-conditions | Players must be the member of a team and have account to the system |
| Post-conditions | The system provide information |
| Main flow | A, player open the home page of our system and chose the cup  B, Players enter their user name and password  C, enter login button  D, select news tab and see recently updated news |
| Exceptional flow | -if player enter incorrect username and password the system will generate error message  -if the player forget his password he have to recover his password by clicking forget password button |
| Include | View , comment |
| Frequency of use | Depend on the visiting of the user |

**Table user description for view and edit profile**

|  |  |
| --- | --- |
| Use case name | View and edit profile |
| Use case ID | 4 |
| Use case description | To see players personal profile and edit |
| Actor | Players |
| Pre-conditions | -Players must be the member of a team and have account to the system  -Players profile database should exist in the system |
| Post-conditions | The system provide information and edit the information |
| Main flow | A, player open the home page of our system and chose the cup  B, Players enter their user name and password  C, enter login button  D, select view profile tab and see their profile  E, click edit button and edit some information’s  F, click save button to save updated information’s |
| Exceptional flow | -if player enter incorrect information the system tell them to correct it  -if the player can’t edit some information’s it will be restricted |
| Include | View , edit, save |
| Frequency of use | Depend on the visiting of the user |

**Table for choosing player**

|  |  |
| --- | --- |
| Use case name | Choosing player |
| Use case ID | 5 |
| Use case description | Choosing players for the team and for the game |
| Actor | Coach |
| Pre-conditions | -visitors must register for the team and come to the training day and show their performance  -coach select the best players for the team  - also select players for the given game |
| Post-conditions | The system provide information about each players |
| Main flow | A, coach open the home page of our system and chose the admin tab  B, coach enter their user name and password  C, enter login button  D, select view list tab and see the list of players  E, click submit button |
| Exceptional flow | -if coach enter more than the appropriate number of players the system tell them to correct it |
| Include | View , save, submit |
| Frequency of use | Depend on the visiting of the user |

**Table for use case description of notifying schedule**

|  |  |
| --- | --- |
| Use case name | Notifying schedule |
| Use case ID | 6 |
| Use case description | Setting schedule time and place |
| Actor | Coach |
| Pre-conditions | -visitors must be member of the team  -coach select the appropriate schedule for training players of the team |
| Post-conditions | The system provide information about training schedule |
| Main flow | A, coach open the home page of our system and chose the admin tab  B, coach enter their user name and password  C, enter login button  D, write on the newsfeed page about schedule  E, click submit button |
| Exceptional flow | -if there are redundancy of schedule the system the generate error massage |
| Include | View , save, submit |
| Frequency of use | Depend on the visiting of the user |

**Table for use case description of manage account**

|  |  |
| --- | --- |
| Use case name | Managing account |
| Use case ID | 7 |
| Use case description | Granting access to other users |
| Actor | Administration |
| Pre-conditions | -visitors must register for the team and they have to be chosen for the team  -coach select the best players for the team and submit to the admin  - admin signup the users and give them username and password |
| Post-conditions | The system provide information about each players |
| Main flow | A, coach open the home page of our system and chose the admin tab  B, coach enter their user name and password  C, enter login buttoD, select view list tab and see the list of players  E, click submit button |
| Exceptional flow | -if coach enter more than the appropriate number of players the system tell them to correct it |
| Include | View , save, submit |
| Frequency of use | Depend on the visiting of the user |

Table for use case description of

|  |  |
| --- | --- |
| Use case name | Manage schedule |
| Use case ID | 8 |
| Use case description |  |
| Actor | Admin and system |
| Pre-condition | -Checking for the time and date for the next game  -checking for available referee |
| Post-condition | -setting the schedule  Assigning referee and posting on the player and user page |
| Main flow | -open the web page  -enter the user name and password and login  -select the manage schedule tab  - set the appropriate schedule time, date and assign referee |
| Exceptional flow | -there may be overlapping of schedule  -search for available time date and place for the games |
| Include | -Create, view, update, save |
| Frequency of use | -For each game |