Group assignment 1

Þróun hugbúnaðar
Spring 2015

Students: (Group F2a)
Einar Helgi Þrastarson
Hannes Pétur Eggertsson
Sigurður Birkir Sigurðsson

Teachers:
Matthias Book
Kristín Fjóla Tómasdóttir

1 Project plan

In this document there's the project plan for group F2a. Group members are: Einar Helgi Þrastarson (personal ID number: 110287-2919), Hannes Pétur Eggertsson (240889-2939) and Sigurður Birkir Sigurðsson (120589-2539). The project involves creating an UI for a fantasy football game. The presenter for this planning on Wednesday will be Einar Helgi.

2 User stories

User stories were split among three 2-week long iterations.

2.1 Iteration 1 (14,5 days of work planned)

■ As a user, I want to have money or at least have some countable currency, to buy players. ■

1,5 days, Priority: 10

Tasks:

a) Create a object that keeps track of ow much money users have.
(1 day)

b) Figure out a reasonable starting sum of money for players depending on the average price of a football player.
(4 hours)

■ As a user, I want to be able to choose and buy players for my roster, to create my team. ■

4 days, Priority: 10

Tasks:

a) Create visual system for displaying football players.
(1 day)

b) Give user a list of available players.
(1 day)

c) Implement a buy/sell system for football players.
(1,5 days)

d) Prevent user from having too many football players their team, and limit how many are allowed for each position.
(4 hours)

■ As a user, I want to have an interface. ■

1 day, Priority: 10

Tasks:

a) Create basic user interface in Java Swing.
(4 hours)

b) Setup basic layout.
(4 hours)

■ As a user, I want to have some kind of visual system to manage my roster, makes managing my team easier. ■

2 days, Priority: 10

Tasks:

a) Create the roster management layout.
(1 day)

b) Add to the layout the football players of the roster.
(1 day)

■ As a user, I want to be able to exchange football players after each round, if their performance is not to my liking. ■

3 days, Priority: 20

Tasks:

a) Add a sell functionality to the football players a user owns.

(2 days)

b) Add sell button next to the football player in the roster manager.

(4 hours)

c) Add ability for users to buy new football players in the roster manager if their team is not full.

(4 hours)

■ As a user, I want to be able to end my turn, to keep the game going. ■

1 day, Priority: 20

Tasks:

a) Create a button that makes the game simulate the next round.

(1 day)

■ As a user, I want to have a point system, to value and see my progress. ■

1 day, Priority: 20

Tasks:

a) Request the simulation for the points of all football players and hold onto them in an scores object.

(6 hours)

b) Do a summary of the points.

(2 hours)

■ As a user, I want to see the points I get and the points each football player gets, to get detailed progress of my roster. ■

1 day, Priority: 30

Tasks:

a) Get points from the scores object and display on screen.

(4 hours)

b) Create layout for the points on screen.

(4 hours)

2.2 Iteration 2 (14 days of work planned)

■ As a user, I want the game to be multiplayer, so the game can be played with friends. ■

4 days, Priority: 20

Tasks:

a) At the start of each game, add a frame/window to add users.
(2 days)

b) Update code to handle more than one users (if needed).
(2 days)

■ As a user, I want to see a scoreboard with statistics when the round is finished, makes it more fun when competing against other people. ■

4 days, Priority: 30

Tasks:

a) Create an object that holds together all scores from all users.
(1 day)

b) Create an object that holds together all results and key events in matches.
(1 day)

c) Create a function that can show user graph of scores.
(1 day)

d) Create an interface to show the above tasks.
(1 day)

■ As a user, I want to be able to substitute football players on the field if they get injured, to keep uninjured players on the field. ■

1 day, Priority: 50

Tasks:

a) Create a function that will check for injured football players.
(4 hours)

b) Let users know football player is injured.
(4 hours)

■ As a user, I want to be able to search for football players from available pool, to make choosing them easier. ■

4,5 days, Priority: 50

Tasks:

a) Create a basic search UI, with a search field and results area.
(2 days)

b) Ability to search football players by name.
(2 days)

c) Ability to search by football player attribute.
(2 hours)

d) Ability to search by team name.
(2 hours)

■ As a user, I want to choose a team captain and I want him to get points depending on my roster performance, this might benefit my roster. ■

4 hours, Priority: 50

Tasks:

a) Create an attribute in the roster manager for the captain.

(2 hours)

b) Collect scores from the team and add extra scores for the team captain accordingly.

(2 hours)

2.3 Iteration 3 (6,5 days of work planned)

■ As a user, I want to be able to choose formations for football players on the field, to have my roster set up the way I like. ■

4 days, Priority: 60

Tasks:

a) Create an object for the team formations.

(1 day)

b) Create UI of the team formations in roster manager.

(3 day)

■ As a user, I want to be able to let the game go through more than one round at a time, so I can play the game faster. ■

4 hours, Priority: 60

Tasks:

a) Create an auto 'end turn' feature.

(4 hours)

■ As a user, I want the game to be good looking, have some imagery, makes it more appealing to play. ■

2 days, Priority: 70

Tasks:

a) Go through every visual part of the game and improve it visually where possible.

(2 days)

3 Conclusion

Our iterations are 14 days long. Subtracting Saturdays (2 days) and other school homework(5 days) leaves $\approx$ 7 days. Of those, only 70%, i.e. $7 \cdot 0.7 =$ **5 productive days** can actually be used for the project. We are 3 people on the team, so we can fit at most $5 \cdot 3 =$ **15 person-days** into an iteration.

So according to our planning we should be able to barely finish the user stories within iteration 1 & 2 where we plan that they take around **14 days** where we plan to have about **15 days** to finish them. In iteration 3 we will spend roughly half of the time implementing the user stories and the other half in integration.