

Exercise 4

- Software Configuration Management setup (like Git or Subversion) ✓
- Project folder design (folders like “src” and “doc”, stored within SCM) ✓

<https://github.com/ElvBC/SWE-Design>

We made 4 use cases because we were unsure, what they should be about and how they exactly look.

• 3 use cases

Use Case Nr.1

Name – Lottery whole program.

Description –User can decide from a menu what he wants to do.

He can: play lotto(Input: First & Last name + His number), watch the result and who won. And finally exit the game

Actors – Primary Actor: Everyone with the compiled code.

Secondary Actor: Programmer

Includes – None

Trigger – User gets the option to choose between 4 functions in the program.

Preconditions – Showing the player a menu with certain functions he can use.

Postconditions – Player can see the results of the Lotto drawing.

Normal flow – 1. The system provides in the console a Menu where the player can decide what he want to do next.

2. One after another all player are asked to enter their name and 6 numbers between 1 and 49. Each number can only entered once.

3. randomly 6 different numbers between 1 and 49 are drawn and displayed on the screen.

4.The drawn number and the according players name are printed on the screen.

For every player the number of correct hits are shown as well.

5. The Program gets closed.

Alternative flow – The user can also look for the numbers or for the winners without playing himself. Also he can close the program directly without playing. Wrong input repeats the question for an input.

Use case history– Lottery_UC_1.1 , Elvin Buljubasic, 21.05.2015

Use Case Nr.2

Use Name name - Lottery whole program

Primary Actor - Everyone with the compiled code

Further Actor - Programmer

Stakeholder and their Interests -

Primary - The actor wants a program with which he can enter lottery numbers, draw 6 winning numbers and see how many correct numbers he and the other players gets.

Success Guarantees - The user can use the lottery program, where he gets displayed a menu. The first thing the actor can do is to enter what he wants to do.

Minimal Guarantees - The user can at least run the program without an error.

Trigger - The user wants to play lotto, draw new numbers or show the winning numbers including other players numbers.

Basic Course (Main Success Scenario) - 1. The system provides in the console a Menu where the player can decide what he want to do next.

2. One after another all player are asked to enter their name and 6 numbers between 1 and 49. Each number can only entered once.

3. randomly 6 different numbers between 1 and 49 are drawn and displayed on the screen.

4. The drawn number and the according players name are printed on the screen. For every player the number of correct hits are shown as well.

5. The Program gets closed.

Alternative Course - The user can also look for the numbers or for the winners without playing himself. Also he can close the program directly without playing.

Wrong input repeats the question for an input.

Use Case Nr.3

Use Name name - Lottery Program show winners

Primary Actor - Everyone with the compiled code

Further Actor -

Stakeholder and their Interests -

Primary - The user decides to press 3 for showing him the winning numbers and the players with their numbers.

Success Guarantees - The user can see the winning numbers and the players and their numbers.

Minimal Guarantees - User gets shown a Menu where he can choose between 4 functions

Trigger - The user invokes an request to show the winning numbers and the players numbers.

Basic Course (Main Success Scenario) - 1. The system provides in the console a Menu where the player can decide what he want to do next.

2. The user presses 2 to draw new numbers.

3. He then presses 3 to show the winning numbers, the numbers of the players and how much numbers they got right.

4. The user can repeat this step now or press 1 to add players,press then again 2 to show the winning numbers and then 3 for the list of players and their numbers or close the program by pressing 0

Alternative Course - The user can also: press immediately 3 but then he gets an informations that he has first to press 2 and draw numbers before he can output the winning numbers.

Use Case Nr.4

Use Name name - Lottery Program enter players

Primary Actor - Everyone with the compiled code

Further Actor -

Stakeholder and their Interests -

Primary - The user decides to press 1 for adding a new player

Success Guarantees - The user can input his first name, last name and his 6 lotto numbers.

Minimal Guarantees - User gets shown a Menu where he can choose between 4 functions

Trigger - The user invokes an request to play lotto with this first name, last name and his lotto numbers.

Basic Course (Main Success Scenario) - 1. The system provides in the console a Menu where the player can decide what he want to do next.

2. The user presses 1 to add him to the player list

3. He then inputs his first name then his last name and then his 6 lotto numbers.

4. The user can repeat this step and input other players now,draw 6 winning numbers,show the winning numbers and the list of players and their numbers, or close the program by pressing 0

Alternative Course - The user can also: press immediately 3 but then he gets an informations that he has first to press 2. and draw numbers before he can output the winning numbers.

When he presses now 2 and then 3 he gets shown the winning numbers but an empty player list because no player was added

• 1 use case diagram

