First Tasks:

2. The Lottery program requires 3 use cases: Entering ticket, Lottery drawing, Show results.

In **Entering tickets** all players will be asked to enter their name and 6 numbers between 1 and 49. Each number can only be entered once.

Actors: User(s)

Basic Flow:

- 1. Prompt to enter name and 6 numbers (between 1 and 49).
- 2. User enters valid input.
- 3. Validation by the system. Name and number are stored.
- 4. Return to Lottery menu.

Exception Flow:

A:

- 1. Prompt to enter name and 6 numbers (between 1 and 49).
- 2. User enters invalid input.
- 3. System prints an error message.
- 4. Return to step 1.

B:

- 1. The step **Lottery drawing** already done. System prints an error message.
- 2. Return to Lottery menu.

<u>Post Conditions</u>: Names and numbers are stored.

In **Lottery drawing** 6 different numbers are drawn and displayed on the screen.

Actors: User(s)

Basic Flow:

- 1. 6 random numbers between 1 and 49 get generated and stored.
- 2. Numbers get displayed.
- 3. Return to Lottery menu

Exception Flow:

- 1. No set of name and numbers is stored yet. System prints an error message.
- 2. Return to Lottery menu.

<u>Post Conditions</u>: Generated numbers are stored. Names and numbers are stored.

In **Show results** will be the drawn number and the players printed on the screen. The number of correct hits will be shown as well.

Actors: User(s)

Basic Flow:

- 1. "Generated number" and "names and numbers" are displayed. Amount of correct hits are displayed for every ticket.
- 2. Asks the user if he wants to reset the lottery or wants to quit.
- 3. User chooses the reset option.
- 4. All stored data gets cleared.
- 5. Return to Lottery menu.

Alternate Flow:

- 1. "Generated number" and "names and numbers" are displayed. Amount of correct hits are displayed for every ticket.
- 2. Asks the user if he wants to reset the lottery or wants to guit.

- 3. User chooses the quit option.
- 4. Program terminates.

Exception Flow:

- 1. Lottery was not drawn yet. System prints an error message.
- 2. Return to Lottery menu.
- 3. We choose the Spiral model and our organization structure is "Team" ©
- 4. We will use java. And Git as SCM tool.

 We use java because it is a straight forward and an easy to use programming language.
- 6. Metrics are tools for supporting and allow the programs to evolve toward successful outcomes, promote continuous improvement, and enable strategic decision making.

The end of the project is in 6 weeks (10.7.2015). The first deadline will be at 29.7.2015 and the second deadline will be at 19.6.2015.

We estimate to successfully perform the tasks one week before the deadline so we can still make last second improvements.

Week	23	24	25	26	27	28
Schedule	Modeling	Modeling	Improvements (optional)	Engineering	Engineering	Improvements (optional)