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## Assignment 2 Requirements

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# 1. Functional Requirements

## 1.1 Introduction

In this document the requirements for assignment 2 will be stated. There will be improvements to the code, as well as new functionalities. This will be done using the MoSCoW Model<sup>1</sup>.

## 1.2 Must Have

- The player must be able to fall through a hole in the floor.
- The player must reappear after falling through a hole in the floor at a corresponding hole in the ceiling.
- The monsters must be able to fall through a hole in the floor.
- The monsters must reappear after falling through a hole in the floor at a corresponding hole in the ceiling.
- The monsters must be able to jump and move around randomly.
- The player must be able to jump in a more natural way, so a decrease in speed when the player jumps.
- The player must be able to fall in a more natural way, so an increase in speed when the player falls.
- The monsters must be able to jump in a more natural way, so a decrease in speed when the monster jumps.
- The monsters must be able to fall in a more natural way, so an increase in speed when the monster falls.
- The bubbles must be able to float to the top of the screen.
- The bubbles must disappear after a period of time.
- The player must be able to jump on a bubble, and use it like a lift.

## 1.3 Should Have

- The bubbles should be able to float through the platforms, but should stop at the ceiling.
- The player should be able to jump on a bubble, and use it like a trampoline.

## 1.4 Could Have

- The player could be able to jump through a hole in the ceiling.
- The player could reappear after jumping through a hole in the ceiling at the corresponding hole in the floor.
- The monster could be able to jump through a hole in the ceiling.
- The monster could reappear after jumping through a hole in the ceiling at the corresponding hole in the floor.
- The bubbles could pop when they disappear.
- The game could play music when played.

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<sup>1</sup>[https://en.wikipedia.org/wiki/MoSCoW\\_method](https://en.wikipedia.org/wiki/MoSCoW_method)

## 1.5 Won't Have

- The monsters won't be able to follow the players movement.

## 2. Non-Functional Requirements

The non-functional requirements are the requirements that are based on the operation of the system, instead of the functions and behaviour of the game itself.

- A working version of the assignment must be delivered September 25th, 2015.
- The assignment should be able to run on Windows (7 or higher), Mac OS X (10.8 and higher) and Linux.
- The assignment will be implemented in Java.
- The assignment delivered will have at least 75% line coverage in Cobertura, where the tests are meaningful. Meaningful means that they do not only execute functions, but actually test the game.