1. Functional Requirements
   1. Saving Progress
      1. Start a New Game

The player is allowed to launch a new game anytime without needing to override any previous progress. In other words, the player may maintain multiple “save files” with each having a possibly different progress.

* + 1. Load Game

Since the player is granted access to multiple save files as mentioned above, this will allow the player to choose and load one of the previously saved games.

* 1. In-game Activities

Having started playing the game, the user is able to perform the following actions:

* + 1. Purchase Items

The player can access the store to buy seeds and tools of different kinds. After clicking the store icon, the items are shown in a list, with each item’s respective price displayed next to it.

Note: Initially, the player is provided with some money to buy the necessary items to begin planting. Except this initial money, the actual income will be generated through growing crops and selling them (see section *1.2.5 Harvest and Sell* for details).

* + 1. Organize Items

The purchased items appear directly on the inventory such that the user could access them directly on the game screen -without launching a new screen. That is, the player can switch back and forth between purchased seeds and tools using the inventory, managing all purchased items in a neat way.

* + 1. Plant Seeds

The player can plant the purchased seeds on soil blocks. However, to be able to plant, it is required to first dig dirt blocks using the shovel tool available in the shop.

* + 1. Water Seeds

To make sure the planted seeds grow properly, the player needs to water them on a regular basis using the watering can available in the store. For the player to keep track of a seed’s water condition easily, the planted soil blocks display a “water bar” at their top.

* + 1. Harvest and Sell

Once the seeds are grown fully, the player is ready to harvest them. As the player collects the grown crops, the money will increase automatically, simulating the selling process. Therefore, the more crops the player harvests, the more money will be earned, allowing new seeds and tools to be purchased from the store. Note that each grown product has a different contribution to the user’s budget, which is defined differently for each type of a seed.

1. Non-functional Requirements
   1. Usability

The game should represent an intuitively understandable user interface. More specifically, the positions of the store icon, inventory etc. should be easy to identify and convenient to interact with.

* 1. Performance
     1. Response Time

The game should respond to the input provided by the user as quickly as possible. Primarily, the images need to be updated instantly to indicate the changes the player has made, also providing a smoother gameplay.

* 1. Supportability

Since the player can start a new game anytime in addition to the previously saved ones (also mentioned in *1.1.1 Start a New Game*), the generation of this new game should not cause any changes to the previously saved games. That is, the game system should handle all save files separately, independent of each other.

1. Pseudo Requirements (Constraints)

The game is supposed to be implemented in Java.