**Use Case Description: Create World** - John Frazer - x16138015

1. **Purpose:**

To allow a player to create an in-game world, hosted for play on the Minecruft server.

1. **Actors:**

*Player* - Selects the option to create a new game world.

*Minecruft Server* - Generates the game world and hosts the game world.

1. **Description:**

The user is able to create in-game worlds, which are generated by the game. The user needs to be logged in on a PC to create a game world. The player will select from a list of available parameters (or leave the default values) which will be used to define the game world.

1. **Flow Description**
   1. Pre-Conditions:
      1. Game installed on a PC.
      2. User is registered to play.
      3. Server must be available and accessible from the player’s computer.
   2. Activation

Player selects to create a new game world.

* 1. Main Flow:
     1. Player logs into the PC game app.
     2. Player selects “Create World” from the main menu.
     3. The Create World screen opens where the user can configure the basic information of their game world. This is simply whether the world type is Survivor mode or Creator mode. This screen also has an “Advanced Options” section, which applies only to Survivor Mode.
     4. The game server will then generate a world based on the given parameters, and allow the player to join.
     5. Use case success - the player has created a game world that they can play in.
  2. Alternative Flow(s):
     1. If the player’s details cannot be validated when logging into the game, they will be prompted to register or request a password reset.
     2. In step iii, should the player select the “Advanced Options” tab, they will be able to configure additional settings, such as world size, world resource level, pre-generated base, enemy spawn rate, enemy difficulty, etc.
     3. Before the player joins the game world in step iv, they are able to invite other players to join them.
  3. Exceptional Flow(s):
     1. The player will be informed if the server is currently inaccessible. They will be advised to check the game status on minecruft.com/status, where they will also be provided with troubleshooting steps to determine and fix any local issues that may be preventing server access.
  4. Termination:

When the world has been created and is available for the player to access, the use case is terminated.

* 1. Post-Conditions:
     1. Success: The user has created a game world on the Minecruft server and they can access same to play the game.
     2. Failure: The player was unable to create a world on the server and was guided to additional information on this failure.

1. **Views**

There are no additional diagrams related to this use case.

1. **Special Requirements**

There are no special requirements for this use case.

1. **Interfaces**

User login - to confirm player is registered and allowed to create game worlds.

Server access - The created game world needs to be hosted to the server to be played.

1. **System Characteristics / Performance**

As initial world generation is computationally expensive, it is expected that there will be a wait time for the player somewhere in the range of 60-180 seconds.

1. **Implementation Requirements**

There are no special implementation requirements for this use case.

1. **Technical Specifications** (copied from the Minecraft website)

Minimum Requirements:

* CPU: Intel Pentium D or AMD Athlon 64 (K8) 2.6 GHz
* RAM: 2GB
* GPU (Integrated): Intel HD Graphics or AMD (formerly ATI) Radeon HD Graphics with OpenGL 2.1
* GPU (Discrete): Nvidia GeForce 9600 GT or AMD Radeon HD 2400 with OpenGL 3.1
* HDD: At least 200MB for Game Core and Other Files
* Java 6 Release 45

Recommended Requirements:

* CPU: Intel Core i3 or AMD Athlon II (K10) 2.8 GHz
* RAM: 4GB
* GPU: GeForce 2xx Series or AMD Radeon HD 5xxx Series (Excluding Integrated Chipsets) with OpenGL 3.3
* HDD: 1GB
* Latest release of Java 8 from java.com