**Use cases: TATM** **Designer**

**Name of Case**: Compress and save files for TATM levels.

**Actor Definition**: A single user with the aim of saving files for TATM levels.

**Pre-Conditions**

1. The user created a string map and ready to be compressed and stored on file.
2. The system is displaying the save button.

**Main Flow**

1. The user clicks save.
2. The system prompts the user for filename and location.
3. The user selects the location and names the file. **(E1)**
4. The system compresses the string map. **(A1)**
5. The system successfully compressed the string map.**(E2)**
6. The system writes the compressed string to file.
7. The system successfully saves the string map.
8. The file has been saved.
9. Use case ends.

**Alternative Flows.**

### **A1**

1. The user interrupts the file compression.
2. The system terminates the use case.

**Exception Flows.**

### **E1**

1. The system detects that the location of the file is not found.
2. The system prints “The file is not found in the specified location”
3. Use case ends.

### **E2**

1. The system detects that the string is invalid format.
2. The string map is decompressible.
3. The system prints “Invalid string format, Please change <char>”.
4. Use case ends.

**Post Conditions.**

1. The system prints out that the file has been saved.

**Name of Case**: Decompress and load files for TATM levels.

**Actor Definition**: A single user with the aim of loading files for TATM levels.

**Pre-Conditions**

1. String map is compressed and stored on a file.
2. All maps currently displayed are already saved.
3. The system is displaying the load button.

**Main Flow**

1. The user clicks load.
2. The system prompts the user for location and the name of the file.
3. The user selects the location and names the file. **(E1)**
4. The system reads the file.
5. The system starts to decompressed the string map. **(A1)**
6. The system successfully decompressed the string map.**(E2)**
7. The system successfully loads the string map.
8. The file has been loaded and displayed on the screen.
9. Use case ends.

**Alternative Flows.**

### **A1**

1. The user interrupts the task.
2. The system terminates the use case.

**Exception Flows.**

### **E1**

1. The system detects that the location of the file is not found.
2. The system prints “The file is not found in the specified location”
3. Use case ends.

### **E2**

1. The system detects that the compressed string is invalid format.
2. The string map is decompressible.
3. The system prints “Invalid compressed string format, please choose a valid file”.
4. Use case ends.

**Post Conditions.**

1. The system displays the map on screen.