Analysis document

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IPS3-DB03

Table of Contents

[Introduction 2](#_Toc81401464)

[Requirements 2](#_Toc81401465)

[Functional requirements 2](#_Toc81401466)

[Non-functional requirements 2](#_Toc81401467)

[Use cases 3](#_Toc81401468)

[Conceptual Model 4](#_Toc81401469)

[UI Concepts 5](#_Toc81401470)

# Introduction

In this application you can play a text adventure game that will be procedurally generated while playing. You will also be able to save your last played adventure to resume later. Furthermore, there will be a leaderboard to show finished adventures with the highest achieved scores.

# Requirements

Requirements (FR-/NFR-) for the application including possible restrictions (R-) and qualitative demands (Q-).

## Functional requirements

FR-01 The user can start a new adventure.

Q-01.1 The user will get notified if an adventure already exists on account.

FR-02 The user can save and resume an adventure.

R-02.1 The user needs to be logged in.

FR-03 The user can register an account.

R-03.1 The user needs to enter a unique username.

R-03.2 The user needs to enter a unique email.

Q-03.1 The username can’t contain any offensive words.

FR-04 The user can see a leaderboard of finished adventures.

FR-05 The user can see his own completed adventures.

FR-06 The user can access all saved/finished adventures and user information.

R-06.1 The user has to be an admin.

Q-06.1 The user cannot see passwords.

FR-07 The user can find an overview of all useable commands.

FR-08 The user can see information on the current adventure.

## Non-functional requirements

NFR-01 The user will get a feedback notification when sending data.

NFR-02 Actions submitted in games will give feedback that it has been executed.

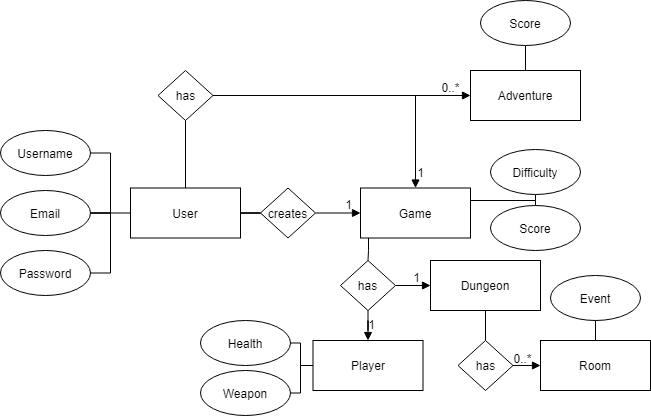
NFR-03 The game will have fast response times.

Q-03.1 The response delay cannot be longer than 500 milliseconds

# Use cases

|  |  |
| --- | --- |
| Name: | UC01: Starting new adventure |
| Summary | A user can start a new adventure. |
| Actors | User |
| Assumptions | None |
| Scenario | 1. Actor wants to start a new adventure 2. Actor presses new game button 3. System creates a new game 4. System redirects player to game page |
| Exceptions | 1. User has a saved adventure. (Q-01.1) Show message warning user that this action will delete the saved adventure, if confirmed go to 3. else bring user to homepage. |
| Result | A new adventure has been created for user. |

# Conceptual Model



In my application is the user a person, that can create and play a game. The user can also store a game to resume. Every user can have many finished runs also called adventures, these adventures are stored and can be viewed and sorted by score.

A user has a username, email, password and can have many adventures and a game.

An adventure has a score.

A game has a difficulty, score and includes a player and dungeon.

A player has health and a weapon.

A dungeon has many rooms.

A room has an event.

# UI Concepts

****The homepage (figure 1) will give the user easy access to starting or resuming a new run depending if they are logged in. The homepage will also include a navigation bar at the top giving links to the leaderboard, an about section and login.

Figure homepage

The homepage will also include a short list op the top players on the leaderboard.

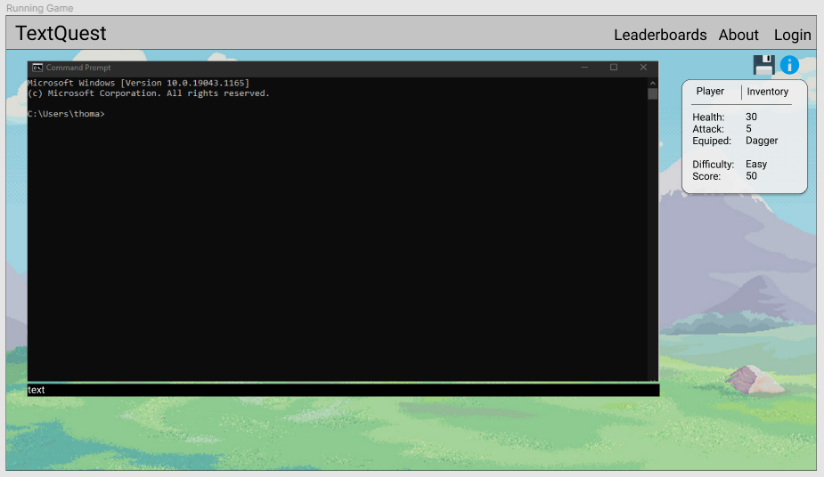
****On the game page (figure 2) there will be a command-line style window, in this window all dialogue will show up. Under the command-line window will be a text input box, the user will type the commands they want to execute in here.

Figure Game

On the right side of the screen there will be helpful information. This includes a button to give the user an overview of all commands and a save button. There is also an information box showing useful data like the player’s health or it’s inventory.