GottMusIg Software Requirements Specification For GottMusIg

Version 1.1.1

Revision History

Date	Version	Description	Author
24/10/16	1.0	First Version	Leon Gottschick
1/11/16	1.1	Link to first two UCS	Leon Gottschick
30/12/16	1.1.1	Minor improvements	Leon Gottschick
04/07/17	1.2	Final improvements	Leon Gottschick

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Software Requirements Specification

1. Introduction

1.1 Purpose

GottMusIg is a web application which aims to ease the life of World of Warcraft Players. This Software Requirements Specification shows the requirements for GottMusIg and how it is organized. This document describes the sought functionality of GottMusIg and other requirements for the project.

1.2 Scope

GottMusIg is a web application to support new as well as experienced WoW Players in getting better equipment and showing them their possible DPS output.

These features enable GottMusIg's functionality:

- The user can search for his character
- The user can create an account to store his characters
- GottMusIg displays improvement suggestions for equipment based on the current equipment status of a character
- GottMusIg simulates the DPS for a character's current equipment status and the DPS based on the suggested equipment
- A bar chart of the DPS of all classes with their respective specifications on the homepage of GottMusIg

1.3 Definitions, Acronyms, and Abbreviations

WoW: World of Warcraft

Equipment: The items a character in WoW can get.

DPS: Damage per Second, the amount of damage a WoW character can deal to enemies per second

BiS: Best in Slot, the best items currently available in the game to maximise DPS output.

1.4 References

Blizzard API: https://dev.battle.net/

SimulationCraft: http://simulationcraft.org/

1.5 Overview

This document provides all the information necessary to understand the functionality and the requirements of GottMusIg.

2. Overall Description

User Characteristics

The users of GottMusIg will most likely be WoW Players already, so they already know all the important facts about equipment, DPS and so on. We expect our users to be beginners as well as experienced players. New players want to see where they can get new equipment for leveling and questing. Experienced players want to see the best equipment available for their spec and their possible DPS output.

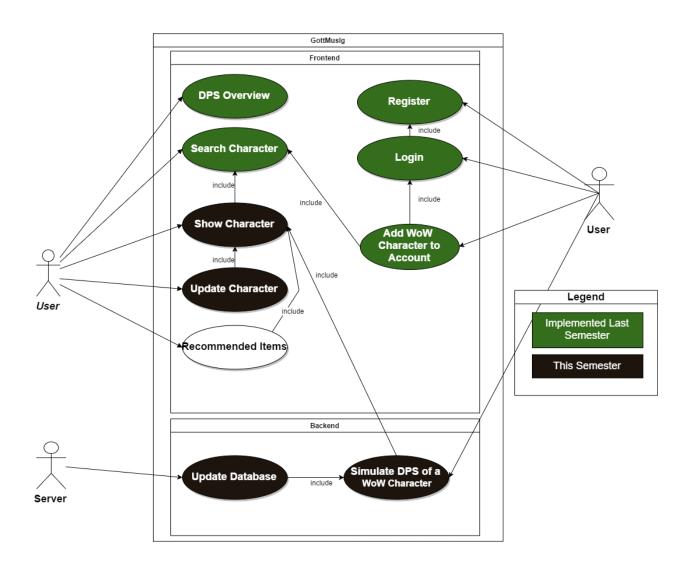
Constraints

Limited Time, the project has to be finished until summer 2017.

Dependencies

SimulationCraft and the Blizzard API.

Use Case Diagram



Choose Character UCS

 $\underline{https://github.com/GottMusIg/Documents/blob/master/documents/ucs/ChooseCharacterUCS.pdf}$

DPS Overview UCS

 $\underline{https://github.com/GottMusIg/Documents/blob/master/documents/ucs/DPSDifferenceUCS.pdf}$

Show Character UCS

 $\underline{https://github.com/GottMusIg/Documents/blob/master/documents/ucs/UCSShowCharacter.pdf}$

Update Database UCS

 $\underline{https://github.com/GottMusIg/Documents/blob/master/documents/ucs/UCSUpdateDatabase.pdf}$

Update Character UCS

https://github.com/GottMusIg/Documents/blob/master/documents/ucs/UCSUpdateCharacter.pdf

3. Specific Requirements

3.1 Functionality

As you can see in the overall use-case diagram, GottMusIg can be divided into three components:

- 1. User System
- 2. DPS Calculation
- 3. Equipment Suggestions

These main components are the base of the structure of this chapter of the document.

3.1.1 User System

Register

A user can register by providing following informations:

- Username
- Password

Account Benefits

A logged in user can add or delete WoW characters associated to his GottMusIg account, to quickly access information about his characters. A user is able to log in and out.

3.1.2 DPS Calculation

General Overview

The general overview will give information about the current maximum DPS every class in WoW can deal with the best equipment available, displayed as a bar graph.

Character DPS

The character DPS graph shows the possible DPS of a **specific** character of the user. It shows the DPS

possible with the current as well as the suggested equipment.

3.1.3 Equipment Suggestions

Best In Slot

Shows the BiS items of a specific character.

Next Upgrade

Shows the next possible improvement of the equipment of a specific character.

3.2 Usability

We expect the users to already play and know about WoW so there is no need to explain the features of GottMusIg.

3.2.1 No Training Time

We aim to design our frontend to be as self-explanatory as possible to guarantee a good user experience.

3.2.2 Minimalistic features

We want to keep our interface clean and simple to prevent information overload.

3.3 Reliability

The server should be available at all times.

3.4 Performance

tbd

3.5 Supportability

tbd

3.6 Design Constraints

3.6.1 Infrastructure

Software language

Java 8.

Server

Tomcat

Frameworks

- Spring Boot
 - for Application booting
- Spring MVC or Wicket
 - for Frontend and MVC
- Spring Data JPA
 - for the Database Persistence
- Jax-rs / Jersey

- for the REST-interfaces
- JUnit
 - for the Test-Cases
- Mockito
 - for Mocking
- Caffeine
 - as Cache
- Jackson
 - for JSON Marshalling

3.7 On-line User Documentation and Help System Requirements

tbd

3.8 Purchased Components

We set up a server for our Jenkins and our database at Scaleway, accessible via http://51.15.45.99:8080/.

3.9 Interfaces

3.9.1 User Interfaces

Our web application will be divided into these subpages:

- **Homepage:** General DPS Overview for all classes and information about GottMusIg.
- Character Page: Best in Slot, Equipment Suggestions and DPS Calculation.
- Account Management Page: add characters to an account.

3.9.2 Hardware Interfaces

n/a

3.9.3 Software Interfaces

REST-API (tbd)

3.9.4 Communications Interfaces

REST with JSON as serialized information.

3.10 Licensing Requirements

Under public GitHub license.

3.11 Legal, Copyright, and Other Notices

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3.12 Applicable Standards

tbd

4. Supporting Information

tbd