

SOFTWARE REQUIREMENTS FOR REUNIONLOG

REUNION

L^AT_EX

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Preface

This is the documentation of the requirements we want to follow when creating the program REUNIONLOG. We will be following the SOLID principles. This software is a program meant for the guild REUNION in the game WORLD OF WARCRAFT. This software will use the API from WARCRAFTLOGS.

Most of these requirements have been gathered from multiple months of pre-gathering data from the WARCRAFTLOGS API. This has been done by creating a *proof-of-concept* program with PYTHON.

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Contents

Contents	2
1 WarcraftLogs and the API	3
1.1 Website	3
1.1.1 Overall form	3
1.1.2 Specific to our needs	3
1.2 Documentation for the API	4
1.2.1 GraphQL	4
1.2.2 Limitation of the API	4
1.3 Integration from the API to C#	4
1.3.1 Authentication	4
1.3.2 Data extracted from the API	4
2 Our software main requirements	5
2.1 Authentication	5
2.2 Events	5
2.3 Query Strings	5
2.4 .CSV file	5
3 Flow of ReunionLog	6
3.1 Simple Overview	6
3.2 Needs for each main Requirements	6
4 Responsibilities for our requirements	7
4.1 Responsibilities	7
4.2 UML Diagram	7
Bibliography	8

Chapter 1

WarcraftLogs and the API

Abstract

This chapter will go through WARCRAFTLOGS and the API correlating. For this chapter we will not go through the actual documentation but rather give a short refer to the documentation and lay out the most important aspect from the site and the API

1.1 Website

The website for WARCRAFTLOGS¹ is a popular website used by guilds to gather data to one single site. This is done through multiple addons and their own in-house software.

1.1.1 Overall form

The data that can be collected is both in the form of GUILD data, RAID data, DUNGEON data, CHARACTER data and much more. These can be accessed for all through the website. This can be done by everyone anonymously.

The website uses GraphQL to display most of their data. Both in tables both also in graphs and tables containing graphics. This gives an easier overview for most users. They also have some options you can choose for the specific data you want to be showed.

A downside to this approach is that a lot of the specific options is not showed. One could reason the "simpler" design is because they want all users to use their website, no matter their technical background.

1.1.2 Specific to our needs

What described in **Section 1.1.1** sound really great and reasonable useful for most users case. This is indeed the case for most users, but if you want the information not available on the site or you want another way to represent the data, then the site is not for you. This is why we will be using the data given to us by the API.

The only need we have of the website is to check if the information we get is also the information displayed on the site.

¹<https://www.warcraftlogs.com/>

1.2 Documentation for the API

The API and its documentation is, for a lack of a better word, idiotic made. There exists two API's. Version 1 and version 2. We will be using the latter. This version has "better" documentation than its counterpart and uses OAUTH 2.0 for its API authentication. The documentation can be found two places. For authentication documentation you can find it at Warcraftlogs 2023 and you can find the actual command call documentation at WarcraftLogs and GraphQL 2023.

1.2.1 GraphQL

The first thing we should worry about is the authentication. As mentioned in the **Preface** we have already made successful connection, therefore this will be discussed later.

GraphQL is the schema of how to make calls to the API. This is done by sending you authentication and a "Query" call. This is in simple terms just a string with specific data. This data is both used to tell WARCRAFTLOGS server what you would like to receive about also where in the schema the server would have to lookup this data. Clearly there is a need to create these query strings.

Therefore we will be using GraphQL library from GRAPHQL-DOTNET. More information can be found at GraphQL 2023. If you were to look at WarcraftLogs and GraphQL 2023 you would find there is a lot of commands you can send. Therefore it is important to create an object which can be agile and create all the necessary strings which we will be using.

1.2.2 Limitation of the API

1.3 Integration from the API to C#

1.3.1 Authentication

1.3.2 Data extracted from the API

Chapter 2

Our software main requirements

Abstract

2.1 Authentication

2.2 Events

2.3 Query Strings

2.4 .CSV file

Chapter 3

Flow of ReunionLog

Abstract

3.1 Simple Overview

3.2 Needs for each main Requirements

Chapter 4

Responsibilities for our requirements

Abstract

4.1 Responsibilities

4.2 UML Diagram

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