Software Requirements Specification

ETL Support

Software Requirements Specification for Team 2

Version 1.0

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Revision History

Version	Date	Name	Description
1	29/03/2019		Pianificazione exportdata.py
2	29/03/2019		Creazione file di configurazione json
3	30/03/2019		Produzione setup.py
4	02/04/2019		Creazione exportdata.py
5	02/04/2019		Tests
6	02/04/2019		Bug fixes
7	03/04/2019		Progettazione script per i file di log
8	04/04/2019		Completata la prima versione del programma
9	20/09/2019		Update exportdata.py
10	30/09/2019		Bug fixes
11	30/09/2019		Update all scripts
12	21/10/2019		Completato lo script per i file di log
13	16/12/2019		Perfezionamento di exportdata.py
14	16/12/2019		Completata la versione finale del programma

1) Introduction

1.1) Overview

The ETL-Support program will be a Python script available only for Windows operating system. The program will allow you to back up your classroom reservation management data on a server (SIGMAQ). The backup result will be made available by the Reporting Service of the school. This document provides information on the requirements for the ETL Support software application.

1.2) Goals and Objectives

The purpose of ETL Support is to back up classroom reservation time data on a server (SIGMAQ) to allow for the visualization of the data thanks to the reporting services of the school.

1.3) Scope

As per introduction, the purpose of the program is to back up class booking data and to allow a visualization of the data to the reporting service of the school.

1.4) Definitions

- *Stackholder:* It's the person who's part of the process ETL-Support.

2) General Design Constraints

2.1) ETL-Support Application Environment

The ETL-Support program includes a CLI application that only works on the Windows operating system. There is no GUI.

2.2) User Characteristics

The application is not intended to be used by many users, but only by one, the stackholder of the ETL-Support project, Professor Gianni Bellini.

2.3) Mandated Constraints

The application will only work on the Windows operating system. The reason for this choice is due to the use of libraries to connect to an SQL Server, the latter also produced by Microsoft.

3) Nonfunctional Requirements

3.1) Operational Requirements

Usability: All those who will use the program will not need to read the documentation, just enter a command to start it all.

3.2) Performance Requirements

Compatibility: For greater compatibility with the operating system, we recommend using the program with the help of a Python Virtual Environment and installing the libraries within it.

3.3) Security Requirements

The ETL-Support program does not have any security features

3.4) Documentation and Training

The ETL-Support program will be delivered to the stackholder via the GitHub platform. There will be no documentation attached to the program.

3.5) External Interface

3.5.1) User Interface

The application is presented through a CLI interface, all the steps of the program will be clear and intuitable by those who will use it

3.5.2) Software Interface

The application will interface with three servers:

- *edu-x04* (MySQL Server)
- *edu-x08* (API MarconiTT)
- *edu-sys01* (SIGMAQ) The first two servers can be chosen when the program starts.

4) Functional Requirements

4.1) Required Features

4.1.1) Use Case: direct

Description: Direct connection to edu-x04 Actor: Stackholder

Command: **exportdata.py direct**

4.1.2) Use Case: api

Description: Connection to edu-x08 via MarconiTT API Actor: Stackholder

Command: **exportdata.py api**

4.2) Optional Features

4.2.1) Use Case: Change MySQL or SQLServer

Description: Possibility to change MySQL Server or SQL Server Actor: Stackholder

Command example: **exportdata.py direct mysql-x04 sql-garuda63**