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Software Requirement Specification

Develop Group: 30

Client Group: 29

Project Requirement

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# Introduction

* 1. Purpose

The purpose of this document is to build an GUI(Graphic User Interface) online system it allows teacher to manage student’s information and student can also access and update their own information.

* 1. Scope
     1. Application Areas

Mainly applicant in educational institutions and related educational objects (e.g., teachers, students, parents of students).

* + 1. Client

Teacher:

Primary school teacher, middle school teacher, Senior school teacher, University teacher

Students:

Primary school student, middle school student, Senior High school student, University student

* + 1. Overview

This document is provided for users and related technical personnel to view the scope of application and function summary of this project, to help users better understand the main information of the project.

# General Description

* 1. Product Perspective

System stores the following information:

* Teacher’s account

Teacher’s name

Teacher’s HKID,

Teacher ID (Teacher’s Teacher ID as login username)

Teacher’s login password

* Student’s account

Student’s name

Student’s date of birth

Student’s HKID

Student ID (Student’s Student ID as login username)

Student’s login password

* Student’s academic record

The academic record is created by teacher.

The date of the record

The name of the record

* 1. Product Functions
     1. Main Function

This project contains:

1. User login system，functionality to differentiate data between different users.
2. User Sign up system, initialize user’s password.
   1. student：the student ID is already given by school. So, student should enter the birthday, HKID, name and password.
   2. Teacher: teacher’s user id is given by school. So, teacher need enter the password and class number they teach.
3. Teacher can create class list and create student list in the class.
4. Teacher can sort the student list when they click the sorting button (Only one variable can be sorted at a time).
5. Student can access their own academic record which is created by teacher.
   1. User Characteristics

Teacher:

In the process of helping students learn, teachers need to record students' scores to better reflect the learning levels of different students. Therefore, teachers are more like administrators using this system, but they are not professional administrators of the entire system.

Student:

Students need to check their past learning status during the learning process to better adjust their learning status and expectations. Therefore, students use this system more to access and view their own learning information.

# Specific Requirements

* 1. External Interface Requirements
     1. User Interfaces
* Front-end software: HTML, CSS, JavaScript
* Back-end software: node.js, MongoDB
  + 1. Hardware Interface
* macOS
* A browser that supports HTML, CSS, JavaScript
  + 1. Software Interface

Operating System:

we recommend using mainstream operating systems (e.g., iOS, Android, Windows, macOS, Linux ......)

MongoDB:

As a database to save the user record and support administrator to modify it.

* + 1. Communication Interface

This project supports all types of web browsers. We provide users with simple and easy-to-understand operation logic.

# Nonfunctional Requirement

* 1. Quality Attributes
     1. Availability:

The system can host multiple people to view and edit data at different times or at the same time.

* + 1. Correctness

After the user stores the data, the system can accurately save the data.

* + 1. Maintainability

The web application must support regular updates to ensure compatibility with the latest web technologies, Bug fixes, and security patches.

* + 1. Usability

The system should satisfy a maximum number of users’ needs. The application should be accessible on multiple devices, including desktop and mobile.