組別 Team ID：202313

專題屬性 Category：多功能網站系統（Website System Design）

專題名稱 Project：校務大數據分析系統（Institutional Research Information system）

一、指導老師 Advisor：陳隆昇教授（Long-Sheng Chen）

二、 組員 Team members：張育維（10914023）、吳煜凱（10914026）、莊宜璇（10914035）、潘雯倩（10914107）、石蕙瑄（10914119）、吳丞浩（10914200）

三、 系統環境 System environment：

（一）軟體 Software：

作業系統 Operating System: Windows 10 以上

瀏覽器 Browser: Google Chrome、Edge、Firefox、Safari

語言 Programing language: Golang、Vue3、Typescript、SCSS

開發軟體 Open Software: 後端(Golang)、前端(Vscode)

（二）硬體 Hardware：

CPU： Pentium III 以上；硬碟： 40GB；記憶體：128MB 以上；網路卡：10Mbps 以上；顯示器：17 吋以上；鍵盤：一個；滑鼠：一個 。

四、 簡介：

（一）系統簡述（系統的主要功能）

本專題以教務處校務研究資訊為主題，取代原先以 Excel 為主的緩慢作業方式，建立一個快速分析的資訊系統，可以立即取得各入學管道、各系、各院的不及格率及學業成績(五標)的分年數據分析與比較圖表。此外，我們也依使用者需求，建立了使用者權限管理、資料安全性保護、學生資料管理、院歸屬系所調整管理、匯入資料自動判別等功能，將原先耗時 3~4 月的作業時間，縮短到幾分鐘內即可完成，有效地改善校務研究作業效能。未來可開放各系使用，減少各系製作辦學問責報告所花費的時間。

（二）特色（系統的亮點）

● 高效率自動化資料處理：原先使用 Excel 需要 3~4 個月才能完成的工作現在可以在幾分鐘內完成，這意味著系統可以自動地處理大量的教務資料，節省了大量時間和人力成本。

● 使用者權限管理：這個系統提供使用者權限管理，確保只有授權的人員可以存取和操作特定數據，增加資料的安全性。

● 系統的實用性:使用者可輕易的查詢數據，依照年度、學院或系別來查詢學生資料。且無需下載任何應用程式，僅需開啟網頁可進行數據計算、新增、查詢、編輯、繪製圖表。

● 系統的開放性:未來可將這個系統開放給各系使用，減少各系為製作辦學問責報告所花費的時間，協助學校更好地管理和監督學業成績和學生表現。

五、 Introduction：

Introduction

This topic is based on the academic research information of the Academic Affairs Office. It replaces the original slow operation method based on Excel and establishes a rapid analysis information system that can immediately obtain the failure rate and academic performance of each admission channel, each department, and each college. (Five Standards) year-by-year data analysis and comparison chart. In addition, based on user needs, we have also established functions such as user rights management, data security protection, student data management, college and department adjustment management, and automatic identification of imported data, reducing the work that originally took 3 to 4 months. The time can be shortened to a few minutes to complete, effectively improving the efficiency of school affairs research operations. In the future, it can be opened to all departments for use, reducing the time spent by each department in producing school accountability reports.

Features

- High-efficiency automated data processing: Work that originally took 3 to 4 months to complete using Excel can now be completed in a few minutes. This means that the system can automatically process a large amount of educational information, saving a lot of time and labor costs.

- User rights management: This system provides user rights management to ensure that only authorized personnel can access and operate specific data, increasing data security.

- Practicality of the system: Users can easily query data and search student information by year, college or department. There is no need to download any applications, you only need to open the web page to calculate, add, query, edit, and draw charts.

- Openness of the system: In the future, this system can be opened to all departments for use, reducing the time spent by each department on producing school accountability reports, and assisting schools to better manage and monitor academic performance and student performance.