

Good evening Dr. Tú. Thank you for joining me today. My name is Nguyễn Phước Vĩnh Khang. I'm very happy to be here and present to you my pre-thesis project that is called Students Management and Registration System.

My presentation is divided into 5 parts: Introduction, Literature Review, Methodology, Implement and Results and final is Future Works and Demo. Now I will go to the first part: Introduction.

### Background

First, About the background of my project. The Student Management and Registration System is a useful tool for both students who wish to study more and teachers who give cram classes at school or at home. Teachers can easily and conveniently construct time frames for additional classes with the help of the system. Additionally, students can choose to register for classes and examine the schedules that each teacher has produced, which saves a lot of time.

### Scope and Objectives

Next, the scope of my project is for students of middle or high school to find and register for extra classes outside of main school hours. Teachers will also easily be able to manage students who registered for their classes, and they can accept those students to study or not. Moreover, the objective for my project is to create a system that not only searches for a class and register, but also teachers can send students a message or give announcements on the website. Besides that, students can view the unpaid tuition amount and pay online on the website.

### Assumption and Solution

The Student Management and Registration System is a crucial tool for instructors and students, offering easy scheduling, comprehensive schedules, and streamlined registration procedures. It simplifies administrative activities, increases efficiency, and will continue to be essential for maximizing learning experiences.

### Literature Review

That the end of part 1, next I will move to the second part: Literature Review. To build this system, I use the main framework Reactjs with HTML, CSS, JS and Bootstrap to support each other for front-end side and for back-end side, I use Nodejs and Expressjs to connect database with the front-end side and MongoDB is used as database of my project.

Reactjs is a free and open-source JavaScript front-end library for building user interfaces based on individual UI components. It is developed and maintained by Meta and its community of individual developers and companies.

HTML is a standard markup language used for web page creation, allowing the creation and structure of sections, paragraphs, and links using HTML elements like tags and attributes.

Web pages are formatted using Cascading Style Sheets (CSS), which define text styles, table sizes, and other elements that were previously limited to HTML definitions.

JavaScript is a lightweight programming language commonly used by web developers to add dynamic interactions to web pages, applications, servers, and even games.

Node JS is a platform for building i/o applications that are server-side event-driven and made using JavaScript. Express JS is a framework based on Node JS which is used for building web applications using approaches and principles of Node JS event-driven architecture.

Bootstrap is a free, open-source front-end development framework for the creation of websites and web apps.

Visual Studio Code is a streamlined code editor with support for development operations like debugging, task running, and version control.

MongoDB is a document-oriented NoSQL database used for high volume data storage. Instead of using tables and rows as in the traditional relational databases, MongoDB makes use of collections and documents.

## Methodology

Now move to part 3: Methodology

Teachers and students should be the two primary user profiles that the system supports. Teachers develop and maintain class schedules, while students register for classes, check schedules, and manage their registrations. Both parties should have access to a notification system through the system, and the registration process should be simple and unambiguous.

User data privacy should be given priority in an interface that is both secure and easy to use. For the best possible user experience, the system should be responsively designed and available on a variety of platforms and devices. Strong functionality that can manage a high volume of users and class registrations should be included in the system.

## Implement and Results

In the 4<sup>th</sup> part: Implement and Results. I will show you some of my system's UI in this part.

In Login page, users can input email and password to login to the system by using the data that user registers, save in the database.

In Register page, user can input the information in these field to save information in the database.

The Home page of both student and teacher can view the main information of the system like announcements, classes and calendar.

This is Classes Page and Announcements Page that teacher can edit or add more classes and announcements for students and students can choose the classes they want to join and get new announcements from teachers. The Inbox Page allows students and teachers chat with each other and Fees Page lets students view the fees.

## Conclusion & Future Work

Finally, Let's move to the final part of my presentation: Conclusion & Future Work and the demonstration for my system.

To sum up, The Student Management and Registration System is a crucial tool for instructors and students, offering easy scheduling, comprehensive schedules, and streamlined registration procedures. It simplifies administrative activities, increases efficiency, and will continue to be essential for maximizing learning experiences.

Furthermore, I would like to improve my system in the future by:

- Improve the user interface and user experience.
- Build the database and connect it to the system to handle some important functions like Login/Register, Add/Delete/Edit information through the database.
- After I finish the database, I can complete the requirements that I have sent to you.
- Moreover, I will build my system on multimedia like tablet or mobile phone.
- And finally, I will add more functions and useful features for my system to make it become more and more perfect and meet everyone's needs.

## References

These are some references that I consulted and used throughout the process of this project. Now let's move on to the Demonstration.