This Project contributes 60% of Total CA Marks.

You should use HTML5, CSS, javascript and jQuery to complete this project. Submit the completed project folders and documentation files on or before **19/11/2021 4:30pm**.

Aims and Objectives
- To gain experience in designing website using HCI knowledge learned.
- To apply the basics of HTML5, CSS, javascript and jQuery programming.
- To gain experience in developing User-centered webpages using HTML5, CSS, javascript and jQuery.

Introduction
This is a group project and should be done in teams of 2 students. On the project cover sheet you must state the contribution of each member using the format below:

Student ID	Name	Contribution	Signature
201234567	Chan Tai Man	50%	
207654321	Wong Sui Ming	50%	

*** Remark: The difference of contribution should not be more than 10%; otherwise, approval is required**.

Scenario
Innovative Secondary school is going to provide a new service called "Attendance Online " to the teachers and students.

The aims of the system are
1) to allow teachers to upload students' attendance records,
2) to allow students to search and view the attendance records,
3) to allow school admin and teachers to generate students' attendance reports

Major Functions of the System:

1. Account Management

There are **THREE** types of user accounts: School Admin, Class Teacher, and Students
1) *All the accounts are created by School Admin staffs*
2) *Users need to complete their profile after their accounts are created*
3) *Users can edit their profile and change their password once they got the account login details*

The Account access right for the users are as follow:
- *School Admin*

  - View and search **ALL** user information
  - Create accounts for all the school members
  - Enable/ Disable user accounts
- *Class Teacher*

  - Search, Edit, and View student information in their Class
  - View and Edit personal account information, including change password
- *Student*

  - View and Edit personal detail, including change password

2. Class allocation:

- *Class Teacher*

    - Create Class
    - Edit Class information
    - Add/Drop students to their class
      (* avoid adding one student into multiple classes)
    - View Class detail
    - View Student list

- *School Admin*

    - Set the Classes Archive to allow new Classes creation
    - Edit Class information

- *Student*

    - View their Class allocation status (including current year and previous years)

3. Searching & reporting:

- *Student*

    - Search their attendance records by year, month, etc

- *Class Teacher*

    - Search students' attendance record as a class and an individual student in the current year
    - Generate class reports for the attendance record, absent record, sick leave record, late record, etc

- *School Admin*

    - Search current students' attendance record as a school, class, and an individual
    - Generate school reports for the attendance rate, absents record, sick leave record, late record, etc for the current school year
    - Generate the above reports for previous years

4. Attendance Management:
Class teachers are required to take attendance every morning at 8:00am by logging into their accounts.

The attendance Status are (not limited) as follow:

- *Present:*

    - Student present on or before 8:00am
      (Recorded by Class Teacher)

- *Late:*

    - Students arrived at the classroom after 8:00am
      (Recorded by Class Teacher)

- *Early leave:*

    - Students leave school before the end of the school day
      (Recorded by Class Teacher)

- *Sick Leave:*

    - Students are required to give a phone call to the school. The school admin will help to mark the Sick Leave record. The student must upload a sick leave certificate, and Class teachers' endorsement is needed afterward. .
      (Recorded by School Admin, Cert Uploaded by students and Endorsed by Class Teacher)

- *Personal leave:*

    - Student is required to provide written notice (Leave Letter) on or before the leave day, or otherwise, attendance records will be marked as absent without reason.

(Recorded by Class Teacher)
- *Absent without reason* (Recorded by Class Teacher)

5. Additional Function:

You are required to design and add **one more function** to the system, which should be of a similar scope size to the functions mentioned above.

Requirement of the Assignment

You are required to submit *System Documentation* and *Prototype* in HTML format as deliverables of this project. The design of your system should be self-explanatory and user-friendly. In your project, try to add animation to each function to make them look more interesting and attractive. Data validation is required wherever necessary. You are encouraged to add special features, for example: Visualize statistics in graphical formats.

1. System Documentation

A. User Analysis

You should carry out the User Analysis process before you start coding your system. In your document, you should include the following areas of research:
- User Characteristics
- Techniques for observing and listening to users
- Environment Analysis
- Recruiting Users
- Task Analysis (HTA)

B. Web Design Concepts

In the second part of the documentation, you should describe how you employ the web design concepts learned in the module and then implement them in your project. In the document, you *need* to capture relevant screen layouts for illustration. You should describe the Design Principles similar to the following table:

Design Principles	Description
Mental Model	
Affordance	
Content Organization	
Visual Organization	
Navigation	

:

2. Prototype

The Prototype should be created in HTML format. All the pre-created user name and password should be listed in a text file named "**USERS.TXT**". Database design/implementation will not be counted in the marking scheme. You may use JSON files or "hardcode" some data for demonstration purpose.

Submission

Each group should submit the followings:

Phase 1 : Prototypes of the 1st, 2nd and 3rd functions (30%)
- Prototype of the system which include function 1, function 2 and function 3.
- Upload your files to Moodle.

Deadline: **15 October 2021 4:30pm**

Phase 2 : Final Product (70%)
- Both system documentation and completed system.
- Upload your files (both the prototypes and system documentation) to Moodle.
- Demonstration of the system is required and will be arranged by the module lecturer.

Deadline: **19 November 2021 4:30pm**

Marking Scheme

They are described in the Project marksheet in the next page.

Marks for enhancement of the prototypes of the 1st, 2nd and 3rd functions submitted in Phase 2 will be given *only if* the group has significant enhancement in those functions when comparing with that submitted in Phase 1. Besides, the maximum mark for that is limited to 15% (5% for the each function) only. And the overall marks of the Phase 1 must not be more than 30%.

Functionality includes the accuracy and adequacy of the functions. Data validation is also included.

System design includes the flow of the system, self-explanatory and user-friendliness.

Name : _____ / _____   **Group:** _____

Project Marksheet

		Grade	**Mark**
Phase 1:			
1. Account Management (10%)			
Functionality and Animation	6%	_____	_____
System Design	4%	_____	_____
2. Class Allocation (10%)		_____	_____
Functionality and Animation	6%	_____	_____
System Design	4%	_____	_____
3. Searching & Reporting (10%)			
Functionality and Animation	6%	_____	_____
System Design	4%	_____	_____
Phase 2:			
A. Enhancement of Account Information	*(max 5%)*	_____	_____
B. Enhancement of Class Allocation	*(max 5%)*	_____	_____
C. Enhancement of Searching & Reporting	*(max 5%)*	_____	_____
Sub Total of Phase 1 (30%)		_____	_____
4. Attendance Management (20%)			
Functionality and Animation	12%	_____	_____
System Design	8%	_____	_____
5. Extra Function (15%)			
Functionality and Animation	10%	_____	_____
System Design	5%	_____	_____
Demonstration (10%)			
Preparation (adequate data)	6%	_____	_____
Flow of Demonstration	4%	_____	_____
System Documentation (25%)			
User Analysis (2% for each area)	10%	_____	_____
Web Design (3% for each principle)	15%	_____	_____
Sub Total of Phase 2 (70%)		_____	_____
Total		_____	_____