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 **26/11/2022 11:55pm**.

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

IVE airline is a new airline company. It provides flights from Hong Kong to Shanghai Pudong International Airport, Kansai Airports, and Taoyuan International Airport. IVE airline will provide a service called "Book your seat Online" for travellers to search the plane and book their seats according to their schedule. Therefore, it provides services to two parties, the traveller and the airline staff. You are the designer of this online portal. You are now required to create a UI prototype for the system.

The aims of the system are

1. to allow the traveller to reserve their air ticket online,
2. to allow the traveller to search and view the booking records,
3. to allow airline staff to generate booking records

At this stage, you are required to implement the following main functions: Register and Login, Searching, View, and Reserve.

Functions of the System:

1) Register and Login

There are THREE types of user accounts: ***Administrator***, ***Operator***, **and** ***Normal_user*.**

After logging in, the main pages for ***Administrator***, ***Operator***, and ***Normal_user*** are different.

Normal_user could create an account by self-registration. While ***Operator*** accounts are created by ***Administrator*** manually. When ***Operator*** login to the system at the first time, they are required to reset their password. Users could renew their password through their registered email if they forget their password.

The system should help users to set a **'STRONG'** password.

2) Searching
An advanced search function is required for the booking system. Users can search the flight information by the arrival airport and the traveling date and time.

Search results may include flight number, departure airport, estimated ticket price, etc. The information meeting the criteria will be displayed on the screen, which may be extended more than one page. Each searching record should have at least **TWELVE** items for the prototype.

3) View and Reserve
After a searching record is selected, users can look on it for details, for example, the price for each class and seat availability of each class. After this, normal users decide whether to reserve a seat on the search or not, if it is available. A UI for reservation flow should be included in this prototype to guide the user to finish their booking. For example, choose the suitable class, ask the user whether they would like to fix a seat, reserve the meal, etc.

After that, a detailed booking information preview will be shown to the user before the final payment. In addition, users could view their previous booking information. However, they should only update and cancel their booking THREE days before the schedule.

4) 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. The additional function should be ***different*** from the above 3 functions.

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 and 2nd functions (35%)

- Prototype of the system which include function 1 and 2.
- Upload your files to Moodle.

Deadline: **22 October 2022 11:55pm**

Phase 2 : Final Product (65%)

- 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: **26 November 2022 11:55pm**

Marking Scheme

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

Marks for enhancement of the prototypes of the 1st and 2nd 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 17% only. And the overall marks of the Phase 1 must not be more than 35%.

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. Register and Login (15%)			
Functionality and Animation	9%		
System Design	6%		
2. Searching (20%)			
Functionality and Animation	12%		
System Design	8%		
Phase 2:			
1.* Register and *Login Enhancement	***(max 7%)***		
2. Searching Enhancement	***(max 10%)***		
Sub Total of Phase 1 (35%)			
3. View and Reserve (20%)			
Functionality and Animation	12%		
System Design	8%		
4. Extra Function (15%)			
Functionality and Animation	9%		
System Design	6%		
Demonstration (5%)			
Preparation (adequate data)	3%		
Flow of Demonstration	2%		
System Documentation (25%)			
User Analysis (2% for each area)	10%		
Web Design (3% for each principle)	15%		
Sub Total of Phase 2 (65%)			
	Total		/100