# <u>IE4717 Web Application Design – Project List for Selection</u>

## Theme 1: A web portal for online food ordering/catering services

You may choose the type of catering service for your application such as NTU canteen, Pizza shops, catering for events and so on. The customer visit the website, browse through the menu and then place orders. Upon finalizing orders, your web application needs to acknowledge the order and provide a means to update the customer on the status of the order, for example, via email. You may also add customer feedback options.

Examples: The Burger House

NTUCan – Online Order/Comment System for NTU Canteens

Blossom Buffet Catering

The Pizaria

## Theme 2: A web portal for online purchase of fashion clothes/shoes/bags/watches

You may choose the type of fashion clothes or shoe shop such as those designer shops. Your web site should allow a potential customer to browse the goods in the online shop. Allow the customer to purchase online. Upon finalizing orders, your web application needs to acknowledge the order via email and provide a means to allow the customer to verify the mock-up design and add final changes to the order.

Examples: A Web Portal for Online Shopping of Shoes

ShoeVille (A web portal for online purchase of fashion shoes)

A web portal for Fashion Bags

Online Fashion Store

## Theme 3: A web portal for online purchase of consumer electronics / IT products

You may choose the types of consumer electronics or IT products and accessories. Your web site should allow a potential customer to browse different categories of products and product details in the online shop, and allow the customer to purchase online. Upon finalizing orders, your web application needs to acknowledge the order and provide a means to update the customer on the status of the order, via email.

Examples: The IT Warehouse

Best Consumer Electronics Online
The Harvey Electronics Shops Online

Theme 4: A web portal for online appointment of family/dental clinic visit

You may choose the family clinic or dentist clinic. Your web site should allow patient to browse the background of the doctors and make appointment. Patient registration is needed. When booking an appointment with the doctor, the doctor's schedule must be shown and the booking is allowed when the doctor is free and available. Once an appointment is made, an email notification will be sent to the patient. Both doctor and patient can also reschedule the appointment.

Examples: A web portal for online appointment of dental clinic visit

Wong & Lim Clinic Online Appointment Booking System

Orange Clinic Online Booking System

Theme 5: A web portal for booking cinema tickets/theatre shows

You may choose either a cinema or a theatre application. Your web site should show the details of the shows and the schedule of screening or performance. A customer can make multiple bookings in order of his/her preferences. The list of available bookings will be presented to the customer for final selection of one or more bookings. Upon confirmation of the final booking(s), an email acknowledgement on the booking details will be sent to the customer.

Examples: A web portal for online booking of cinema tickets
Silver Village Cinema Booking System
The Opera House

In all the above project themes, payment is assumed to be handled by a third-party portal and you do not have to implement the redirection. You simply consider the actions to take when the payment is successful or not successful.

After selecting the above project theme, work on a project title that best describes your web application. Then, brainstorm the project scope and application requirements with your project partner to design, develop and publish your web application as per project guidelines given in the course.

# **Guidelines on Web Application Design Project**

The web application design project aims to give you a hands-on practice of what you learned from exercises and examples covered in the class. You are expected to design, develop, and publish a web application proposed by you using recommended design practices. Hence, your Project should demonstrate your hands-on experience of the web application development lifecycle and concepts learned in this course.

The project must be based on your own design and completed by you in a group of two students (or a single student in case there is an odd number of students in the class group). The use of free or purchased web site templates is not permitted. These include those found in Dreamweaver, purchased or free, blog or social networking templates from the Internet as well as the examples and case studies in textbooks.

Also, you cannot re-use this design project as part of your Final Year Project or for any other courses in which it is assessed.

What is a "page"? To be considered as a "page" in your project, a web document must be consistent with your design and contain dynamic content for the target audience such as text and images with respective styling and data validation where applicable. A web page that has little or no dynamic content or consists only of a static image or a PDF will NOT be counted as a "page".

## Project MUST contain at least

- One (1) home page and four(4) but no more than ten(10) additional content pages
  - Every page must contain appropriate text and images to convey the desired messages to the target audience
  - Every page must contain appropriate page titles
- One (1) table display content effectively
- One (1) form (four (4) fields minimum), together with server-side processing of form data and transactions with database.
- Transactions with database must involve SQL commands such as Select, Insert,
   Update.
- One (1) server-side generated web page.
- Data entries not validated by HTML5 should be validated by JavaScript except for those which can only be validated by server-side scripts together with the database.

- Data entries not validated on client-side must be validated on the server-side using PHP.
- Form must reside on project site (link to an external form is not allowed)
- One (1) external style sheet (CSS) file which contains a minimum of four (4) styles should be found in the web folders

## **Project must NOT contain**

- Mailto or handlers as the FORM action. FORM action should invoke a php script.
- < FRAMES > based page layout
- < TABLE > based page layout
- < IFRAME > based page layout
- JQuery, JSON, AJAX, etc. which are not covered in this module
- Purely image-based page (where the page contains little or no text or content other than images)
- Templates or features extracted from Flutter, Marvel, ReactJS, Dreamweaver,
   Bootstrap, Foundation, GitHub, or any other web site development tools
- Links to Paypal, Facebook, Twitter Hotmail, Gmail, Yahoo mail, etc. external web sites

#### Your project will be evaluated on the following criteria

- Application of Design Principles
- Accomplishment with respect to your design documents
- Visually Appealing
- · Your mastery of web programming languages.

## In the design project report, the following must be seen:

- Application requirements
- Functional Requirements
- **Site Map:** it shows the overall web site structure
- **Storyboard:** Using a word processor, PowerPoint, or ruler and pencil, draw a flowchart (storyboard) of your web site that shows the hierarchy of pages and relationships between the pages.
- Wireframe: Use ruler and pencil or use a computer application to create a
  wireframe for a sample page on your web site that clearly shows the logo,
  navigation, content, and footer areas. Use a camera or use a graphics application
  to save a wireframe as a .gif or .jpg file.
- **Implementation details:** This section should describe how the web applications are implemented and coding techniques used. It should correspond to the design.
- Testing of web application: Test cases should be part of the design and these
  test cases must be presented with the test methods and test results. The tests
  should show that all the application requirements are met.

Note that you must not send email to any email account except your own web account in your local web server.