IERG4210 WEB PROGRAMMING AND SECURITY (2022 SPRING)
ASSIGNMENT MARKING GUIDELINES

REVISION HISTORY

v1.0   Published on 24/01/2022

GENERAL GUIDELINES

The assignment is designed to let students practice what they have learned in the course. Students must be aware of web application security throughout the web development. The whole assignment is split into 6 phases, leading all the way to a creative and functional shopping cart upon completion. Students should take a real-world website, <u>parknshop.com</u>, as a reference. In the assignment, students are expected to <u>understand and apply</u> proper security design principles and programming skills, regardless of which programming languages and libraries the students desire to use. The marking checklist included in the next page therefore outlines only the general requirements with a <u>result-oriented basis</u> in order to encourage students' creativity. For detailed guidance, students should refer to both lecture and tutorial notes.

SUBMISSION POLICY

Students are required to package all of their source code, a <u>README</u> file, and any external resources (e.g., database, images, css and js files) into a zip file and submit it to the Blackboard. Each phase is associated with a <u>firm</u> submission deadline.

- Late Submission Penalty -- Late submission will lead to your mark reduction by the formula 0.9^{n}, where n is the round-up number of days delayed (e.g., assume your score is S and your submission is 9 hrs late $\rightarrow 0.9 \times S$, 25 hrs late $\rightarrow 0.81 \times S$, 49 hrs late $\rightarrow 0.729 \times S$, and so forth).
- *Final Demonstration* – Students will sign up for a timeslot to demonstrate their websites to a marker, who will then grade it according to the checklist. The marker will then evaluate the student's understanding with questions.

HONESTY IN ACADEMIC WORK

CUHK places very high importance on honesty in academic work submitted by students, and adopts a policy of *zero tolerance* on cheating in examinations and plagiarism. Students are NOT allowed to submit anything that is plagiarised. Therefore, we treat every assignment our students submit as original except for source material explicitly acknowledged. We trust that students acknowledge and are aware of University policy and regulations on honesty in academic work, and of the disciplinary guidelines and procedures applicable to breaches of such policy and regulations, as contained in the website http://www.cuhk.edu.hk/policy/academichonesty.

IERG4210 WEB PROGRAMMING AND SECURITY (2022 SPRING)
ASSIGNMENT MARKING CHECKLIST v1

PHASE 1: LAYOUT (DEADLINE FEB.6.2022)   (SUBTOTAL: 15')

The appearance of a website plays a big role in attracting visitors. In Phase 1, you will create a **dummy** shopping website from scratch by hardcoding the basic elements. (**Dummy** means categories and products are only for the purpose of displaying. Customers can not purchase any goods at this moment.)

Figure 1 shows an example of a shopping website layout. **Note** that the layout you design must be different from the example we provide, at the same time, involving all the necessary features we list below. You can draw inspiration by referencing popular shopping websites (e.g.. https://parknshop.com, https://www.walmart.com).

Declaration:

1. Javascript is **NOT** necessary at this phase.
2. Front-end frameworks are allowed in designing your website.
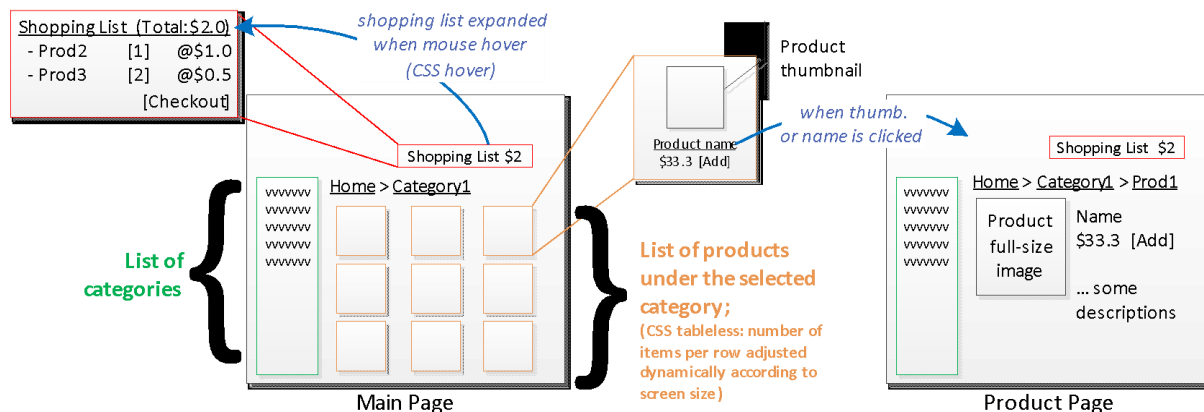
1. HTML: Make good use of semantic HTML <u>throughout the whole assignment</u>.   _____ / 2'
   o <header>, <nav>, <footer>, <div>, <section>, <ul>, <li>, etc.
2. CSS: Clean separation of HTML, CSS and JS code and files <u>throughout the whole assignment</u>.   _____ / 2'
   o No inline CSS and JS are allowed
   o No HTML for styling use, e.g. <center>, align="center", etc.
   o Tolerance: < 5 exceptions
3. *Main page* demonstrates the use of "CSS table-less" *product list*   _____ / 2'
   o Each product has <u>at least</u> its own thumbnail, name, price, and *addToCart* button
   o When the thumbnail or name is clicked, redirect to the corresponding product page
4. *Main page* demonstrates the use of "CSS hover" *shopping list*   _____ / 3'
   o When displayed, it will cover any elements behind
   o Input boxes are used for inputting the quantity of each selected product
   o A checkout button is used (supposed to submit the list to PayPal, currently no function)
   o The shopping list is displayed on both main and product pages
5. *Product page* provides product details   _____ / 3'
   o To show a full-size or bigger image, name, description, price, and *addToCart* button
   o To display the inventory of the item
6. Both main and product pages should include a hierarchical navigation menu   _____ / 3'
   o e.g., <u>Home</u> or <u>Home</u> > <u>Category1</u> or <u>Home</u> > <u>Category1</u> > <u>Product1</u>
   o They are hyperlinks that can redirect users to an upper level of the hierarchy