CS2204 Fundamentals of Internet Application Development
Course Work No. 1 (CW1)
Semester A 2023-2024

10% Marks
Due Date: 09 October 2023, 23:59 [Week 6]

Learning Outcomes:

- Design structures of web pages for a more realistic, commercial-like website
- Achieve user requirements by using appropriate HTML5 markups.
- Produce web pages that can pass through validation.

1.   Overview

You must build a simple Web site for Hong Kong Industrial University by going through the 3S's: structure, style, and script. This CW1 is the first step focusing on structure only. The Web site, therefore, would not be fully functional until the second and third parts (CW2 & CW3) using CSS and JavaScript are completed.

To encourage you to have critical thinking and investigation, only the basic information of the Web pages is specified, and you have the freedom to design the structure if it can fulfill the specified requirements. However, like any design, some structures are better than others.

To ensure timely feedback to the student's questions, each of the following TAs will be responsible for different groups of students according to **the last digit of your student ID**. If you have any questions, you can contact the corresponding TA directly.
- Student ID's **last digit 0 ~ 1:** ZENG Yuhan (yhzeng3-c@my.cityu.edu.hk)
- Student ID's **last digit 2 ~ 3:** HONG Chenhao (HONG.Chenhao@my.cityu.edu.hk)
- Student ID's **last digit 4 ~ 5:** Muratov Ali (amuratov4-c@my.cityu.edu.hk)
- Student ID's **last digit 6 ~ 7:** MUKASHEV Alikhan (amukashev2-c@my.cityu.edu.hk)
- Student ID's **last digit 8 ~ 9:** SANIYAZOV Dias (dsaniyazo2-c@my.cityu.edu.hk)

Guideline for late submissions:
- Late within **3 hours** - **10% marks deduction**
- Late within **3 ~ 12 hours** - **50% marks deduction**
- After **12 hours** - **no** submission will be accepted

2.   Requirements of Structure

Required information on the Web site is grouped into blocks, then pages. There are six main pages and one design page. All contents, unless specified, could be made up by you. If you use information and ideas from others online, you **MUST** acknowledge and quote the source on the design page. When designing your website, if you have borrowed projects from previous years' seniors, this is also a form of plagiarism, as these projects have already been created and submitted by others. **If you are found to have plagiarized, you will be subject to severe penalties, including but not limited to a zero for this coursework, failing the course, and being reported to the school authorities. Therefore, please follow the above rules to ensure the successful pass this course.**

There are 7 pages in total. The default landing page of the Web site is the *Home* page. The contents of every page can be found in the file "cw1-contents.txt" available on Canvas.

Home Page

a) This page contains information grouped into 5 blocks, 3 of which are the standard header, navigation bar, and footer blocks as follows:

a.1) The header/banner block consists of a logo (**logo.png**) and the heading of the Website; these are separated and should not be done in one single image. You should use **<header>** for the heading block. The size of the logo should be set to **100×400**. The following is an example of how to set the size of an image:

<img src="…" width="400" height="100">

Hong Kong Industrial University

a.2) The navigation bar should include links to all the website's six main pages (except the Design page); all jump hyperlinks must be valid in the navigation bar. Ensure all links point to the correct page so users can access the required information without problems. Also, ensure that the layout and design of the navigation bar are consistent across all pages so that users can easily find the information they need. You also need to note that you need to use a reasonable HTML structure to organize the navigation bar. You need to note that there is no requirement for the navigation bar to be horizontal or vertical. **<nav>** should be used for the navigation bar.

- Home
- About
- Apply
- Visit
- Program
- Contact

a.3) The footer with another logo (**footer_logo.png, 100×300**) and information about the copyright and a link pointing to the Design page. **<footer>** should be used for the footer block.

© CityU 2023 sources of images and text from Wikipedia Commons and Courtesy of Icon pack by Icons8 -- designed by CS2204

"@CityU 2023 – sources of images and text from Wikipedia and Courtesy of Icon pack by Icons8 – designed by ******".

Where ****** is your name, including a link to the *Design* page.

These three blocks would appear on not only the home page but also all other pages. HTML code of them should be duplicated on every page.

b) The remaining 2 blocks are as follows:

b.1) The welcome block contains some information shown in the screenshot. You can find the content of this page in the appendix at the end of the document. The website we needed to implement had a large amount of text, so we provided all the website's textual content in the appendix.

b.2) The basic information block contains five types of information shown in the screenshot: address, telephone, business hours, why HKIU, and location which is an image (**location.jpg, 800×800**); use the most structured elements to present such information. At the end, an image (**button.png, 100×400**) link points to the Apply page. We have implemented the button's functionality with an image here.

The following is an example of a finished home page.

![Hong Kong Industrial University logo] 香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

Hong Kong Industrial University

- [Home](#)
- [About](#)
- [Apply](#)
- [Visit](#)
- [Program](#)
- [Contact](#)

Welcome to Hong Kong Industrial University

Hong Kong Industrial University is a comprehensive public university located at Tat Chee Avenue, Kowloon, Hong Kong. The university was established in 1997 to provide high-quality education and research opportunities for Hong Kong and international students. The university's campus covers an area of about 500 hectares with excellent facilities and a beautiful environment.

The university offers undergraduate education in 11 disciplines: Physics, Chemistry, Biology, Materials Science and Engineering, Electronic Science and Technology, Cognitive Science, Computer Science and Technology, Biomedical Engineering, Electronics and Information Technology, Materials and Chemical Engineering, and Biology and Medicine. The School's teaching and research team comprises renowned scholars and experts from home and abroad committed to providing students with cutting-edge knowledge and skills.

Address
Tat Chee Avenue,
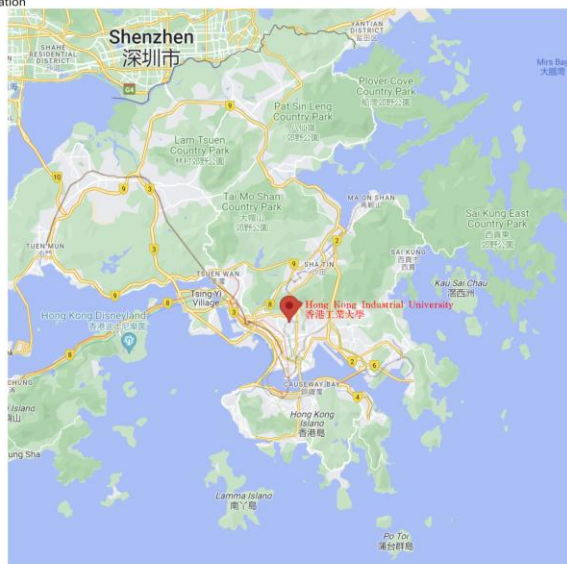Kowloon,
Hong Kong SAR
Tel
(852) 1234 5678
Business Hours
8:30 AM to 17:30 PM
Why HKIU
(1) A full range of disciplines and specialties: Hong Kong Industrial University offers 11 fields and things in Physics, Chemistry, Biology, Materials Science and Engineering, Electronic Science and Technology, Cognitive Science, Computer Science and Technology, Biomedical Engineering, Electronics and Information Technology, Materials and Chemical Engineering, and Biology and Pharmaceuticals, which cover several popular fields and industries, and provide broad development opportunities for students.
(2) Practical Education and Employment Opportunities: The university emphasizes practical education and has established close cooperation with many enterprises and organizations to provide students with internships and employment opportunities, which is conducive to applying what they have learned in practice and better prepares them for their future careers.
(3) Abundant research resources: The university has first-class research facilities and resources and is committed to promoting scientific and technological innovation and social progress. Students can access the latest research findings and participate in scientific research to expand their horizons and skills.
(4) Internationalized education: HKIU has students and teachers from all over the world. Students can be exposed to different cultures and ways of thinking and expand their international vision and language skills.
(5) Rich Campus Life: The university provides students with various extracurricular activities and clubs, including arts and culture, sports, and social practice, to cultivate students' sense of social responsibility and leadership. The school also provides students with a rich campus life, including dining, lodging, and recreational facilities, to create a comfortable learning environment and a well-rounded student experience.
Location

![CLICK TO APPLY NOW! button]

香港工業大學
Hong Kong Industrial University
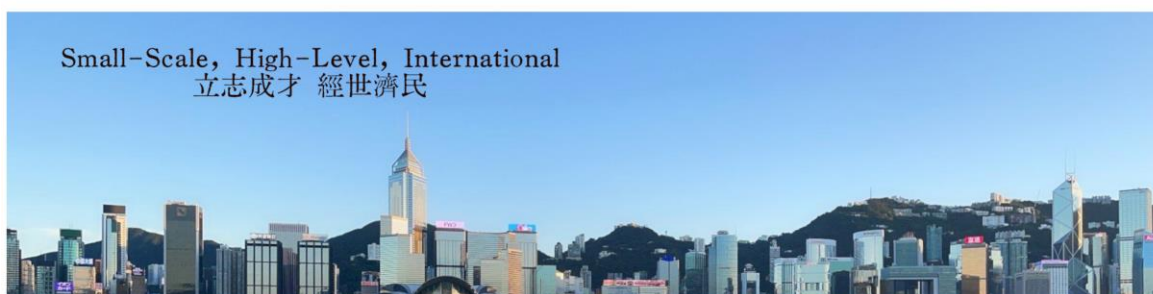立志成才 經世濟民 Better Learning Better Service

© CityU 2023 sources of images and text from Wikipedia Commons and Courtesy of Icon pack by Icons8 -- designed by [CS2204](#)

About Page

c)   contains the standard header, navigation bar, and footer, the same as the *home* page. The About page also includes two more blocks: the **promotional image block** and the **information block**.

d)   You should put an extra **promotional image block** inside the header that contains only one image (**about.png, width="1650"**). You should put it in the <header> with the header block introduced before.

e)   **The information block** should display the information below. Use <p> for each paragraph. Also, it should display the "HKIU at a glance" table that contains some brief information. The cw1 does NOT require the "HKIU at a glance" table's border.

香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

Hong Kong Industrial University

Small-Scale, High-Level, International
立志成才 經世濟民

- Home
- About
- Apply
- Visit
- Program
- Contact

Welcome to Hong Kong Industrial University -- a dynamic and innovative institution committed to providing high-quality education and research opportunities for students from Hong Kong and worldwide. Since our establishment in 1997, we have been dedicated to becoming a small-scale, high-level, and international universityoriented toward research and innovation.

Our campus covers an area of approximately 500 hectares. It is located in the Hong Kong Kowloon High-Tech Park, where we collaborate closely with institutes of the Chinese Academy of Sciences. Our faculty comprises renowned scholars and experts from home and abroad who are committed to providing students with cutting-edge knowledge and skills in 11 disciplines, including Physics, Chemistry, Biology, Materials Science and Engineering, Electronic Science and Technology, Cognitive Science, Computer Science and Technology, Biomedical Engineering, Electronics and Information Technology, Materials, and Chemical Engineering, and Biology and Medicine.

At Hong Kong Industrial University, we offer a student-centered educational approach that encourages cross-disciplinary research in an international environment. Our curriculum is based on international standards and is taught entirely in English. We encourage undergraduate students to join research groups from their first year, with approximately 82% of our undergraduate students joining research groups by their third year and 100% by their final year. To broaden our students' international perspectives, we provide them various overseas study opportunities, including at world-renowned universities such as Harvard University, Massachusetts Institute of Technology, Tsinghua University, City University of Hong Kong, and Peking University.

Our faculty members are recognized leaders in their fields, with 321 tenured professors and 80% with overseas study or work experience. As a university committed to innovation, we have created an atmosphere on campus that supports and encourages entrepreneurship. We have established 370 spin-off companies, with 114 of them founded in 2024 alone. Our incubator programs provide students and faculty opportunities to connect with technology, market, policy, and capital resources, making it a crucial "power source" for innovation practice.

Hong Kong Industrial University's strength lies in our world-class facilities and talented faculty and students. We are dedicated to providing our students with the resources and guidance they need to excel in their fields and positively impact society. Thank you for considering us as your academic home.

HKIU at a Glance			
Undergraduates	Master's and Ph.D. Students	Faculty Members	Nobel Laureates on Faculty
1,926	1,919	321	10+

香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

Apply Page

f) contains the standard header, navigation bar, and footer, the same as the *home page*. The order page also includes three more blocks.

g) **The welcome block** contains welcome information. On this webpage, we include the phrase "Welcome to HKIU" in the block.

The apply block shows the majors provided by **Hong Kong Industrial University** for applying; it has the heading "Common Application to Undergraduate Program" followed by three more minor headings with names (College of Engineering, College of Science, and College of Interdisciplinary Studies. You should design five major application forms for the College of Engineering (first five, CS~EST), three major application forms for the College of Science (PHY~BIO), and three major application forms for the College of Interdisciplinary Studies (Cognitive Science~Biologyand Medicine). Each major is a <form> including a <img> (**200×200**), a <label>, a <input>, and a <button>. We do not use these buttons in this coursework. We will functionalize them in later coursework with JS. Majors from the same college should be organized in a <div>. The "action" and "method" of each form should be set to "#" and "get", respectively. **The resulting block** displays information about choice majors, rankings, and the number of completion choices in a table format. The head of this table, time, and "Total number of …" are three sub-headings like <h2>.

香港工業大學
Hong Kong Industrial University
立志成才 招賢育民 Better Learning Better Service

Hong Kong Industrial University

- Home
- About
- Apply
- Visit
- Program
- Contact

Welcome to HKIU

Common Application to Undergraduate Program

College of Engineering

College of Science

College of Interdisciplinary Studies

BSc in Computer Science and Technology [   ] rank of choice

BEng in Electronic Information [   ] rank of choice
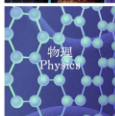

BEng in Materials Science and Engineering [   ] rank of choice
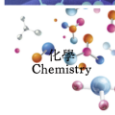

BEng in Materials and Chemicals [   ] rank of choice

BSc in Electronic Science and Technology [   ] rank of choice

BSc in Physics [   ] rank of choice

BSc in Chemistry [   ] rank of choice

BSc in Biology [   ] rank of choice

BSc in Cognitive Science [   ] rank of choice

BEng in Biomedical Engineering [   ] rank of choice

BSc in Biology and Medicine [   ] rank of choice

Your chosen majors:

7 Jul 2023 22:22

College	Major	Rank
College of Engineering	BEng in Electronic Information	1
College of Science	BSc in Physics	2
College of Interdisciplinary Studies	BSc in Cognitive Science	3

Total number of completed choices: 3

submit clear

香港工業大學
Hong Kong Industrial University
立志成才 招賢育民 Better Learning Better Service

Visit Page

h) This page contains information grouped into six blocks, 3 of which are the standard header, navigation bar, and footer blocks, as introduced above. The remaining three blocks are as follows.

i) **The welcome block** is a block of HTML code containing a paragraph that displays a warm welcome to visitors and introduces the campus and academic environment of the Hong Kong Industrial University. <p> should be used for each paragraph. You will lose some points if we find all the text in the welcome block crammed into one paragraph.

j) **The location block** contains five types of information as shown in the screenshot: address, telephone, fax, email, and location (**location.jpg, 800×800**); use the most structured elements to present such information.

k) **The reservation block** is an HTML snippet that contains a reservation form. It displays a form on a web page for booking a campus visit and collects information about the user's reservation. The user can fill in the information about the reservation to visit the campus, including the date, time, and number of visitors, and submit the form via the submit (Check Availability) button. It would be best to implement everything in the reservation block shown in the screenshot, including but not limited to the legend "Booking information," the form's action attribute, Date, Time, and "No. of Visitors," and Check Availability and reset. You need to note that you should develop at least two time options. In the screenshot, we have implemented six options.

Hong Kong Industrial University is having an open day on campus! Please make a reservation to visit our campus!

Booking information:
Date: 2023/08/04
Time: 8:30-9:30am
No.of

| 8:30-9:30am |
| 9:30-10:30am |
| 10:30-11:30am |
| 1:30-2:30pm |
| 2:30-4:00pm |
| 4:00-5:00pm |

Check

Hong Kong Industrial University

- Home
- About
- Apply
- Visit
- Program
- Contact

We warmly welcome you to visit us at our Kowloon campus and experience our vibrant learning community. Our campus is located in the Hong Kong Kowloon High-Tech Park, where we collaborate closely with institutes of the Chinese Academy of Sciences.

During your visit, you can explore our world-class facilities, including the Protein Folding Science Center, Hong Kong Advanced Computing Equipment, Hong Kong Ultrafast Laser Facility, Hong Kong Electron-Positron Collider, and Hong Kong Supercomputer Facility. These facilities are available to our faculty, students, and researchers worldwide.

You will also have the chance to meet our renowned scholars and experts from home and abroad committed to providing students with cutting-edge knowledge and skills in their respective fields. Our faculty members are recognized leaders in their fields, and their research has been published in prestigious journals such as Cell, Nature, and Science.

We hope you will come and visit us soon to experience firsthand the dynamic and innovative community at Hong Kong Industrial University.

Location

Address: Tat Chee Avenue, Kowloon, Hong Kong SAR

Tel: (852) 1234 5678

Fax: (852) 8765 4321

Email: visit@hkiu.edu.hk

Hong Kong Industrial University is having an open day on campus! Please make a reservation to visit our campus!

Booking information:
Date: 年 / 月 / 日
Time: 8:30-9:30am
No.of Visitors:

[Check Availability] [Reset]

Program Page

l) This page contains information grouped into five blocks, 3 of which are the standard header, navigation bar, and footer blocks, as introduced above. The remaining two blocks are as follows.

m) There are two **promotion information blocks,** each containing a text passage for the promotion of Hong Kong Industrial University, followed by a video that plays **automatically** and continuously. Inside the <video> tag, use the <source> tag to define the source file for the video. In this project, two source files are provided as alternatives. The browser will select the first supported file type for playback. If the browser does not support either source file type, then the video will not play. The first <source> tag specifies the MP4 file source of the video, and the second <source> tag specifies the MKV file source of the video.

Videos are available on:
https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video1.mp4
https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video1.mkv
https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video2.mp4
https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video2.mkv

n) The **information table block** contains an HTML table for displaying various degree programs of different colleges and their related information. In the first row of the table, the <th> tag defines the table header, including the column headings "College," "Program," "Duration," "Language," and "Fee." Starting with the second row, each corresponds to information about a degree program. The text content of each cell is defined using <td> tags. This table presents the various degree programs and their related information from different colleges so users can easily compare and find the programs of interest.

Hong Kong Industrial University

- Home
- About
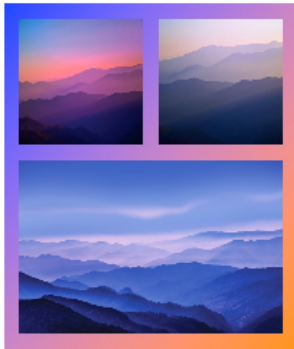- Apply
- Visit
- Program
- Contact

Program

Join Hong Kong Industrial University's College of Science for world-class education and research opportunities in science and technology! 20 QUOTAS LEFT!

Chemistry Program

- The Chemistry program covers a broad range of topics, including organic chemistry, physical chemistry, inorganic chemistry, and analytic chemistry. Students will gain hands-on experience in laboratory work and will have the opportunity to participate in research projects, such as the study of materials chemistry, biochemistry, and environmental chemistry.

Join the future of engineering with Hong Kong Industrial University's College of Engineering, offering innovative programs and world-class faculty to prepare you for success in the field! 40 QUOTAS LEFT!

BEng in Materials and Chemical Engineering

The BEng in Materials and Chemical Engineering program focuses on the design, development, and application of materials and chemical processes. The program includes core courses in materials science and engineering, chemical engineering, physical chemistry, and thermodynamics, as well as elective courses in various fields such as polymer science, biomaterials, electronic materials, green chemistry, etc. Students will also gain practical experience through laboratory courses, project courses, internships, and research projects.

College	Program	Duration	Language	Fee
College of Engineering	BSc in Computer Science and Technology	4 years	English	HK$42,100
College of Engineering	BEng in Electronic Information	4 years	English	HK$42,100
College of Engineering	BEng in Materials Science and Engineering	4 years	English	HK$42,100
College of Engineering	BEng in Materials and Chemicals	4 years	English	HK$42,100
College of Science	BSc in Physics	4 years	English	HK$42,100
College of Science	BSc in Chemistry	4 years	English	HK$42,100
College of Science	BSc in Biology	4 years	English	HK$42,100
College of Interdisciplinary Studies	BSc in Cognitive Science	4 years	English	HK$42,100
College of Interdisciplinary Studies	BEng in Biomedical Engineering	4 years	English	HK$42,100
College of Interdisciplinary Studies	BEng in Electronics and Information Technology	4 years	English	HK$42,100
College of Interdisciplinary Studies	BEng in Biology and Medicine	4 years	English	HK$42,100

香港工業大學
Hong Kong Industrial University

Contact Page

o) This page contains information grouped into four blocks, 3 of which are the standard header, navigation bar, and footer blocks, as introduced above. The remaining two blocks are as follows.

p) The contact block creates a table with contact information, including location, address, telephone, fax, and e-mail. Such a table can be used to display the contact information of a school or organization, making it easy for visitors to access relevant information for communication or contact.

香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

Hong Kong Industrial University

- Home
- About
- Apply
- Visit
- Program
- Contact

Contact

Location	Address	Tel	Fax	Email
HKIU	Tat Chee Avenue, Kowloon, Hong Kong SAR	(852) 1234 5678	(852) 8765 4321	contact@hkiu.edu.hk

香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

© CityU 2023 sources of images and text from Wikipedia Commons and Courtesy of Icon pack by Icons8 -- designed by CS2204

Design Page

q) This is an additional free format Web page for you to acknowledge the sources of information used in your design. If you use images, **icons,** or text obtained from the Internet, write the source and links **on** this page. Most information will be put in later for CW2 and CW3. **Whether** you **need something** to acknowledge **or not**, **enter** your name and student ID.

香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

Hong Kong Industrial University

- Home
- About
- Apply
- Visit
- Program
- Contact

Welcome to HKIU

Design Page

Name:CS2204

SID:xxxxxxxx

香港工業大學
Hong Kong Industrial University
立志成才 經世濟民 Better Learning Better Service

© CityU 2023 sources of images and text from Wikipedia Commons and Courtesy of Icon pack by Icons8 -- designed by CS2204

3.   Assessment criteria

You will be assessed by how much and how well you can apply what has been learned from the course; some considerations are:

- **No** styling nor JavaScript is required in CW1 (do not include any style or CSS; marks will be deducted if your styles confuse our marking)
- use appropriate HTML structural tags (e.g., <header>, <footer>, <div>, <span>), and give as much structure as feasible.
- Adopt all possible good practices discussed in lectures.
- Your website should be organized in proper folders, e.g., HTML and image.
- Make sure the hyperlinks on your web page are available.
- All pages except the design page must pass through validation with no error. You can use https://validator.w3.org/#validate_by_input+with_options for a check.

4.   Submission

- Submit a zip file of your website with appropriate folders set up so that it can be tested directly by unzip - be careful with your URLs; they should work when your submission is tested as local files on other computers or as Web pages served by a Web server.

- DO NOT include video files in your submission file; DO NOT use YouTube video; should use any one given video link in the server folder. Note that this link can only be accessed within the CityU network. If you are outside campus, you should use VPN.

  https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video1.mp4
  https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video2.mp4
  https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video1.mkv
  https://personal.cs.cityu.edu.hk/~cs2204/2023/video/video2.mkv

  Videos for the promotion information block: video1.mp4, video1.mkv, video2.mp4, video2.mkv

5.   Miscellaneous information

- You should retain a copy of your submission. The same set of web pages will be used again in CW2 and CW3 for adding styles and JavaScript, respectively.
- Some images are available in the Canvas CW1 folder.

~ End ~