

University of Wollongong
School of Computing and Information Technology

CSIT828/HCSI828 Introduction to Web Technology

Examination Paper

Spring Session 2020

Exam duration:	3 hours
Weighting:	60%
Total mark:	60 marks
Items permitted during exam:	All teaching resources on subject Moodle site
Number of questions:	5 questions
Submission instruction:	Submission is on Moodle. Create a folder to store all your code and images. Compress your folder into Exam.zip and submit it via the Exam Submission on Moodle.
Penalty for late submission:	1 mark deduction per 1 minute late.

Exam Declaration:

This is the exam paper for the subject CSIT828/HCSI828.

By proceeding to attempt this exam, I agree to the following:

- *I am enrolled in the subject CSIT828/HCSI828 in Spring session 2020;*
- *This submission is my own work;*
- *I understand that at no point during or after the exam I am allowed to discuss, collude, or share information about the exam with any other individual or group;*
- *I understand that if I am found in violation of this agreement that I will be subject to university Academic Misconduct Procedures.*

Question 1 (10 points). Create a webpage Question1.html.

On the webpage, display the following information about yourself and this subject.

(Note: you must use **your own information** and **correct subject information**).

Question 1 for 828

PERSONAL DETAILS	
Student number	1234567
First name	John
Family name	Smith
SUBJECT DETAILS	
Subject	XYZT828: Introduction to Web Technology
Exam start time	8:30AM Saturday 10/01/1990
Exam duration	3 hours
Exam end time	11:30AM Saturday 10/01/1990
DECLARATION	
By proceeding to attempt this exam, I agree to the following:	
<ul style="list-style-type: none">• I am enrolled in the subject CSIT828/HCSI828 in Spring session 2020;• This submission is my own work;• I understand that at no point during or after the exam I am allowed to discuss, collude, or share information about the exam with any other individual or group;• I understand that if I am found in violation of this agreement that I will be subject to university Academic Misconduct Procedures.	

Question 2 (10 points). Create a webpage Question2.html.

On the website, use **your own full name** and **student number** to display the following.
(Here is an example of student name “John Smith” and student number “9610514”)

Question 2

John Smith - Student number 9610514

9	6	1	0	5	1	4
9	6	1	0	5	1	4

Question 3 (10 points). Write an XML document called Question3.xml that represents the following player record and the XML must contain **internal DTD**.

Player info

Player ID 0460123
Name John Smith
Rating national 5
Rating international 146
Country Australia

Major match history

Date	Player	Result
25/03/2001	Naskov Boris	win
02/04/2001	Joseph Valentin	draw
03/07/2002	Martin Tome	win
21/08/2003	Boja Tomica	loss

Question 4 (15 points). Create a webpage Question4.html.

The web page should display 2 buttons “Start Animation” and “Stop Animation”.

Whenever the button “Start Animation” is clicked, every second, the website displays an equation based on your student number. The example below illustrates how the animation should work:

- Suppose that your student number is 9610514, then in the animation, the web page first displays the equation $9610514 + 1 = 9610515$
- Then a second later, the equation becomes $9610514 + 2 = 9610516$
- Then a second later, the equation becomes $9610514 + 3 = 9610517$
- Then a second later, the equation becomes $9610514 + 4 = 9610518$, etc...

In this animation, you must use **your own student number** for the first number. The second number in the equation is increased by 1 every second.

Whenever the button “Stop Animation” is clicked, then the web page stops the animation. Whatever the equation is currently displayed will stay there on the page.

Question 5 (15 points). Create a webpage Question5.html.

On the web page displays “Enter command: ”, followed by a text field for the user to enter a command, followed by a button “Execute command”.

Below the button, display 5 images of the same height: a frog, a table, a chair, a phone and a car, in this exact order.

A valid command is of the form “Change X to Y” where X and Y are two different words from this list: frog, table, chair, phone, car. Below are some examples of valid commands and invalid commands.

Examples of valid command	Examples of invalid command
Change table to frog	frog
Change chair to phone	Change chair to chair
Change frog to car	Change frog to dog
Change car to chair	car to chair
Change table to phone	Change TABLE to PHONE

- If the user enters an **invalid command** and presses the button “Execute command” then an alert window appears which says “You have entered an invalid command”.
- If the user enters a **valid command** “Change X to Y” and presses the button “Execute command” then any image of X on the page will be replaced by the image of Y.

The following example illustrates how the program should work:

- Initially, 5 images: a frog, a table, a chair, a phone and a car, displayed in this order.
- The user enters the command “Change table to chair” and presses the button “Execute command”, 5 images becomes: a frog, a chair, a chair, a phone and a car, in this order.
- Next, the user enters the command “Change car to frog” and presses the button “Execute command”, 5 images becomes: a frog, a chair, a chair, a phone and a frog, in this order.
- Next, the user enters the command “Change table to frog” and presses the button “Execute command”, 5 images unchanged: a frog, a chair, a chair, a phone and a frog.
- Next, the user enters the command “Change frog to car” and presses the button “Execute command”, 5 images becomes: a car, a chair, a chair, a phone and a car, in this order.

END OF EXAM