

Assignment 2 (Group)

Your assignment must be submitted to Moodle before the deadline. Create a folder and named it as **A2-GxTyy-UOWID1,UOWID2(Name1,Name2)** where “x” stands for your tutorial group number and “yy” is the team number. For example, A2-G2T05 stands for team 05 in tutorial group 2. In this folder you should have one MS Words report and all your sources. The sources can be in separate files. Submit it via the Assignment Submission tab in moodle. Only 1 submission per group. Part of the evaluation include the ability to follow these instructions.

You need to demonstrate your work for this assignment. You may be asked questions during the demo about your code. Part of the evaluation include the ability to answer the question.

Assignment question: Using HTML, CSS, Javascript, XML, XSD, XSL and XLST to develop the content as shown below. There are 3 parts. Use relative link. All source codes need to follow proper programming style and convention to enhance its readability. Your report must include the screenshot of your webpage and the explanation of all your codes.

Part 1:

A table reflecting the following information. The format must be as shown below.

| CSIT128: Assignment 2 | | | Group GxTyy |
|----------------------------------|-------|-----------|-------------|
| Student Number / Name / Email | UOWID | Your Name | Your Email |
| | UOWID | Your Name | Your Email |
| | UOWID | Your Name | Your Email |

Part 2:

This part is a game that the user can play.

The game starts with the following screen in a table structure as shown below.

| Part 2: Game | | |
|--------------------------|---------------------------|--------------------------|
| Your chosen number: | <list box showing 3 to 7> | Current Score: 0 |
| <Start Game Button> | | <Stop Game Button> |
| <1 st number> | <2 nd number> | <3 rd number> |

The player will pick a target number from a list box showing 3 to 7 (inclusive 3 and 7). The initial value of score is zero and it must be shown as “0” in the box.

When the player clicks on the “Start Game” button, in every 2 seconds, three random numbers will be generated and displayed on the screen (e.g. 3 4 7) at the position as shown above. The three numbers must not repeat at the same time (i.e. can’t have repeating numbers – e.g. 3 4 3). After starting a game, you can’t change the chosen number.

To play the game, the player must click on the randomly generated number that was chosen earlier to win 3 points. If the player clicks on the wrong number, 2 points are deducted. Therefore, the game score can become negative if the player clicks on many wrong numbers. For example, if the chosen number is “5” and the randomly generated characters are “5”, “7” and “3”, clicking on the 1st number “5” will gain 3 points. Clicking on the character “7” will result in losing 2 points. The current score is displayed on the top right corner of the table. It must be updated in real-time as the player plays the game.

Try to have the font size, foreground and background colours as close as possible to what are shown above.

When the player clicks on the “Stop Game” button, the game is stopped. The screen must remain the same with the chosen number, the current score and the last 3 random numbers unchanged. When you click on “start” game again, it will reset the score to 0 and start the random number generation again. You can also change the chosen number to a new number.

Part 3:

On Moodle site, under Assignment 2 section, download the file A2.xml and study it carefully. Using the content of A2.xml, create the following files.

- edited A2.xml file to use the stylesheet S2.xsl
- a S2.xsd file describing the structure of A2.xml
- a stylesheet file S2.xsl.

Below is only a sample showing the general format of the display. You should follow the given xml file and the formatting as described below. You should see different cells being filled up.

Singapore [01/08/20 10:00 PM]

| Date | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|--------|--|---|-----|--|--|-----|--|
| 12 Jun | | | | | 23° - 29°  Cloudy with a thunderstorm | | |
| 16 Jun | | 25° - 30°  Considerable clouds | | | | | |
| 28 Jun | | | | | | | 22° - 30°  A morning shower, then rain |
| 06 Jul | 30° - 34°  Plenty of sunshine | | | | | | |
| 10 Jul | | | | | 29° - 33°  Partly sunny | | |
| 30 Jul | | | | 28° - 32°  Plenty of sunshine | | | |

Please note that:

- The background colour for the first row and first column is **Aqua**. The text for the 1st row is bold. All table cell contents are centralised.
- All the forecasts must be displayed in **descending** order from **latest date to earliest date**.
- The temperature is from **lowest to highest** with the degree symbol.
- You have to use the images from the A2 Resources folder (base on the “overallCode” element in the xml file)
- Use **blue** for “cloudy”, **orange** for “thunderstorm” and “rain” and **red** for “sunny” and “partly sunny” weather as shown above.