

### **Bonus Lab**

IMPORTANT! Save all your work to a safe location such as oneDrive.

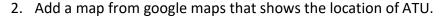
Create a folder for GUI & Web Development into which you will save all your work for this module, arranged how you wish. Ideally you should create a folder <u>each week</u> for your lab exercises. Note that you should create <u>a separate file</u> for each exercise.

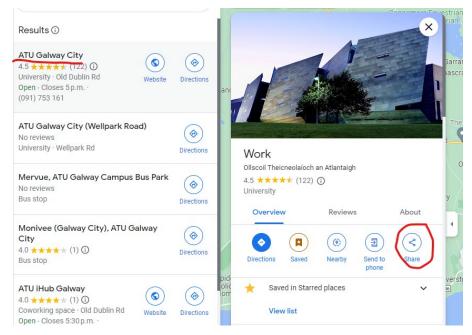
# Exercise 1: Using <iframe> to embed content from external sources.

1. Add a video to the personal GMIT page you created in previous weeks. The video you can add is a *youtube video* called "A day in the life at GMIT". You should use an **iframe** to add this video.

Locate the video in youtube. Directly underneath the video (to the lower right), click the share option, and select "embed". The code required will be generated for you.

Copy and paste this code into your existing personal web page, underneath your timetable. Test the page to ensure the video plays.





Search for "google maps" in google, and open the google maps result. Search for ATU.

3. Click on the share option, then select "Embed a map". The iframe code is automatically generated for you. Copy the HTML.



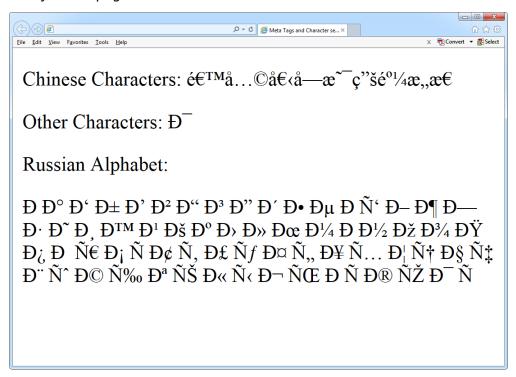
4. Add the map code into your personal page beside the embedded youtube video so that they appear side-by-side. Ensure that the video takes up approximately half the page width and the map takes up the other half.

#### **Exercise 2: UTF-8 and Entity Characters**

Note that in this exercise you should use INTERNET EXPLORER. Do not use Chrome or Firefox as they auto-detect the character required. In this exercise you are viewing what may happen when no character set has been specified.

1. Open the file "utf8.txt" in moodle. Copy and paste the code into notepad++. Save the page and view the page in internet explorer (NOT chrome or Firefox)

Your finished page should look similar to as shown here:



Note that the browser is unable to display the Chinese characters or the Russian alphabet correctly. This is because it does not have a character set specified.

Amend your page to include the charset metatag with a value of UTF-8, as shown below:

- 2. Save the page and view it again in internet explorer. The page should now be displaying the Chinese characters and the Russian alphabet as you have specified a Character Set to use (UTF-8). UTF-8 has a very large set of characters used to display characters other than the standard characters used in the English language.
- 3. Entity characters can also be used to display special characters. Download the file "entity.txt" and copy and paste the code into notepad++. Save and run the page in internet Explorer. Note the 3 representations of the euro symbol. The first has not displayed correctly, but the next 2 have, because the entity character has been used.

Euro Symbol: â,¬

Euro Entity Name Code: €

Euro Entity Decimal Code: €

Entity characters can also be used for special characters such as multiple spaces, as outlined below:

to add a single space

  to add 2 spaces   to add 4 spaces

Note: It is <u>recommend</u> that you include the <meta charset="UTF-8"> tag in your web pages to ensure compatibility across a variety of browsers.

## **Exercise 3: Top 3 Movies page**

Recreate the following page:

## TOP 3 Movies of 2023

