Assignment 1 – Spatial Data and Asset / Facilities Management

Carrying out a Condition Survey

Submission Date:
Friday 16th October 2020 at 13:00

Submission Method:

- Upload a spreadsheet to moodle
- Create some data on a test website

This assignment is worth 5% of the marks for the module.

- *If you have questions about this assignment, please post them on Moodle*
  - *That way everyone is given the same information*
  - *That way I remember what I've said to you and don't mark you down for doing something that I wasn't expecting*
  - *Any questions should be generic – as this is an assessment which will gauge how much you've learned during the module I won't be able to solve very specific assignment-related problems for you.*

- *This is a digital submission – it is up to you to ensure that the file you upload to Moodle is not corrupt in any way (you might be able to do this by downloading the uploaded file to check it)*

Overview
The assignment will allow you to explore two ways of capturing condition data about rooms where you work or live:

- By creating an online form
- By filling in a form on a website

To pass the assignment you will need to complete 5 condition surveys for 1 room and then insert the data into the online form and the website form

Make sure that for part 2 you fill in your user details correctly otherwise someone else might benefit from your work!

(You can do more than 1 rooms if you'd like to practice- we'll take the last room when marking)

Part 1 – Creating an Online Form

Step 1
- Select an online form creation tool such as Google Forms or Microsoft Forms
- Create a new form using this tool. The form should have the following 13 fields:
    - Username (the one assigned to you for this class i.e. userxxx)
    - Room name - text
    - Condition information for
        - Walls
        - Ceilings
        - Doors
        - Windows
        - Furniture and Equipment
        - Heating System
        - Air Conditioning
        - Sockets
        - Lighting and Switches
    - Latitude – as a number (float)
    - Longitude – as a number (float)

Condition ratings are all numbers as shown here:

1	"As new or in good serviceable condition"
2	"Deteriorating, evidence of high usage, age, additional maintenance costs and inefficiency"
3	"Requires replacement within 5 years"
4	"In poor condition, overdue for replacement"
5	"Unable to determine condition (e.g. as item is hidden)"
6	"Item does not exist"

Step 2
- You need to do FIVE condition surveys of same room, on different days[1]
    - i.e. fill in the form 5 times
- You can get the latitude and longitude values of the rooms from sites such as: https://getlatlong.net/ or https://www.latlong.net/. You do not have to use the real values for location – you can choose anywhere in the world.

(You might want to take a note how long this takes you each day)

Step 3
- Download your data from the form and upload the CSV file to Moodle.

NB: Do not include any personal information on the form!

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[1] In reality you wouldn't usually do condition surveys so close together as it is likely not much will change.

Part 2 – Filling in an Online Form

For this part of the assignment, we will be using a customised website to capture the same data as above – but this time instead of putting it into a spreadsheet individually, you'll all put the data into the same database.

Follow the steps below to insert the data.   Once you have finished you can explore the website a little but note that it is still very much under development!
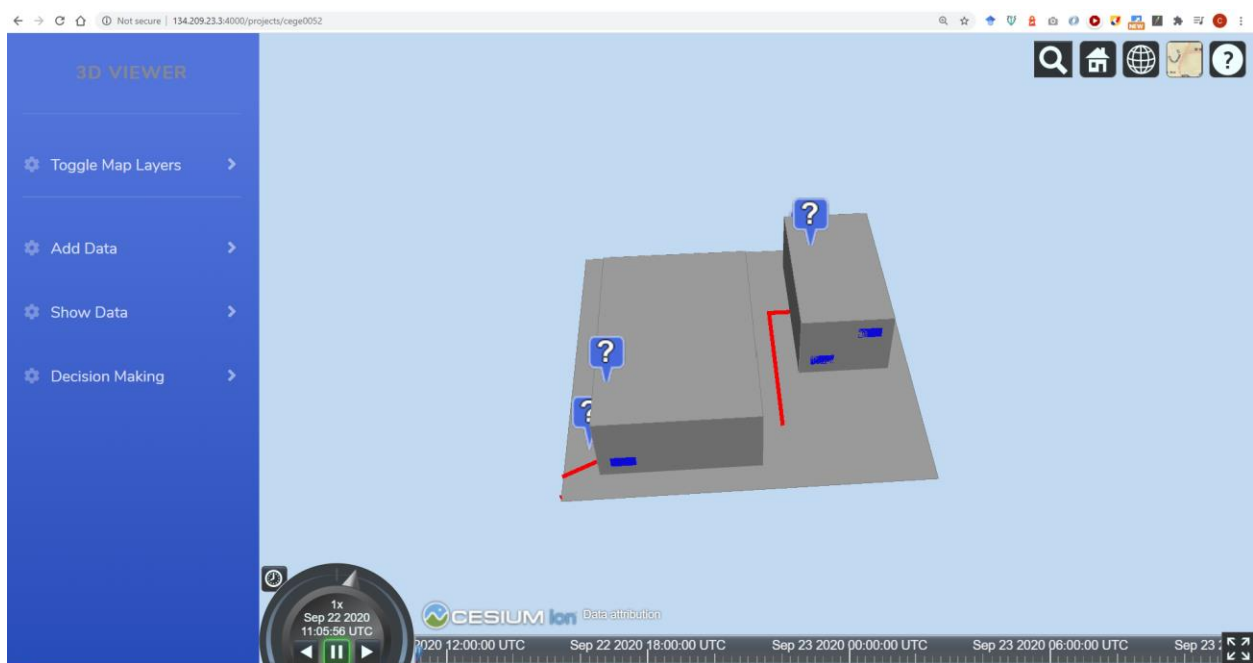
Step 1 – Load the website
- In a browser (e.g. edge, chrome) type the following URL:

http://134.209.23.3:4000/projects/cege0052

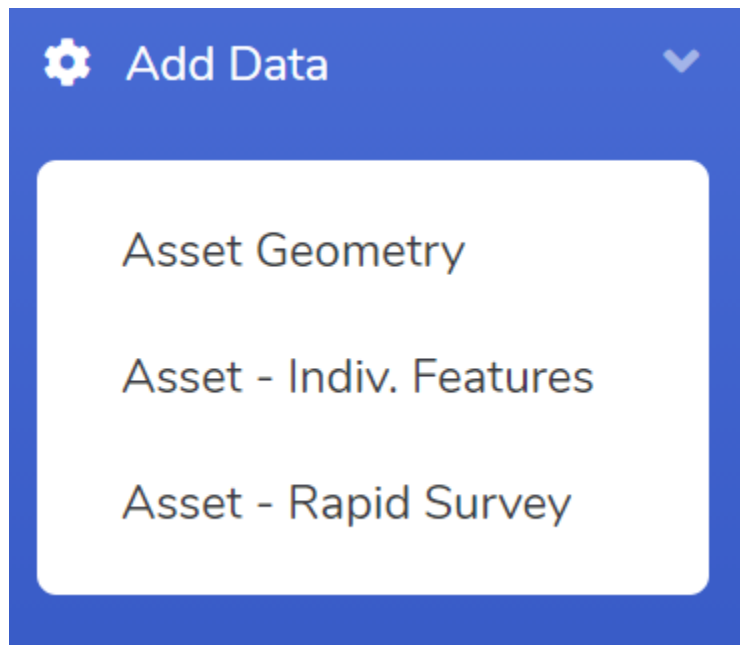http://142.93.33.55:4000/projects/cege0052   (upgraded due to large class size)

You should see a screen similar to the following (the data is the sample data that we're using for the case study for this module)
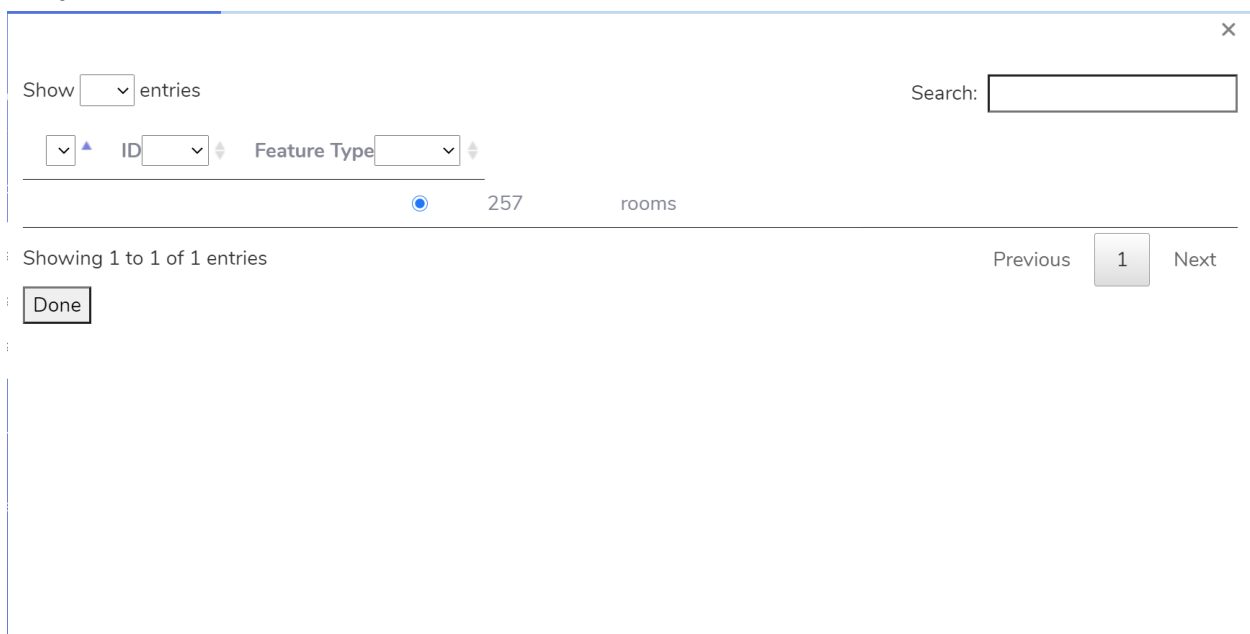
Step 2 – Add a point for your room
As we're now using a map, we need to create a point to show the location of the room[2]

- Click on ADD DATA and then click on ASSET GEOMETRY

⚙ **Add Data**   ⌄

Asset Geometry

Asset - Indiv. Features

Asset - Rapid Survey

- You will see a list of the geometry types you can add (just *rooms* for now)
-

✕

Show [⌄] entries   Search: [   ]

[⌄]▲   ID [⌄] ⬍   Feature Type [⌄] ⬍

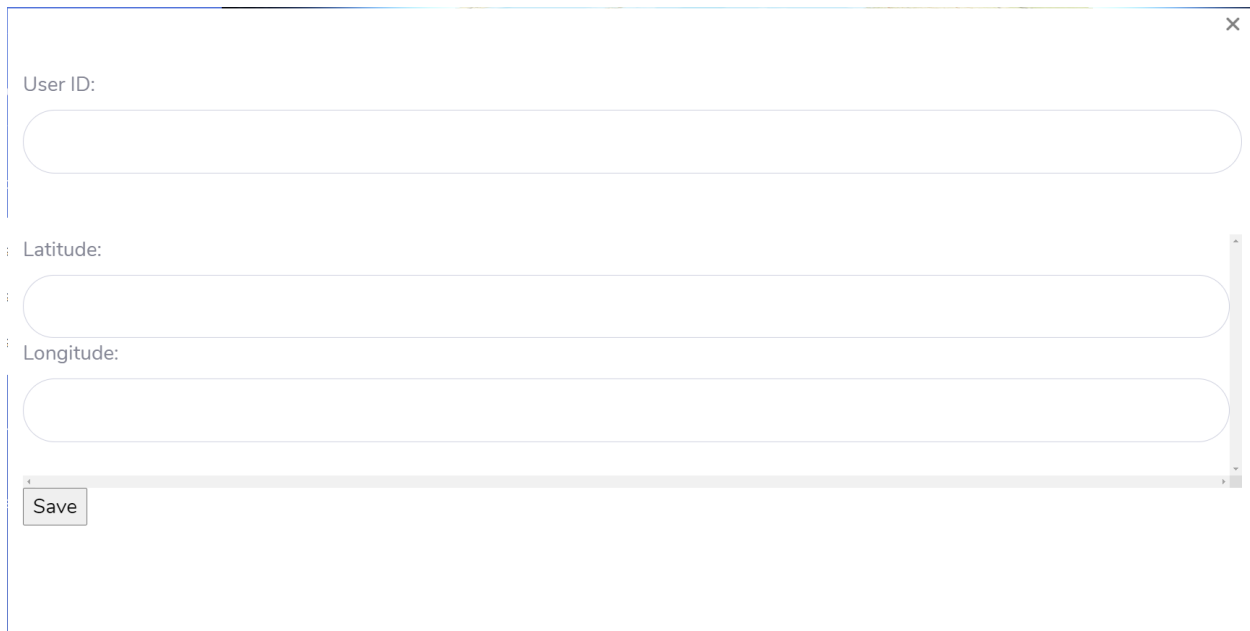   ◉   257   rooms

Showing 1 to 1 of 1 entries   Previous [1] Next

[Done]

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[2] (In reality a room is an area/polygon or a 3D box but as this is the beginning of the module we'll use a point for now – we'll learn about areas and 3D boxes later on)
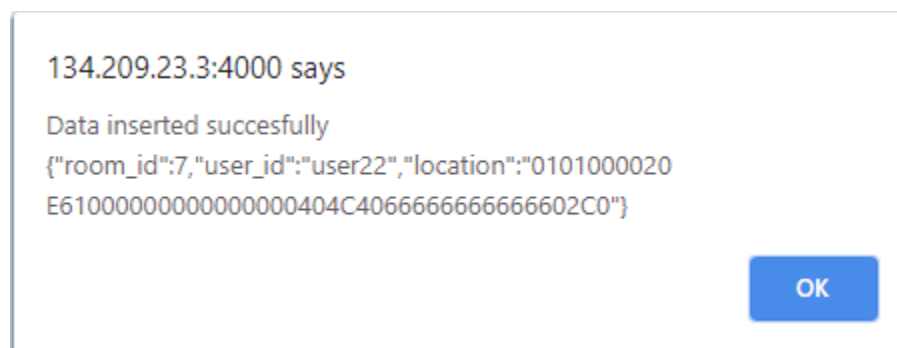
- Select *rooms* and then click DONE

- Type in your *userid* (==make sure this is correct as otherwise your work can't be marked== – this should be *userxxx* not *ucxxxxxx*)

- Type in the latitude and longitude values for the room and then click SAVE

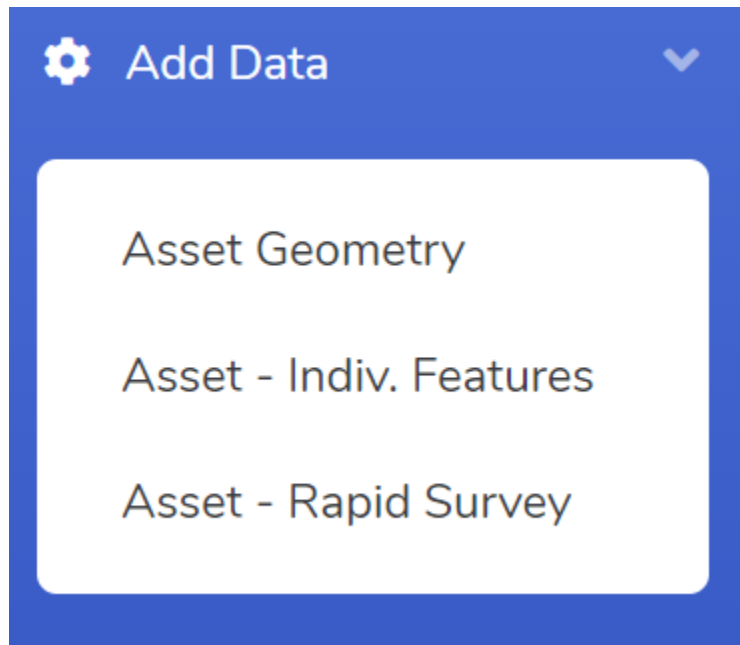 You will see a message similar to the following

  ==** Make sure you note the ROOM_ID as you need it for the next step **==

134.209.23.3:4000 says

Data inserted succesfully
{"room_id":7,"user_id":"user22","location":"0101000020
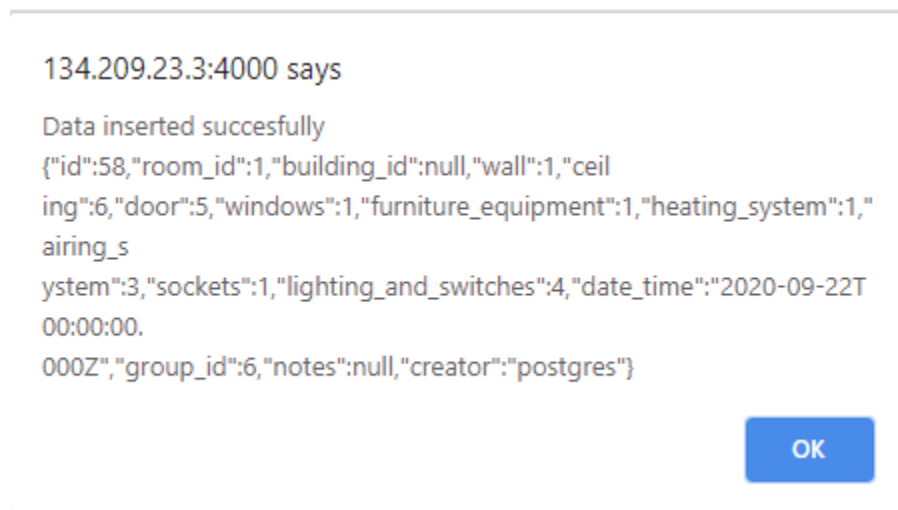E610000000000000000404C4066666666666602C0"}

OK

- (If you refresh the web page you'll see a point on the map where your room is located – you can click on it to see if it is correct and re-check your username)

Step 3 – Add the condition information for your room (do this 5 times)

- Click on ADD DATA again and this time select ASSET – RAPID SURVEY

- Select *rooms* from the list and click DONE (as above)

- Select the correct ROOM_ID from the list, and select your USER_ID

- Then select the required condition information

- If your data saves correctly, you will see a message similar to the following

<mark>Repeat STEP 3 for each of your 5 condition reports</mark>