

I have provided you with a database called '*crime*' which contains a single table also called '*crime*'. The table contains complete information on all types of crimes committed in Ireland from the year 2003 to 2019. The data is separated by Garda Division and is presented quarterly. There are 1624 records in the table and it contains 73 columns.

There are 14 offence types listed in the database.

1. Homicide offences
2. Sexual offences
3. Attempts/threats to murder, assaults, harassments and related offences
4. Dangerous or negligent acts,
5. Kidnapping and related offences
6. Robbery/extortion and hijacking offences
7. Burglary and related offences
8. Theft and related offences
9. Fraud/ deception and related offences
10. Controlled Drug offences
11. Weapons and Explosives offences
12. Damage to Property and to the Environment
13. Public order and other social code offences
14. Offences against government/ justice procedures and organisation of crime

This data set in its original form has been taken from StatBank, Central Statistics Office, Govt. of Ireland [website](#).

To Do:

Develop a client/server application that will allow a server application to provide a range of services to connected clients. These services will essentially provide an interface to the '*crime*' table in the database. You have a free hand regarding what services your server will provide and ultimately how your client will consume them. Because of that, each student's submission will be unique.

Stipulations:

- Your application must be client/server in nature.
- The server must be capable of handling multiple clients at the same time. You may decide to make your client multithreaded too so that the application is not blocked from executing while it waits for a response from the server.
- All database interactions on the server must run as separate threads.
- All erroneous conditions must be handled gracefully.

Note:

- The deadline for this assignment is Friday, February 10th at 6pm.
- I am using GitHub Classroom to manage this assignment. **At a minimum you must commit your work to GitHub at the following times:**
 1. By the end of your practical class on Monday, January 30th.
 2. By the end of your practical class on Thursday, February 9th.

3. The final deadline on Friday, February 10th at 6pm.

You will (and should) commit your work to GitHub with greater regularity as it brings many benefits such as the ability to roll back to a previous commit should the need arise. Failure to commit your work to GitHub on the specified dates will see your mark reduced by 5% for every commit you miss.

A final demo and code review will take place the week of February 13th. You can expect a rigorous examination and scrutiny of the code you have presented as your own on both days. 10% is allocated to this demo/review. **I will not be assessing the work of any student which is not demonstrated and reviewed with me in class.**

Each student's GitHub repository comes with a README and in this file, you must detail what you have done, how your work is to be tested and what, if any, bugs exist within the code. 5% is allocated to the README file. The README file is to be written in markdown (MD) and some useful tutorials on markdown tutorials include....

<https://guides.github.com/features/mastering-markdown/>

<https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet>

<https://www.markdowntutorial.com/>

****I also require you to upload a copy of your final project to Moodle before the deadline expires****