Web Development and Databases

Practical Aim

This practical session aims to cover practical aspects of web development. Also, your tutor will introduce Website project specification and share example(s) from previous year.

Exercise 1: What software are needed and why?
We'll be using the following software:
VS Code, Python 3.8.x+, Flask, MySQL, MongoDB, WorkBench, Postman, Web server, Web browser

Take few minutes to get yourself familiarise with the above software and tools. You may google search. Once you have a clear understanding why you need the above software then you should move on to next exercise.

Exercise 2: Do you think different Web Browser can cause any incompatibility issues for web applications? Have a quick discussion with your tutor.

Exercise 3: In this exercise, you should quickly read project specification (under Assessment link) and then have a discussion with your tutor to clarify any aspects.

Exercise 4: Discuss with your tutor what different options are to set up your web development environment? Also, take few minutes to find differences between **development environment** and **production environment** and discuss with your tutor.

Home work: Exercise 5: Let's assume we have the following URLs:
http://www.uwe.ac.uk/
https://intranet.uwe.ac.uk/
https://www.uwe.ac.uk:443/search-results?q=Computer+Science
https://people.uwe.ac.uk/Person/Zaheer2Khan
https://www.bbc.co.uk/news
https://www.bbc.co.uk:443/news
https://www.bbc.co.uk:80/news

Use a search engine to complete the following tasks:
Task 1: Identify protocols used in the above URLs
Task 2: Identify domain names in the above URLs
Task 3: Identify sub-domains in the above URLs

Task 4: Identify the top-level domain in the above URLs

Task 5: Identify the second level domain in the above URLs

Task 6: Identify Paths in the above URLs

Task 7: Identify Query String in the above URLs

Task 8: Identify ports in the above URLs

Task 9: Identify which one of the above URLs is invalid and why?