



Web and Mobile GIS - Apps and Programming (CEGE0043)

Description

The world is increasingly mobile and people use Geographic Information and Location-Based applications (e.g. Google Maps or route finders) on their phones much more than on a PC. Learn HTML5, Javascript and NodeJS, Leaflet and modern code management techniques through GitHub, and how to program your own Location-based Apps for Android phones and the web. Integrate data capture and data visualisation mechanisms into one platform, learn about APIs (Application Programming Interfaces) for code and data, and develop your own data API for geospatial data. Advanced topics (depending on time) could include Material Design, Cesium 3D Mapping, visualising data in D3, and code packaging and deployment techniques using gulp and NPM.

NB: This is not a beginners programming module - you should have some knowledge of programming (at least to the level of a term 1 module in python) before you start this module. Knowledge of SQL and GitHub is also an advantage.

Learning Outcomes

At the end of the module, you will be able to

1. Create client-side Apps that work on mobile devices or in web browsers (demonstrated via practical sessions and assignment)
2. Understand web architecture and how server-side code can be used to provide dynamic information to client-side apps via an API (demonstrated via practical sessions and assignment)
3. Be able to integrate location-based functionality in Apps (demonstrated via practical sessions and assignment)

Key information

Year	2019/20
Credit value	15 (150 study hours)
Delivery	PGT L7, Campus-based
Reading List	View on UCL website
Tutor	Dr Claire Ellul
Term	Term 2
Timetable	View on UCL website

Assessment



■ Coursework: 100%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

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