

305CDE Developing the Modern Web 2

Introduction to Labs 2014/15

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Schedule

Lectures

- ▶ Tuesday 1-2pm, ECG-27

Labs (one of)

- ▶ Monday 11am-1pm, ECG-14
- ▶ Wednesday 9-11am, ECG-14

Today

- ▶ 15 minute introduction
- ▶ No lab work until next week!

The Year Ahead - Content

Split in to four parts:

1. JavaScript
2. JavaScript
3. JavaScript
4. JavaScript

The Year Ahead - Content

In more detail:

1. Fundamentals of the JavaScript language (5 Weeks)
2. Building client-side applications with AngularJS (6 Weeks)
3. Designing server-side RESTful services (5 Weeks)
4. Building server-side RESTful services with NodeJS (6 Weeks)

The Year Ahead - Assessment

No exam.

Two coursework assessments (one each term):

1. Individual 40%

- ▶ Portfolio of code selected from 10 weekly challenges
- ▶ Video demonstrations of your code

2. Individual 20%, Group 40%

- ▶ RESTful API business pitch
- ▶ API design documentation
- ▶ Server-side code that implements your API
- ▶ Individual reflective report

Weekly Lab Format

What will we do in labs??

2 hours split in to four parts:

1. JavaScript
2. JavaScript
3. JavaScript
4. JavaScript

Weekly Lab Format

In more detail: WORKSHEETS + CHALLENGES

1. Review previous week's challenge
 - ▶ get formative feedback from tutors
 - ▶ save or commit your solution to git version control
2. New worksheet
 - ▶ work individually
3. Presentation by tutors on *concepts and theory*
 - ▶ understand the worksheet you just did
 - ▶ learn how to do the next challenge
4. Next programming challenge issued

Get Prepared

Before next week:

1. Get ready for version control with Git
 - ▶ Sign up for a free GitLab account at <http://gitlab.com>
2. Install development tools on your computer
 - ▶ Git client
 - ▶ SourceTree (Windows and OSX)
 - ▶ GIT-SCM (Linux)
 - ▶ Code editor
 - ▶ Brackets
 - ▶ Browser
 - ▶ Google Chrome

Get Inspired

Before next week:

- ▶ Take a look at some badass JS on <http://badassjs.com>
 - ▶ control 3D holograms with hand gestures
 - ▶ make voice and video calls in the browser
 - ▶ do peer to peer networking in the browser
 - ▶ collaborate on 3D designs
 - ▶ visualise complex mathematics

All of these and much more can be done with pure JavaScript!

Resources

- ▶ All Slides, code, and documentation for the labs
 - ▶ <https://gitlab.com/c0lin/305cde>
- ▶ Become a Git Guru
 - ▶ <https://www.atlassian.com/git/tutorials>