

Web Application Development

Produced
by

David Drohan (ddrohan@wit.ie)

Department of Computing & Mathematics
Waterford Institute of Technology

<http://www.wit.ie>



Waterford Institute of Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE



Outline

- My Background
- Module Description
- Structure
- Assessment

My Background *

- ❑ David Drohan BSc., MSc.
- ❑ Lecturing Software Development since 1995
- ❑ Currently delivering Mobile & Web Development Modules on 3rd year, 4th year and MSc Programmes
- ❑ Contact me at
 - ddrohan@wit.ie (email)
 - @daithid73 (twitter)
 - 051 302683 (office)

Module Description

- ❑ This module approaches web application development from an apps and services perspective, as opposed to the monolithic, server-side rendering model.
- ❑ Services will be formulated as REST APIs (Representational State Transfer Application Program Interface), while multiple service consumer forms will be considered, including Single Page Apps (SPA) and other services.
- ❑ The principles and patterns underpinning the design of both components (SPA and REST API) will be examined as well as the fine-grained aspects of the underlying communication protocol.
- ❑ There will be an emphasis on development, including the use of application frameworks, workflow automation tools and cloud deployment platforms.

MEMN

MONGODB - EXPRESS - VUEJS - NODEJS

MEVN Stack



MONGO DB

*{name: mongo, type:
DB}*



EXPRESS JS

*Web dev framework for
Node JS*



VUE JS

*Super Heroic Frontend
Framework*



NODE JS

*Event based Concurrency
Environment*

Structure

- ❑ Week 01 - 02 : Introduction, Web Apps Overview & Case Study
- ❑ Week 03 : NodeJS – Part 1 (Events, Node Modules & NPM)
- ❑ Week 04 : NodeJS – Part 2 (REST, API & Express)
- ❑ Week 05 : NodeJS & MongoDB – Part 3 (also covered it the labs)
- ❑ Week 06 : VueJS – Part 1 (Overview)
- ❑ **Week 07 : Ass.1 Submissions (Source Code, Doc + Youtube Video Link)**
- ❑ Week 07 - 10 : VueJS in Depth Week 11 : TECH SUPPORT 😊
- ❑ Week 12 : Project Demos / Videos

- ❑ **Week 13 : Ass.2 Submissions (Source Code, Doc + Youtube Video Link)**

Assessment

□ 100% Continuous Assessment

- 1 Individual Project – Due week 7 & 12/13 (30% & 70%) – *PROTOTYPE WEEK 4*
- Project Ideas **MUST** be unique **AND** all your own original work (mostly!)
- 1st come 1st served approach to Project Titles

20% REDUCTION PER DAY FOR EVERY DAY LATE

Contact

□ David Drohan

■ ddrohan@wit.ie



■ 051 302683



■ @daithid73



Resources & Case Study

ddrohan.github.io

[Moodle Page](#)

<http://donationweb-server.herokuapp.com/>

<http://donationweb-vue.firebaseio.com/>

Questions?