

Full Stack Development

Containers, Microservices and UI

0. Course Introduction

Overview

- Full stack development
- Modern container architecture
- DevOps and CICD
- Building Microservices
- Working with data in a full stack app
- User interface frameworks Angular and React
- Orchestration with Kubernetes

Introduction

- This is a beta version of the class
 - That means that it will be modified on the fly with feedback from students
- Learn by doing
 - There will be a strong emphasis on demo and labs
 - How much material we cover is not as important as the amount of material you actually learn
 - Hypothetical problem scenarios will be posed during class for discussion
 - There will be no reading from slides – they are only a guide
- Be interactive
 - I will be soliciting your insights, feedback and questions so you have to be present and ready to contribute
- Interactive documentation
 - We will rely throughout the course on current online documentation
 - More detailed materials are available in the repository

Logistics

- Class hours are 9-5 EST
 - This may change if LearnQuest changes the times for the classes
 - One hour for lunch 12-1
 - Two 15 minute breaks mid-morningish and mid-afternoonish
 - Last hour of each day is reserved for questions, hands-on and discussion
 - No new material will be introduced after 4pm
- Lab machines will be provided
 - They will be available 24/7 for the duration of the class
 - You may use your own machines if you want but there is no time during class to help students with set-up issues on their own machines.
 - A full setup spec is available in the repository
- Course materials
 - Available for download at <https://github.com/ExgnosisClasses/FSDNov28-Student>
 - This will be updated during the class and will be available until Jan 9, 2023

Rod Davison

45 years experience

Academia (math, linguistics, cognitive science)

Artificial Intelligence R and D

Software Development

Data Analytics – Social Research

Project Manager

Quality and Testing

Business Analysis

Consulting and Training



Introductions

- Please introduce yourself
 - Name you prefer to be known by in class
 - Your area of expertise or specialization (developer, tester, etc.)
 - Technical background and experience with full stack development
 - Specific goals or expectations for what you hope to learn

The Class Project

- We will be doing a full stack project in class
 - The class will decide what the project is - we will not be doing any sort of pre-canned project
 - In other words, there will be no “answer in the back of the book”
- Why are we doing this?
 - To get an understanding of how we go from an initial concept to application delivery
 - To get a big picture overview of how the full stack tool chain is used in the context of a project
 - To get a chance to think creatively as a developer - the sort of thing we have to do in the real world
 - To develop a feel for how to assess the quality of a solution - strengths and weaknesses
 - It's fun
- Everyone must submit a suggestion for the project at the start of day 2
 - The class will vote for the idea they like the most
 - The instructor has god-like veto powers over the decision

A detailed Renaissance-style painting of Plato's Academy. The scene is set in a grand hall with classical columns and a landscape view through the arches. Numerous figures, representing various Greek philosophers, are engaged in discussion and study. Plato, an older man with a white beard, stands in the center, pointing his right index finger towards the sky. Aristotle, a younger man with a dark beard, stands next to him, gesturing with his palm facing down towards the earth. Other figures are seated or standing, some holding books or scrolls. The overall atmosphere is one of intellectual pursuit and philosophical discourse.

Questions?



End Module