

Server-side Development with NodeJS

Course Overview

Jogesh K. Muppala

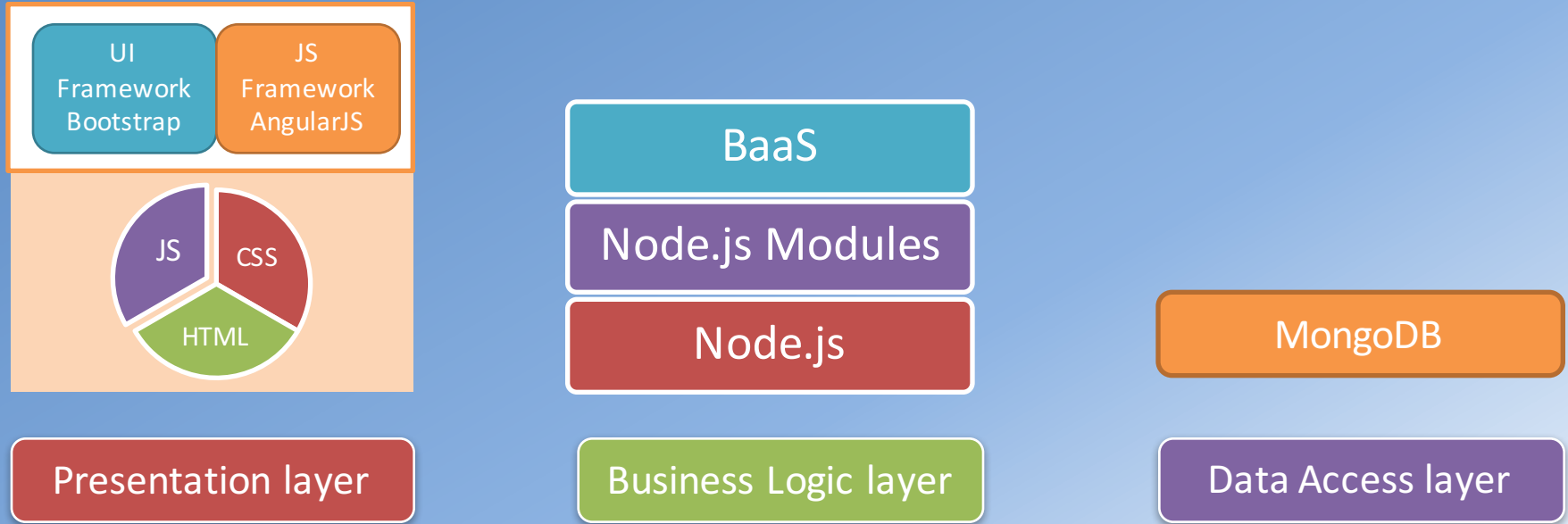


THE DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
計算機科學及工程學系



香港科技大學
THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY

Full Stack Web Development



Course Outline

- Node.js and Node modules
- Express Framework
- MongoDB
- Backend as a Service (BaaS)

Module 1: Introduction to Server-side Development

- Full Stack Web Development: The Big Picture
- Introduction to Node.js and NPM
- Node Modules
- Node and HTTP
- Introduction to Express
- Assignment 1

Module 2: Data, Data, Where art Thou Data?

- Express Generator
- Introduction to MongoDB
- Node and MongoDB
- Mongoose ODM
- Assignment 2

Module 3: Halt! Who goes there?

- REST API with Express, MongoDB and Mongoose
- Basic Authentication
- Cookies, Tea and err ... Express Sessions
- User Authentication with Passport
- Assignment 3

Module 4: Backend as a Service (BaaS)

- Mongoose Population
- HTTPS and Secure Communication
- Backend as a Service (BaaS)
- Loopback, StrongLoop ARC and IBM Bluemix
(Guest Lecture by Mr. Raymond Camden)
- Assignment 4