AWS Intermediate

Overview

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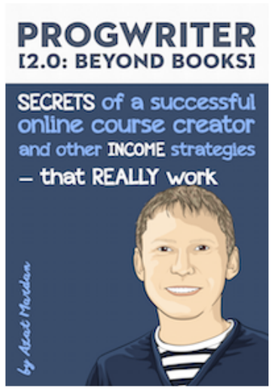
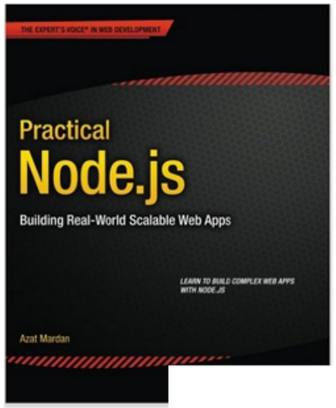
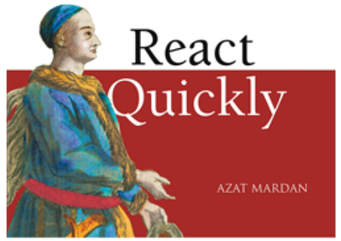
Node University

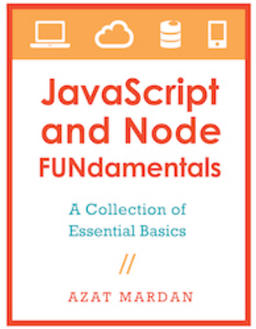
Meet Your Instructor

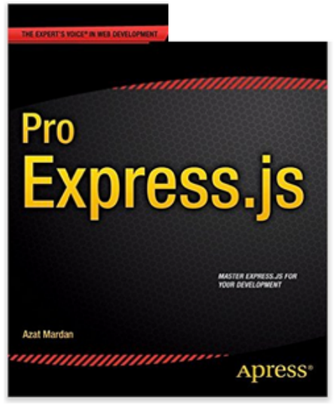
- Name: Azat Mardan
- Author 14 books and over 12 online courses, taught over 500 engineers in-person and over 25,000 online (Udemy and Node University)
- Work as Capital One Technology Fellow (modeled after IBM and Google Fellows)

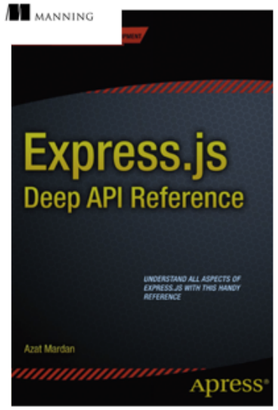












Meet Your Instructor (cont)

- Master of Science in Information Systems Technology from University of Northern Virginia (2007)
- Working on my second Master's degree, this time in Software Engineering and from Harvard University
- Twitter: @azat_co, Online: http://azat.co

Why I teach this course?

- Gizmo: small startup, used Rackspace
- Storify: small startup, used Joyent and AWS
- DocuSign: not used cloud 😞
- Capital One: cloud everywhere

Introduce your self by raising hand ✋

» How many year in technology, 1, 2, 4, 8, 16?

» Your main language, Java, Python, Ruby, C, JavaScript, COBOL?

» What is your expectation so you are 100% satisfied by this course at 5pm?

Turn off your IMs, Slack, Hipchat, email, phones… seriously

Multitasking does NOT work (for work which requires focus)[1]

[1] https://blog.codinghorror.com/the-multi-tasking-myth, http://amzn.to/2ojSBzx and http://amzn.to/2oTZSDU

Process

- Lectures, demos and hands-on labs - you'll download them soon
- Lunch break 12-1pm and 2 smaller breaks before and after
- Fill out sign up sheets and DI evaluation *before* you leave (put in the envelope)
- Slides are often just talking points because reading from slides is boring so pay attention and take notes!
- Labs have detailed step by step walk-through

Questions

- General questions – ask during the open frame, NOT during the lecture (write it down to remember later)
- Specific questions (why XYZ is not working on my computer!?) – ask during labs

Table of Contents

Module 1: DevOps Principles

- DevOps and Infrastructure as code
- Identity Access Management in AWS
- Connecting Resources and IAM, Extra Services and Best Practices
- Working with AWS CLI
- Lab 1: Install AWS CLI, configure, create an instance

Module 2: AWS SDKs

- Advantages of AWS SDKs
- Node SDK Example
- Lab 2: Write a Node script to create an instance and run it

Module 3: Cloud Infrastructure Automation with CloudFormation

- CloudFormation advantage
- CloudFormation structure
- Demo: CloudFormation example and AWS CLI
- Demo: CloudFormation visual web editor
- Lab 3: Create a ELB and auto scaling environment from CloudFormation template/blueprint

Module 4: Building CI/CD

- CodeDeploy with S3 and GitHub
- CodeDeploy and CodePipeline
- Demo: Building CI with GitHub
- Lab 4: Build CI with CodeDeploy

Module 5: AWS Databases

- RDS
- DynamoDB
- Creating a database instance
- IAM Role

Module 6: PaaS and Containers

- Working with ElasticBeanstalk
- Working with Docker: EC2, ECS and Elastic Beanstalk Containers

Module 7: Serverless

- Serverless with AWS Lambda
- Demo: Building Microservice with Lambda and API Gateway
- Lab 5: Create a lambda CRUD microservice to save data in DB

Outro

- Summary
- AWS Events
- AWS Certifications
- AWS Books
- AWS Courses