

# **Reading Material and Syllabus**

- Visual Studio Download https://code.visualstudio.com/
- Web 101- Client Server architecture
- HTML and CSS
  - o https://github.com/RitikPatni/Front-End-Web-Development-Resources
  - <a href="https://learn.shayhowe.com/html-css/building-your-first-web-page/">https://learn.shayhowe.com/html-css/building-your-first-web-page/</a>
  - https://www.freecodecamp.org/news/get-started-with-css-in-5-minutes-e0804813f c3e/
  - Try to get some hands on experience by creating one of these projects -<a href="https://medium.com/@avicndugu/projects-to-practice-html-css-skills-for-beginner-s-8b9ed67a7dd1">https://medium.com/@avicndugu/projects-to-practice-html-css-skills-for-beginner-s-8b9ed67a7dd1</a>
- JS and Bootstrap
  - Bible https://getbootstrap.com/docs/4.4/getting-started/introduction/
  - https://www.freecodecamp.org/news/learn-bootstrap-4-in-30-minute-by-building-a -landing-page-website-guide-for-beginners-f64e03833f33/
- Angular JS
- Node JS
- Version Control
  - Follow this tutorial to setup git locally https://git-scm.com/book/en/v2/Git-Basics-Getting-a-Git-Repository
- MVC Architecture
  - https://softwareengineering.stackexchange.com/questions/127624/what-is-mvc-really
- AWS Scaling Intro
- AWS EC2 https://aws.amazon.com/getting-started/
- AWS S3 Setup and Configure
- Servers and ELBs
- LAMP Architecture
- Introduction to Linux Environment Users, Groups and Permissions
- Virtual Hosts and .htaccess files
- Domain Names and Basics of SEO
- Designing systems Youtube/Netflix/Equivalent, Ecommerce/Equivalent, Cab Hailing/Equivalent (Depends on requirements)



## **Deployment SOP**

**Project Agenda -** Set up EC2 web server and configure different services through Virtual Hosting with embedded Caching and Mysql Host setup. (If time persists we can also create one sample web Microservice). Also, upload your project on Github using version control.

**Tech Involved -** AWS EC2 Ubuntu image instance, Elastic IP load balancer, DB sharding, Virtual Hosting through Apache V2, Confd Configuration, MYSQL setup, Memcache Configuration, Version Control (Github and Bitbucket), DNS Config and full web stack for our microservice (HTML,CSS,JS,PHP,Jquery, Angular-JS,NodeJS etc)

**Goal -** We will configure a web server of your own and then host a webservice and create a 301 redirect to demux servers. At the end of this exercise you can upload whatever project you want on your own personal web server and your portfolio will live over the domain **name bought by you.** We will also configure DNS and see how it works in real time.

## Prerequisites -

- Sign into <u>AWS console</u> and create a free 1 year account ( Might charge 2 rs for first time but that's totally worth )
  - Create a personal account and not professional ( they might charge more otherwise)
- For Windows user install putty and putty keygen
- Please read through all basic <u>Linux Commands</u>
- Please read about GIT using tutorials mentioned below.
- Rest details we will cover in today's session.

### Login for Windows User (Through Putty)

Follow all steps mentioned here -

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/putty.html Take reference - https://www.youtube.com/watch?v=bi7ow5NGC-U

#### Login for Ubuntu/Macos Users

Through normal ssh through terminal - ssh -i <.pem file location> ubuntu@<Complete HostName>



## **Creating Sample web page and learning Bootstrap**

- <a href="https://www.freecodecamp.org/news/learn-bootstrap-4-in-30-minute-by-building-a-landing-page-website-quide-for-beginners-f64e03833f33/">https://www.freecodecamp.org/news/learn-bootstrap-4-in-30-minute-by-building-a-landing-page-website-quide-for-beginners-f64e03833f33/</a>
- <a href="https://medium.com/techtrument/how-i-made-my-portfolio-website-409dfbbc5b87">https://medium.com/techtrument/how-i-made-my-portfolio-website-409dfbbc5b87</a>
- https://codeburst.io/how-to-create-a-dynamic-website-in-30-minutes-with-fullpage-js-7e9
  1b70dcdee

## Resources to Learn basic Bootstrap -

• <a href="https://medium.com/quick-code/top-tutorials-to-develop-responsive-websites-using-boots-trap-4-c934172f3ebd">https://medium.com/quick-code/top-tutorials-to-develop-responsive-websites-using-boots-trap-4-c934172f3ebd</a>

#### Resources to learn about GIT -

- https://hackernoon.com/understanding-git-fcffd87c15a3
- <a href="https://medium.com/@george.seif94/a-full-tutorial-on-how-to-use-github-88466bac7d42">https://medium.com/@george.seif94/a-full-tutorial-on-how-to-use-github-88466bac7d42</a>
- <a href="https://www.freecodecamp.org/news/learn-the-basics-of-git-in-under-10-minutes-da5482">https://www.freecodecamp.org/news/learn-the-basics-of-git-in-under-10-minutes-da5482</a> 67cc91/

### Initialize git over your Server

https://www.digitalocean.com/community/tutorials/how-to-install-git-on-ubuntu-18-04-guickstart

## **Type of DNS Configs**

https://www.godaddy.com/garage/dns-records-a-beginners-guide/

### **DNS** Configuration

https://medium.com/@jryancanty/domain-by-godaddy-dns-by-route53-fc7acf2f5580