Name of the Course: Certificate Course in Full Stack Development
Eligibility: Any students having knowledge of HTML basics
Duration: 36 Hrs
Number of Students: 60
Fees: 500/- Rs
 Objectives of the Course:
- Develop a fully functioning website
- Build an end-to-end application from scratch and test it

Syllabus

1) Introduction
- What is FULL stack
- Background on angular and node
- Installation Node js
- Npm command
- Installation of Angular

2) Angular overview
- First Angular application -hello-world
- Command line run, ng commands
- Directory structure of angular projects
- App component
- Creating new component
- Component integration
- Module overview
- app.module.js explanation
- Interpolation
- Angular life cycle- flow of execution

3) Web page development
- Installation of bootstrap
- Bootstrap settings
- What is single page application development
- Different traditional and single page app development
- Templates
- Changes in angular structure wrt templates
- Event handling

- One way and two-way binding.

4) Data Models
- To-do List UI
- How to convert static to dynamic page
- Creating models
- Using model into UI
- How to write functions in Type Script
- Click event in JS
- Let keyword
- Using ng directives
- Use of two way binding data models

5) Deep dive into Angular feature - Services
- Define Custom events
- Binding of events into UI
- Angular services introduction
- Creating and configuring services

- Integration of services into UI and component
- Service binding

6) Angular JS routing
- Introduction to routes
- Creating angular routing file
- Registering routes
- Configurating routes in component
- Testing UI

7) Server-side code Node JS
- Traditional Web Service Model.
- Node JS introduction
- Node JS feature and process Model
- Npm and express commands

8) Node JS Project – Web Services
- Creating project using npm
- Packages
- Install express
- Web Services- overview
- Creating index.js
- Define movie app
- Add, update, view movies
- Search the movies

9) Node JS with mysql

- Installation
- Creating DB in mysql
- Connecting node js to mysql
- Define REST API
- Sample App product development
- http protocol theory, http status code
- postman setup & features
- POST API
- PUT API
- DELETE API
- GET API

10) Http API access (if time permits)

Reference Books

1. The Full Stack Developer: Your Essential Guide to the Everyday Skills Expected of a Modern Full Stack Web Developer (First Edition) By Chris Northwood
2. Full Stack Web Development: Round One – Begin! By Edwin Ross Torres

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