

- Software Development lifecycle
- Coding standards
- Object oriented programming
- Software Testing
- Software Architecture design
- Web Technology overview
- Cloud Fundamentals
- UI/UX
- Security Practices
- Version control using Git
- MVC & MVVM

- Back-end(at-least one)
 - Java (Spring boot)
 - PHP (Laravel / CakePHP)
 - Python (Django / Flask)
 - Node.JS/JavaScript (Express / NestJS)
- Front-end (at-least one)
 - JavaScript (React & Vue.JS)
 - TypeScript (Angular & Vue.JS)
- Topics to cover
 - Programming basics
 - Data types
 - Operators
 - Functions
 - Control structures
 - Data Structures
 - Arrays
 - Strings
 - Dictionary/Map
 - List/Set
 - Classes
 - Database access
 - Exception handling

- MySQL

- Relational database concepts
- Keys
- Relationship
- Transactions
- Data types
- Data definition
 - CREATE / ALTER / DROP DATABASE
 - CREATE / ALTER / DROP TABLE
- Data manipulation
 - INSERT / UPDATE / DELETE
 - SELECT
 - LOAD DATA

- MongoDB

- NoSQL database concepts
- Collections & Documents
- Index
- CRUD operations
 - Create
 - Read
 - Update
 - Delete
- Aggregation

- Back-end
 - Create a MVC application
 - Create a REST API application
- Front-end
 - Front-end for consuming the REST API
 - Form validation
- Application outline
 - User registration (First Name, Last Name, Email Address, Password, Confirm Password, Date of Birth, Gender, Phone Numbers, Address, Profile Picture)
 - User login
 - Contacts management
 - Create/Edit contacts (First Name, Last Name, Address, Company, Phone numbers)
 - List contacts with search and pagination
 - Delete contact

Software Development lifecycle	https://aws.amazon.com/what-is/sdlc/ https://www.tutorialspoint.com/sdlc/sdlc_overview.htm
Coding standards	https://www.geeksforgeeks.org/coding-standards-and-guidelines/ https://blog.codacy.com/coding-standards
Object Oriented Programming	https://en.wikipedia.org/wiki/Object-oriented_programming https://www.javatpoint.com/what-is-object-oriented-programming
Software Testing	https://www.ibm.com/topics/software-testing https://www.geeksforgeeks.org/software-testing-basics/
Software Architecture design	https://www.tutorialspoint.com/software_architecture_design/introduction.htm
Web Technology overview	https://www.geeksforgeeks.org/web-technology/ https://developer.mozilla.org/en-US/docs/Web/HTTP/Overview
Cloud Fundamentals	https://k21academy.com/cloud-blogs/cloud-fundamentals/ https://techsparks.co.in/cloud-computing-fundamentals-its-basics-and-terminology/
UI/UX	https://careerfoundry.com/en/blog/ux-design/the-difference-between-ux-and-ui-design-a-laymans-guide https://bootcamp.cvn.columbia.edu/blog/what-is-ux-design/
Security Practices	https://developer.mozilla.org/en-US/docs/Web/Security https://www.cloudflare.com/learning/security/what-is-web-application-security/
Version control using Git	https://git-scm.com/book/en/v2/Getting-Started-About-Version-Control https://nvie.com/posts/a-successful-git-branching-model/
REST Architecture	https://www.baeldung.com/cs/rest-architecture https://www.codecademy.com/article/what-is-rest
MVC	https://www.geeksforgeeks.org/mvc-framework-introduction/ https://www.tutorialspoint.com/mvc_framework/mvc_framework_introduction.htm
MVVM	https://www.geeksforgeeks.org/introduction-to-model-view-view-model-mvvm/ https://www.tutorialspoint.com/mvvm/index.htm

Backend	Java	https://dev.java/learn/ https://www.w3schools.com/java/ https://www.javatpoint.com/java-tutorial https://www.geeksforgeeks.org/java/ https://www.javatpoint.com/steps-to-connect-to-the-database-in-java
	PHP	https://www.php.net/manual/en/ https://www.w3schools.com/php/
	Python	https://www.python.org/doc/ https://www.w3schools.com/python/
	Node.JS	https://nodejs.org/en/learn/getting-started/introduction-to-nodejs https://www.w3schools.com/nodejs/
	JavaScript	https://www.w3schools.com/js/ https://www.turing.com/kb/javascript-for-backend-development
Frontend	JavaScript	https://www.w3schools.com/js/ https://developer.mozilla.org/en-US/docs/Web/JavaScript
	TypeScript	https://www.typescriptlang.org/docs/ https://www.w3schools.com/typescript/typescript_intro.php

Back-end	Java - Spring boot	https://spring.io/guides/gs/spring-boot/ https://www.baeldung.com/spring-boot
	PHP – Laravel	https://laravel.com/ https://www.tutorialspoint.com/laravel/laravel_overview.htm
	PHP – CakePHP	https://book.cakephp.org/5/en/index.html https://api.cakephp.org/5.0/ https://www.tutorialspoint.com/cakephp/index.htm
	Python – Django	https://docs.djangoproject.com/en/5.0/ https://www.w3schools.com/django/
	Python – Flask	https://flask.palletsprojects.com/en/3.0.x/ https://www.tutorialspoint.com/flask/index.htm
	NodeJS – Express	https://expressjs.com/en/starter/installing.html https://www.tutorialspoint.com/nodejs/nodejs_express_framework.htm
	NodeJS – NestJS	https://docs.nestjs.com/ https://www.javatpoint.com/nestjs
Front-end	Angular	https://angular.io/start
	ReactJS	https://react.dev/learn https://www.w3schools.com/REACT/DEFAULT.ASP
	Vue.JS	https://vuejs.org/guide/introduction.html https://www.w3schools.com/vue/index.php

MySQL	https://dev.mysql.com/doc/mysql-tutorial-excerpt/8.0/en/tutorial.html https://www.w3schools.com/MySQL/default.asp
MongoDB	https://www.mongodb.com/docs/ https://www.w3schools.com/mongodb/