

Application Developer Course Syllabus

Week 1-6

- Logic, Variables & Methods
- Boolean Logic, Conditionals and problem solving
- Arrays, Loops, Sorting, Analyzing and Searching Algorithms
- 2-Dimensional Arrays, Lists and Sets
- Stacks and Queues
- Inheritance, Polymorphism, Abstraction, Interfaces

Week 7 & 8

- Project Management Fundamentals (Agile - Scrum using Jira)
- Fundamentals of SDLC & BPMN
- Fundamentals of Software Requirements, Analysis and Design
- User Interface Design Activities and Complexity
- Software Development, Implementation, Validation and Verification Fundamentals
- Software Paradigms
- Oracle Fundamentals

Week 9 & 10

- Install Java SDK
- Install Eclipse
- Variables
- Operations and Priorities
- Decision Making
- Loop Control
- Array and Strings

Weeks 11 & 12

- Functions
- Object Oriented Programming (OOP)
- Storage-files
- Multi-Threading
- Collections
- Java 8 new Features

Weeks 13 & 14

- Java GUI with JavaFX
- Basic Input & Output including java.util
- Concurrency in Java
- Lambda Expressions

Weeks 15 & 16

- Database - Use Sqlite in Java
- Java Networking Programming
- Spring MVC

Weeks 17 & 18

- Spring MVC
- SonarQube
- JPA Basics
- Maven