



## **EDGE Stands for Essential Diploma for Graduate Engineers**

**Note: Only few points are mentioned in this file. Teaching/Training will be in detail.**

# **C Programming**

History of C, Features of C, How to install C, First C Program, Flow of C Program, printf scanf Variables in C, Data Types in c, Keywords in c ,C Operators, C Comments, C Escape Sequence, Constants in C

**C control Statements** C if-else, C switch, C do-while loop, C while loop, C for loop, C break, C continue ,C goto ,Type Casting C

**Functions**-What is function, Call by Value & Reference, Recursion in c

**Array**- 1-D Array, 2-D Array, Array to Function

**Pointer** C Pointers, C Pointer to Pointer, C Pointer Arithmetic

**Strings** String in C, C gets() & puts(), C String Functions, C strlen(), C strcpy(), C strcat(), C strcmp(), C strrev() ,C strlwr(), Cstrupr(), C strstr(), C math functions

**C Structure Union**-C Structure, C array of Structure, C Nested Structure, C Union

**C File Handling**- C File Handling, C fprintf() fscanf(), C fputc() fgetc(), C fputs() fgets(), C fseek(), C rewind(), C ftell()

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune

Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

# SQL

**Introduction to SQL** What is Database, What is RDBMS, DBMS vs RDBMS, SQL Syntax, SQL Data Types, SQL Operators

**SQL Database** SQL CREATE Database, SQL DROP Database, SQL RENAME Database , SQL SELECT Database

## **SQL Table**

What is Table, SQL TABLE Variable, SQL CREATE TABLE, SQL DROP TABLE, SQL DELETE TABLE, SQL RENAME TABLE, SQL TRUNCATE TABLE, SQL COPY TABLE, SQL TEMP TABLE, SQL ALTER TABLE

## **SQL Select**

SELECT Statement, SQL SELECT UNIQUE, SQL SELECT DISTINCT, SQL SELECT COUNT, SQL SELECT TOP, SQL SELECT FIRST, SQL SELECT LAST, SQL SELECT RANDOM, SQL SELECT AS, SQL SELECT IN, SQL SELECT Multiple, SQL SELECT DATE, SQL SELECT SUM, SQL SELECT NULL

## **SQL Clause**

SQL WHERE, SQL AND, SQL OR, SQL WITH, SQL AS

## **SQL Order By**

ORDER BY Clause, ORDER BY ASC, ORDER BY DESC, ORDER BY RANDOM, ORDER BY LIMIT, ORDER BY Multiple Cols

## **SQL Insert**

INSERT Statement, INSERT INTO Values, INSERT INTO SELECT, INSERT Multiple Rows

## **UPDATE Statement**

## **SQL Delete**

DELETE Statement, SQL DELETE TABLE, SQL DELETE ROW, SQL DELETE All Rows, DELETE Duplicate Rows, SQL DELETE DATABASE, SQL DELETE VIEW, SQL DELETE JOIN

## **SQL Join**

SQL JOIN, **SQL Outer Join**, **SQL Left Join**, SQL Right Join, SQL Full Join, SQL Cross Join

## **SQL Keys**

Primary Key, Foreign Key, Composite Key, Unique Key, Alternate Key

**PL/SQL-** Control Statements, Trigger, Functions, Stored Procedures

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune

Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

# **Web Designing**

## **HTML**

Introduction, Basic tags, Lists, Tables, Frames, Forms, HTML5

## **CSS**

Introduction, Types of Style Sheets, Class Selector, ID Selector, Absolute and Relative Positioning, DIV + CSS, Layout Design, CSS

## **JavaScript**

Introduction to scripting, Introduction to JavaScript, Variables and operators, Working with alert, confirm and prompt, Conditional Statement, Looping Statement, Events and functions

## **Bootstrap**

Bootstrap, Advance, Bootstrap, Utilities

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune

Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

## **Software Project Management Syllabus**

<b>Software Project Management</b>
Introduction to Project Management
Scope of Project
Project Scheduling
Team responsibilities and activities
Test Cases and Cost implications
UATs
Software DLC
Live Project

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune  
Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

# JAVA

## CORE JAVA

Getting started - Java Language Environment, Introduction to java language, JVM and its working, Features of java language, Difference between JDK, JRE and JVM.

Basic Language Constructs - Data types, Operators in java, Conditional construct, Looping construct, Arrays, Scanner Class

**OOPS Concepts** - Encapsulation, Abstraction, Inheritance, Polymorphism Creating Classes and Objects - Declaring variable and accessing it.

Methods, Constructors, Use of Access Specifiers, Static and This Keyword

### **Method overloading**

Inheritance - Type of inheritance, Concept of Polymorphism, Method Overriding, Covariant Return Types, Super Keyword.

**Polymorphism** - Final Keyword, Runtime Polymorphism, Abstract Classes, Interfaces

**Packages**, import and static import

**Some Useful In-Built Classes** - Object Class, Wrapper classes and Auto- Boxing

String Class - String Definition, Method of string class, StringBuffer Class, String Builder class

**Exception Handling** - Try catch statement, Finally statement, Nested try catch, User Define Exception class, Throw, Throws

**Mutli threading** - What is Thread, Creating thread, Thread class and Runnable Interface, Yield and Joint, Synchronization, Wait, Notify, Notifyall, Thread Priority, Deadlock Situation and Prevention

**Collection Framework** - Interface and Implementation, List and Set, HashSet and ArrayList

**Generics** - Generic Class and type, Generic Method

I/O - Input and output stream, FileOutputStream and FileInputStream, BufferedInputStream and BufferedOutputStream class

### FortuneCloud Technologies Group,

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune

Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

I/O - InputStreamReader class, DataInputStreamClass and DataOutputStream class, FileWriter and FileReader class

## Advance Java

Java Database Connectivity - Introduction to JDBC, Architecture, Types of Driver, Creating Connectivity, Statement

Prepared Statement, Callable Statement, Result set, Practical Example

Servlet - Introduction to Java Servlet, Lifecycle, Design web application, Advantages of servlet, Tag information, Http Servlet and Generic Servlet

Handling Data, Get Post method, Submitting form, Handling request and response, Client side and server side redirection

State management, Http session, Cookies, String URL, Tracking session details, Hidden Form Field

ServletConfig, ServletContext, Attribute in Servlet, Using RequestDispatcher to implement MVC, MVC Architecture, Understanding the benefits of MVC

Filters, Filter Basic, Lifecycle, Chaining, Configuring Filter, Using Initialization parameter in filter.

JSP - Working with JSP, Lifecycle of JSP, Architecture, JSP basic Syntax Scripting Element in JSP, Static v/s dynamic text, JSP Scriptlets, JSP declarations, Expression

Implicit Objects, Request, response, Out, Session, Exception handling, Application Scope

Directive Element, Page Directive, Include Directive, Taglib Directive

Action Element, Jsp:forward, Jsp:include, Bean class, Jsp:usebean, Jsp:setproperty and jsp:getProperty, Exception in JSP

MVC in JSP, Practical

Java Standard Tag Library

Implementing JSP tag extensions, Use of JSP Tag, Creating and using Custom tag

Adding Listener, Understanding Listener, Monitoring creation and destruction in ServletContext, Recognizing session creation and destruction, Recognizing request creation and destruction

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune

Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

## **Struts -2.0**

Introduction to struts, Architecture, Config, Result, Interceptor, OGNL & tags, Validation, Component, Controller, Actions

Tags, Data Tag, UI tag, Control tag, Bean tag

Input parameter, Post request, Action Support, Model Object

Annotation - Types of annotation

## **Hibernate**

Hibernate - Introduction to Hibernate, ORM description, Hibernate Configuration, Writing HB Application

HB with annotation, Generator Class, Table per Hierarchy, Table per Concrete class, TPC using Annotation, Table Per Subclass and Annotation

Collection Mapping, Component Mapping, Association Mapping

HQL, Hibernate Queries, SessionFactory, Struts with hibernate, Building Advance Query

## **Spring**

Architecture, Overview, Architecture, Environment Setup, Hello World Example, IoC Containers

Beans, Bean definition, Scope, Life cycle, Post pre-processor, Defination Inheritance.

Bean Injection, Dependency injection, Injecting inner bean, Injecting Collection

Spring Configuration, Spring auto-wiring, Annotation based configuration, Java based configuration

Spring with JDBC Connectivity

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune

Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)

## Front Bench Advantage:

- *Over 5 years Real-Time experienced Faculty*
- *Job oriented, Industry relevant curriculum*
- *Conceptual training methodology*
- *Project/Lab based training*
- *Opportunity for Internship*
- *100% Job Assurance*

## Career Options:

- Software Development Companies
- Web design studios
- Website development studios
- Website or portal development studios
- Advertising agencies
- Print & Publishing houses (like newspapers, magazines, etc.)
- Multimedia production houses
- Freelancing (Work from home)

## Job Profile after this course:

- UI Developer / Web Developer
- Software Developer / JAVA Developer/ .Net Developer
- Full Stack Developer
- SQL Developer / Database Analyst / BACKEND DEVELOPER

**FortuneCloud Technologies Group,**

2<sup>nd</sup> Floor, Abhinav Apartment, Beside Congress Bhavan, Shivajinagar, Pune  
Cell – 9766439090 | [www.fortunecloudindia.com](http://www.fortunecloudindia.com)