

SUMMER INTERNSHIP COURSE CONTENTS

(3 Months/90 days)

Our Features of Summer Internship Training:-

- Theory & Practical Implementation
- Industry Based Syllabus
- Soft Copy of Notes
- Experienced Trainers

PHP COURSE CONTENTS

(3 Months/90 days)

Basic HTML-5 and CSS-3

An Introduction to PHP

- History
- Versions and Differences between them
- Practicality
- Power
- Installation and configuring Apache and PHP

PHP Basics

- Default syntax
- Styles of PHP tags
- Comments in PHP
- Output functions in PHP
- Data types in PHP
- Configuration Settings
- Error Types

Variables in PHP

- Variable Declarations
- Variable Scope
- PHP's Super global Variables **Control Structures**
- Execution Control Statements
- Conditional Statement **Functions**
- Standard Pre-defined Functions
- Creating Functions
- Passing Arguments by Value
- Passing Arguments by Reference
- Recursive Functions **Arrays**
- What is an Array?

- How to create an Array
- Traversing Arrays
- Array Functions

Include Functions

- Include, Include_once
- Require, Require_once

Regular Expressions

- Validating textboxes, emails, phone number, etc.
- Creating custom regular expressions

Object Oriented Programming in PHP

- Classes, Objects, Methods
- Constructor and Destructor

PHP with MySQL

- What is MySQL
- Integration with MySQL
- MySQL functions
- Uploading and downloading images in Database
- Registration and Login forms with validations
- Paging, Sorting...

Date and Time Functions Authentication

Cookies

- Why Cookies
- How to Create and Access Cookies
- Auto-Login

Sessions

- Session Variables
- Creating and Destroying a Session
- Retrieving and Setting the Session ID

Web Services Introduction

- Why Web Services
- Uses of web services

SPECIAL DELIVERY

- Sending Mails using PHP
- File Uploading and Downloading
- SMS Gateways and sending SMS to Mobiles (Introduction)
- Payments gateways and How to Integrate them (Introduction)

- Domain Hosting
- Use of templates

Frameworks

- Word Press (Blogs)
- AJAX (As per Project Requirements)
- Bootstrap (basics Introduction required to template code manipulations)

With Live Project on PHP Technology.....

JAVA Course Contents (3 Months/90 days)

CORE JAVA

MODULE 1: Introduction to HTML Concepts

- HTML Tags, Tables, Frames
- Form Elements, DHTML
- Nested Tables

MODULE 2: Getting Started

- Describe the key features of Java Technology.
- Write, complete and run a simple Java Technology application.
- Describe the functions of Java Virtual Machine (JVM).
- NOTE: The terms “Java Virtual Machine” and “JVM” means a virtual machine for the Java Platform.
- Define Garbage Collection.
- List the three tasks performed by the Java Platform that handles code security.

MODULE 4: Identifiers, Keywords & Types

Use comments in source program.

- Distinguish between valid and Invalid Identifiers.
- Recognize Java Technology keywords.
- List the eight private types.
- Define literal values for numeric and textual Types.
- Define the terms private variable and Reference Variable.
- Declare Variable of class type.
- Construct an object using new.
- Describe default initialization.
- Describe significance of a reference Variable.
- State consequence of assigning variables of class types.

MODULE 5: Expression & Flow Control

- Distinguish between Instance and Local Variables.
- Describe how to initialize instance variables.
- Identifiers and correct a possible reference before assignment compiler error.
- Recognize, Describe and Use Java Software Operators.
- Distinguish between legal and illegal Assignments of primitive types.
- Identify Boolean Expressions and their Requirements in control; constructs.
- Recognize assignment compatibility and require casts and fundamental types.
- Use if ,switch, for, while and do constructions And the labels forms of broke and continue as flow control structure in a program,

MODULE 6: Arrays

- Declare and create arrays of primitive, class or array types.
- Explain why elements of and arrays are Initialized.
- Explain how to initialize the elements of an array.
- Determine the number of elements in an array. Create a multidimensional array.

MODULE 3: Object Oriented Programming

- Define modeling concepts abstraction, Encapsulation and packages.
- Discuss why you can reuse Java Technology Application Code.
- Define class, member, attributer, method, constructor and package.
Use the access modifier private and public as Appropriate for the guidelines of encapsulation.
- Invoke a method on a particular object.
- Use the Java Technology Application Programming Interface (API) online documentation.

MODULE 7: Class Design

- Define inheritance, polymorphism, overloading and virtual method invocation.
- Use the access modifier protected And the default (package friendly)
- Describe the concept of constructor & method overloading.
- Describe the complete object constructor and Initialization operation.

MODULE 8: Advance Class Features

- Create static variables, method, and Initializes.
- Create final classes, methods and Variables.
- Create and use enumerated types.
- Use the static import statement
- Create abstract classes and method.
- Create and use an interface.

MODULE 9: Exceptions

- Define exceptions
- Use try, catch and finally statements.
- Describe exception categories.
- Identify common exception.
- Develop programs to handle your own Exception.
- Use assertions.
- Distinguish appropriate and inappropriate uses of assertions.
- Enable assertions at runtime.

MODULE 10: Text-Based Applications

- Write a program that uses command- Line argument and system properties.
- Write a program that reads from standard input.
- Describe the C-type formatted input and output.
- Write a program that can create, Read and write files.

- Describe the basic hierarchy of collections in Java 2 Software Development kit (Java 2 SDK).
- Write a program to iterate over a collection.
- Write a program that uses generic collections

MODULE 14: Threads

Define a thread.

- Create Separated thread in a Java technology program, controlling the cone and data that are used by the thread.
- Control the execution of a thread and write platform independent codes with threads.
- Describe the difficulties that might arise when multiple thread share data.
- Use wait and notify the communicate between threads,
- Use synchronized to protect data from corruption.

MODULE 15: Advance I/O Streams

- Describe the main features of the Java to Package.
- Construct node and processing Streams and use the appropriately.
- Distinguish readers and writers from Streams and select appropriately between them.

MODULE 16: Networking

- Develop code to setup the Network Connection.
- Understand the Transmission Control Protocol/ Internet Protocol (TCP/IP).
- Use Server Socket and Socket Classes for implementation of TCP/IP clients and servers.

MODULE 17: Building Java GUIs

- Describe the Abstract Windowing Toolkit (AWT) package and its components.
- Define the terms containers, components and layout managers and describe how they work to get to build a GUI.
- Use layout managers.
- Use the frame and panel containers appropriate.
- Describe how complex layout with nested containers work.

MODULE 18: GUI Event Handling

- Define event and event handling.
- Write code to handling events that occurs in a GUI.
- Describe the concepts of adapter Classes, including how and when to use them.
- Determine the user action that originated the event from the event.
- Identify the appropriate listener interface for a verity of event types.
- Create the appropriate event handle methods for the verity of event types.
- Understand the use of inner classes and anonymous classes in event handling.

MODULE 19: GUI- Based Applications

- Identify the key AWT components and the event that day trigger.
- Describe how to construct a menu and menu items in a Java GUI.
- Understand how to change a color and font of a component.

ADVANCE JAVA CONTENTS

Swings

- AWT and Swing
- GUI Programming
- Layout Management
- Event Handling

Database Connectivity

- JDBC Connectivity Model
- Database Programming
- Connecting to the Database
- Executing SQL Queries
- Result Set Meta Data
- Executing SQL Updates
- Using prepared Statement
- Parameterized Statement

Remote Method Invocation (RMI)

- Distributes Application
- RMI Server
- RMI Client
- Stood and skeleton
- RMI Classes and interfaces
- Create Remote Object
- RMI Registry Security Manager
- Using Policy tool.

Servlets

- Browsers, Servers and Servlets
- Servlets Basics
- Servlets life cycle
- Http Sen/let
- Http Servlet Request
- Request-Response Basics
- Session Tracking using Cookie and Http Session.

Java Server Pages

- Description
- JSP versus Server
- JSP
- Actions
- Directives
- Expressions
- Java Beans and JSP

Java Beans

- Introduction
- Types of Java Beans

- Bean Properties
- Bean Scopes

With Live Project on JAVA Technology.....

ANDROID COURSE CONTENTS

(3 Months/90 days)

- 1. Overview**
 - a. Why go MAD (Mobile Application Development)?
 - b. Why Android and not iPhone or other OS?
- 2. Architecture of Android**
 - a. Components of Android
 - b. Layouts in Android
 - c. Life Cycle of Activity
- 3. Getting Started**
 - a. Android SDK
 - b. ADT Bundle & Eclipse
 - c. Creating a Virtual Device/emulator
- 4. Hello World Application**
 - a. Creating new Android application
 - b. Running an Android application
 - c. Understanding Android application structure
- 5. Android UI Design & Event Handling**
 - a. Edit Text
 - b. Checkbox
 - c. Radio Buttons
 - d. Spinner
 - e. Button
 - f. Using Images
 - g. Image Button
 - h. List
 - i. Date and Time picker
 - j. Designing Form & handling events
- 6. Intent**
 - a. Switching screens / activities
 - b. Pending Intent
- 7. Menus**
 - a. Options Menu
 - b. Custom Menu

8. Alerts & Dialogs

- a. Toast
- b. Alert Dialog
- c. Custom Dialog
- d. Status Bar Notification
- e. Creating Animations in Android

9. Main Building Blocks

- Activity
- Intents
- Services
- Content Providers
- Broadcast Receivers

10. Resources

- Overview of Android Resources
- Creating Resources
- Using Resources
- Drawable Resources
- Animation Resources

11. Data Storage

- SQ Lite Database

12. Usage of:

- WiFi
- Camera
- Telephony Manager
- Location Services
- Google Maps

With Live Project on Android Application.....

.NET COURSE CONTENTS

(3 Months/90 days) C# Course Contents:-

- Introduction to Windows Forms
- Taking Advantage of the Form Event Model
- Common Windows Forms Controls
- Data Binding Techniques
- Using the Data Controls
- Handling Input / Output Tasks
- Project Settings in Visual Studio 2010
- Debugging Your Applications
- Developing Windows Forms Applications using C#
- Container Controls
- Menus and Toolbars
- Creating MDI Applications
- Complex Windows Forms Controls
- Creating Custom Controls
- Working with Tool Box Components
- More Tool Box Components
- Deploying Applications using Click-Once
- Deploying Applications and adding Pre-Requisites into the system

ASP Course Contents:-

- Introducing ASP.NET Application and Page ASP.NET Web Server Controls
- Validation Server Controls
- Working with Master Pages
- Themes and Skins
- HTML and CSS Design with ASP.NET
- Data Binding in ASP.NET
- Data Management with ADO.NET
- Site Navigation
- Membership and Role Management
- Security
- State Management
- Caching
- Cookies and State Management
- Debugging and Error Handling
- File I/O and Streams
- User Control and Server Controls
- Packaging and Deploying ASP.NET Applications
- Hosting and using FTP (File Transfer Protocol)

SQL SERVER COURSE CONTENTS

SQL Server Architecture

- SQL Server edition overview
- Introducing the tools
- SQL Server Management Studio

Managing Tables with DDL creating schemas

- Managing schemas
- Referencing schemas versus using the default schema
- Hiding schemas with synonyms

Building tables

- Selecting appropriate SQL Server data types
- Constructing tables with CREATE TABLE

Adding constraints

- Enforcing uniqueness using PRIMARY KEY and UNIQUE constraints
- Validating relationships using FOREIGN KEY

Retrieving Data with Transact-SQL Stored Procedures

Batch and stored procedure processing

- Minimizing network traffic using batches and procedures
- Stored procedure compilation and execution
- Using scalar functions

Selecting data

- Developing stored procedures that extract data from multiple servers
- Executing dynamic queries using OPENROWSET and OPENQUERY
- Executing remote procedures
- Combining results from multiple databases
- Capturing RETURN values from stored procedures

Declaring variables and parameters

- Creating and utilizing local variables
- Passing input and output parameters
- Interrogating global variables

Calling built-in scalar functions

- Converting data using CAST and CONVERT
- Ordering data with ranking functions **Maintaining Data**

Modifying data

- Inserting, updating and deleting data
- Ensuring data consistency with transactions and distributed transactions
- Managing concurrency with isolation levels
- SQL Server locking fundamentals
- Avoiding blocking problems with read-committed snapshot isolation
- Managing locks using hints

Producing server-side result sets

- Building and using temporary table
- Processing rows on the server with a cursor
- Taking advantage of table variables

Developing Views, Functions and Triggers storing queries on the server

- Concealing complexity with views
- Solving business problems using multi statement table-valued functions

Creating user-defined functions

- Calculating values with scalar functions
- Processing multiple rows returned from a table-valued function
- Taking advantage of schema binding

Formulating triggers

- INSTEAD OF vs. AFTER triggers
- Detecting row changes using the inserted and deleted tables
- Tracking metadata changes with DDL triggers
- Auditing user access using a LOGON trigger
- Tracking data changes with the OUTPUT clause

Warm Regards

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