### **Brochure Content:**

# About CV Infotech Training Program

Welcome to CV Infotech IT Training and Placement Program, where **we don't just offer courses– we shape careers**. We provide training from a highly trained and experienced Developer Team. We are pioneered in training on the latest cutting-edge technology by the easiest and best ways of teaching so that learners feel that here is the best environment to learn new technologies. Our Training programs are designed in such a way that you learn from scratch to the end means learning to develop as well as experiencing hosting your developed projects with us. The Developers are well-trained in their respective technology. We have master Developers for each technology and that's why we provide the best training in IT.

# Courses

# **Full Stack Web Development**

## 1. Web Designing (Frontend)

### Overview

- About Responsive Website Designing
- VS Code Installation
- HTML & HTML 5
  - Table
  - Types of Lists
  - Forms
  - Head tag & Meta tag
  - Layout
  - Classes and ID
  - Div Tags
  - Section Tags
  - HTML 5 new element
  - HTML 5 Validations

CSS & CSS3

- Basics
- Background Image & Colors

- Selectors
- Declaration & Types
- Fonts & Text Properties
- Text Shadow, Gradients, etc.
- Overflow & Display Properties etc.
- Effects Border Radius, Box Shadow, etc
- Box Model Border, Margin, etc
- Units in CSS
- Positions Static, Absolute, Relative, Fixed, Sticky etc
- Transforms 2d & 3d Effects
- Transitions Color Effects
- Animations
- Menu & Navigation Bar
- Chrome's Inspect Element for Desktop & Mobile for Runtime CSS Manipulations

### SASS OR SCSS

- Introduction
- Installation
- Variables
- Nesting
- Import
- Mixin
- Extends
- Functions

### **CSS Media Query**

- Overview
- Creating CSS Media Query Files
- Device Width-wise CSS Programming
- Device Orientation-wise CSS

### JavaScript

- Basics
- Variables, Operators, Data Types, etc
- Control Structures If-Else, while, Do while, For Loops
- Logic Building Sessions
- Creating Functions
- Inbuilt Functions Dates, Strings, Numerics etc
- Arrays
- Objects
- Events
- Regular Expressions
- HTML DOM
- Alert box etc

## jQuery

- Basics
- Effects
- DOM Parsing
- Form Validations
- Events
- functions
- Creating Images
- Dynamic CSS Programming
- Hide and show elements etc

## Bootstrap

- Basics
- Grid system
- Tables
- Images & Buttons
- Font Awesome
- Pagination
- Forms
- Menu & Navigation Bar
- Carousel Plugin
- Bootstrap Modals (pop-ups)
- Creating Responsive Websites in Bootstrap
- New features added in the latest version

# **2.** PHP

### Technologies

- PHP, MySQL, React & WordPress
- XAMPP Server Configuration
- XAMPP Server Setup
- Configuring PHP & MySQL Admin

### PHP

- Basics of PHP
- Variables, Constants, etc
- Control Structures
  - If Else, Do While, While loops, For Loops, For Each Loop, etc.
- Functions
- Arrays
- Logic Building
- PHP Forms Get & Post
- Global Variables
- Validation

• Sessions vs Cookies

#### **Advanced PHP**

- File Includes
- Headers & Footers Implementation
- Creating Mini Project
- Integrate Website designed in Web design course with PHP
- Implementing Common Headers & Footers in Website Using PHP
- Integrate CSS, Javascript, JQuery, etc with PHP
- Integrating Google APIs etc.
- PHP File Handling
- Image & File Upload
- Sessions
- Cookies
- Error & Exception Handling Try Catch Block
- Creating Functions & Routines

#### PHP OOPs

- Classes
- Objects
- OOPs Concepts
- Methods etc.

## 3. PHP MySQL

- Using PHPMyAdmin
- MySQL Configuration
- CRUD Operations
  - Create, Drop, Select, Insert, Update, Delete, etc.
  - Integrating MySQL & PHP
  - Data Display on PHP Forms
  - CRUD Operations using PHP Forms
  - Building an Application using PHP MySQL

#### AJAX & JSON

- Overview of AJAX & JSON
- Ajax JSON Integration
- Select & DML Operations using AJAX JSON with MySQL
- Display data from JSON on Form

## 4. REST API

• Overview of REST API

- Creating REST API
- JSON Response
- Using REST API

## 5. WordPress

- Installing WordPress
- Configuring WordPress
- Creating Categories
- Creating Forms/Blogs
- Deployment
- Custom Shortcodes
- Hooks
- Contact Form 7
- Page builder: Elementor, Divi
- AJAX in WordPress

# **React.JS Development**

- Why use ReactJs
- NPM
- Download & Install VS Code IDE for React
- Build Tools and its use
- Folder Structure
- Modal Javascript
- JSX Syntax and how JSX is compiled?
- SASS or SCSS
- Module Import Export
- Create Reusable Components
- Conditional Rendering
- Props
- Controlled and Uncontrolled Components
- Higher order components
- React Developer Tools Debug
- Hooks (useState, use effect, useParam, useLocation, etc)
- Shimmer effect for better UX
- Memorize for performance boost
- Working with Forms

- Adding Bootstrap and Material UI
- Call Rest API in React and CRUD operations
- React with Backend (PHP / Node.js)
- React Router
- Redux, React Query for State Management (optional)
- Unit and Integration Testing (optional)

# **React Native Development**

- Basics of JavaScript (Datatypes, Operators, Conditional Statements & Loops)
- JavaScript Arrays, Objects,
- JavaScript Functions, Promises & Asynchronous JS
- Introduction to React Native
- Hybrid vs Native Apps
- React Native Cli VS Expo Cli
- React Native Setup for Android
- React Native Setup for iOS
- Class Components
- Functional Components
- Lifecycle of a React Component
- React Hooks, States & Props
- React Core components (View, TextInput, Flatlist etc.)
- Create & Handle Modals in React Native
- Data handling with Flatlist, ScrollViews
- Form Handling & Custom Components
- React Navigation
- Types of Navigation (Stack, Tab, BottomTab & Drawer)
- API handling & Context APIs
- Introduction to React Redux
- Github

# **App Development**

Learn basic and advanced app development with projects with app deployment steps on Playstore.

## 1. Core Android

- Android components
- Android Studio Setup & Configuration
- Android OS Overview
- Activity
- Data Sharing
- Shared Preferences
- Broadcast Receivers
- Recycler view
- List view
- Services
- Java / Kotlin
- Material Design
- Storage
- MVVM
- Jetpack
- Room DB
- Retrofit / Ktor
- API
- Proguard
- XML
- View Binding
- GitHub

# **Graphic Designing**

#### **ADOBE SUITE:**

Adobe Photoshop Adobe Illustrator

#### **OTHER PLATFORMS**

Canva Figma

# UI UX

#### What is User Experience

- Functional, aesthetic, and experience design
- What goes into the process?
- What are the benefits?

#### What We Need To Understand About Users?

- Goals, behaviors, and context
- Mental models
- Organizing information
- Visualizing the interface

#### **Research Techniques**

- Deciding what information you need
- Task analysis
- How to ask questions
- Interviews and observation
- Online surveys
- Quantitative Research (Analytics)
- Qualitative research (Analytics)

#### **Information Architecture**

- Content sorting
- Tree testing

#### Wireframe

- Wireframe ideas
- Proofing with
- Creating a test script

### **Building Prototype**

- Minimum viable prototype
- Prototyping tools
- Building a prototype

#### The Test Setup

- Desktop testing: hardware and software
- Mobile testing: hardware and software

#### How To Moderate A Test

- Allowing participants to relax
- Giving instructions
- Open-ended questions

#### **Design Tools**

- Photoshop
- Illustrator

#### **Mobile Design**

• Type of apps (Native Apps, Mobile Web Apps, Hybrid Apps)

- Designing for Android and iOS
- Design Guidelines (Android and iOS)
- Mobile Design Patterns
- User Testing

# **Search Engine Optimization (SEO)**

#### Introduction

- Introduction to SEO and benefits
- Types of SEO
- Techniques of SEO

### **ON-PAGE OPTIMIZATION**

- On-page Optimization
- The Page Title
- Meta Descriptions & Meta Keywords
- Headings
- Bold Text
- Domain Names & Suggestions
- Canonical Tag
- Meta Tags
- Images and Alt Text
- Internal Link Building
- The Sitemap
- Invisible Text
- Server and Hosting Check
- Robots Meta Tag
- Doorway Pages
- 301 Redirects
- 404 Error
- Duplicate content

### **Off-page Optimization**

- Page Rank
- Link Popularity
- Link Building in Detail
- Directory Submission

- Social Bookmark Submission
- Blog Submission
- Articles
- Links Exchange
- Reciprocal Linking
- Posting to Forums
- Submission to Search Engine
- Press Release Submissions
- Forum Link Building
- Competitor Link Analysis

#### **SEO Tools and Reports**

- Keyword Tools and planner
- PA & DA Checker Tools
- Google Webmaster
- Google Analytics
- Keywords position Checker
- Keyword Density checker
- Plagiarism Checker
- •

#### **Local SEO Services**

- Local keywords research
- Google Listing
- Google Mapping
- Creating Local or city-wise pages and Optimization

# **App Store Optimization (ASO)**

#### **Introduction to App Store Optimization**

- Introduction to App Marketing and App Store Optimization
- Key Metrics for App Store Optimization
- Admob
- Adwords

#### **Keywords Optimization**

- Introduction to Keyword Optimization & Finding Root Keywords & Long Tail Keywords
- Choosing the right Keywords

#### **ASO for Play Store**

- Increasing Visibility in the Google Play Store
- Increasing Conversions and Getting Featured in the Google Play Store
- On-Page ASO
- Off Page ASO

#### **ASO for App Store**

- Increasing Visibility in the Apple App Store
- Increasing Conversions in the Apple App Store
- Getting Featured in the Apple App Store

#### **Localization Reviews and Ratings**

- Localization
- Reviews and Ratings

# **Project Coordination**

#### Introduction & Overview

- Introduction & Overview
- Tools You Need

#### **Teams & Leadership**

- Teams & Leadership
- Teams
- Conflict

#### **Project Communication**

- Project Communication
- Didactic Communications
- Basic Meeting Rules

#### **Stakeholder Management**

#### The Basics Of Project Management

- The Basics of Project Management
- Project Needs

#### **Scope And Requirements**

- Scope and Requirements
- Work Breakdown Structures
- Displayed Thinking

#### **Developmental Methodologies**

- Developmental Methodologies
- Methodology Types
- Selecting a Methodology

#### **Effective Budgets & Schedules**

- Effective Budgets & Schedules
- Resource Estimating
- Estimating Techniques

#### **Project Performance**

- Project Performance
- The Keys to Success
- Project Performance Key Values

#### **Change Management**

# **Quality Analyst**

#### **Testing concept**

- Introduction to Test Cases and Use Cases
- Creating/Designing/Executing Test Cases
- Introduction to Test Plan
- Introduction to Test Case Management System

#### **Bug Tracking and Reporting**

- Fundamentals of Bug Tracking tool [Bugzilla]
- Bug Reporting basics
- Generating reports in Bug tracking tool

#### **Advanced Concepts**

- Introduction to Agile & SCRUM
- Difference between Desktop and Web-based Application Testing
- Introduction to test planning

#### Functional back-end tests

- Dividing back end based on functionality
- Checking data integrity and consistency
- Login and user security
- Stress Testing

- Test back end via front end
- Benchmark testing
- Common bugs

#### **Mobile Testing**

- Introduction to Mobile Testing
- What is mobile application testing?
- Need of mobile application testing
- Mobile Technology
- Different Mobile OS
- Mobile devices
- Android Framework
- Emulator and Simulator
- Mobile Functional Testing with tools
- Mobile Performance testing with tools.

### Testing The Nightly downloading and Distribution jobs

- Batch jobs
- Data downloading
- Data conversion
- Data distribution
- Nightly time window
- Common bugs

#### Testing the Interfaces to Transaction APIS

- APIs' queries to back end
- Outputs of back end to APIs
- Other Database Testing Issues
- Test tips
- Test tools
- Useful querie