CERTIFICATE IN FULL-STACK DEVELOPMENT- FLUTTER

DURATION: 240 Hours

TOTAL CREDITS: 8

COURSE SYLLABUS

Objective

The **CERTIFICATE IN FULL-STACK DEVELOPMENT - FLUTTER** makes a student proficient in using the Flutter framework to build both the front-end user interface (UI) and interact with the back-end services of a web application, essentially handling the entire development lifecycle from the visual design to server-side logic, all within the Flutter ecosystem; allowing them to create cross-platform web applications with a single codebase.

Exit Profile

- Complete Knowledge in Web UI & Mobile Application Development

- FLUTTER & its frameworks.

- Designing level knowledge

Career Path

- Full-Stack Web Developer

- Frontend developer

- Back-End Developer

- UI Designer

- Mobile Application Developer

Course Outline

Course Name:	CERTIFICATE IN FULL-STACK DEVELOPMENT-FLUTTER	Duration:	240 H
Module	Topic	Dur.	Total Dur.
MODULE -1	Introduction to UI/UX designing	6 H	120 H
	HTML	22 H	
	CSS	22 H	
	JavaScript	30 H	
	JQuery	30 H	
	Bootstrap	10 H	
MODULE -2	Dart Programming	30 H	120 H
	Android UI Development using Flutter	60 H	
	Database operations using Flutter with SQLite Database	18 H	
	Introduction to Cloud Computing , Git & Github	12 H	

Course in Detail

MODULE-1

INTRODUCTION TO UI/UX DESIGNING

- HTML
- CSS
- JavaScript
- JQuery
- Bootstrap
- Core Java Programming
- RDBMS -My SQL Server
- JDBC
- Servlets
- JSP
- Spring Frameworks
- Hibernate
- Introduction to Cloud Computing, GIT & GITHUB

HTML

- Introduction
- Building Blocks of Web Frontend
- Introduction To HTML
- Basic HTML TAGS
- Advanced HTML Tags & concepts.

CSS

- Introduction to CSS
- CSS Basics
- CSS Advanced

JAVASCRIPT

- Introduction to DHTML
- Javascript Basics
- Javascript Advanced
- Document Object Model
- Manipulating DOM using JS
- DOM Events

JQUERY

- JQuery Basics
  - What is JQuery?
  - Adding JQuery to a web page
  - JQuery Syntax
  - JQuery Selector
  - JQuery Events
- JQuery Advanced
  - HTML Manipulations
  - Effects
  - Traversing
  - Plugins

BOOTSTRAP

- What is Bootstrap?
- Adding bootstrap to your projects.
- Different predefined Element styles
- The Grid System
- Forms
- Templates

MODULE-2

DART PROGRAMMING

- Introduction to Dart Programming

- Features of dart

- Syntax

- Data Types

- Variables

- Operators

- Loops

- Decision making

- Collection Data Types

- Maps

- Functions

- Dart symbols

- Dart enumeration

- OOPS

- Dart generics

- Debugging

ANDROID UI DEVELOPMENT USING FLUTTER

- Introduction

- Installation

- Flutter First Application

- Flutter Architecture

- Flutter vs React native

- Dart Programming

- Flutter Basics

- Flutter Widgets

- Routing

- UI designing

- Advanced Concepts

DATABASE OPERATIONS USING FLUTTER WITH SQLITE DATABASE

- Introduction to SQLite Database

- Adding Dependencies

- Creating the data models

- Adding the imports

- Initialize the database

- Performing CURD Operations (Create, Update, Retrieve, Delete)

INTRODUCTION TO CLOUD COMPUTING, GIT & GITHUB

- What is cloud computing?

- Working of cloud Computing

- Advantages of Cloud Computing

- What is Git and Gitlab?

- Installing Git

- Git File Management

- Branching

- Pull Requests

- Common Workflows