

Python Web Development for Kids Course

Course Intro

Introduce your child to the exciting world of **web development with Python!** This beginner-friendly course is designed for **kids aged 11-14**, teaching them how to build **interactive websites and web applications** using Python, HTML, CSS, JavaScript, and Flask/Django.

Through hands-on projects, students will learn **coding fundamentals**, how websites function, and how to create real-world applications—turning their creativity into functional websites!

About the Course

The **Python Web Development for Kids** course is designed for young learners with **no prior web development experience**. Over **three months**, students will learn:

- ✓ **Python programming basics** (functions, loops, and data types).
- ✓ **How to build web pages** using **HTML and CSS**.
- ✓ **How to create interactive websites** with **Flask/Django**.
- ✓ **How to integrate databases, user authentication, and APIs** into a website.
- ✓ **How to deploy projects to the web** and share them with others.

By the end of the course, students will **build their own web project** and earn a **certificate of completion!**

Course Requirements

To participate in this course, students will need:

- ✓ **A laptop** with internet access.
 - ✓ **Python installed** for coding.
 - ✓ **Zoom installed** for virtual sessions.
 - ✓ **A Gmail account** for accessing development tools.
 - ✓ **No prior coding experience required!**
-

Course Outline

1. Introduction to Python and Web Development

- Setting up a **Python development environment**.
- Writing your first **Python script**.
- Basics of **HTML & CSS** for structuring and styling web pages.

2. Flask/Django & Web Page Routing

- Introduction to **Flask/Django** for web development.
- Creating multiple pages using **routing and templates**.

3. Forms, User Input & Databases

- Creating forms to collect and display user input.
- **Connecting a database** to store information.

4. Building Web Apps with CRUD Operations

- **Create, Read, Update, Delete (CRUD)** operations in web applications.
- User authentication: **registration, login, and logout features**.

5. Frontend Basics: JavaScript & Interactivity

- Introduction to **JavaScript** for adding interactive elements.
- Fetching and displaying data dynamically using **AJAX & APIs**.

6. Advanced Web Design & Styling

- Learning **CSS Flexbox and Grid** for better layouts.
- Using **Bootstrap** to design professional-looking web pages.

7. API Integration & Debugging

- Fetching data from **external APIs** to display in web applications.
- **Debugging and testing** web applications for reliability.

8. Deployment & Performance Optimization

- Deploying websites to **the cloud** (e.g., Heroku).
- Understanding **web security** and best practices for protecting user data.

9. Final Project & Showcase

- Building a **personal web project** using Python, Flask/Django, and web design skills.
- **Live presentation** of student projects to the class.

Course Benefits

- ✓ Learn Python and web development from scratch.
- ✓ Build real-world web applications.
- ✓ Gain hands-on experience with HTML, CSS, JavaScript, Flask/Django.
- ✓ Develop problem-solving and coding skills.
- ✓ Create and launch a final project to showcase.
- ✓ Receive a certificate upon completion!

Final Project Options

Simple Web Calculator

- Build a basic **calculator** that performs addition, subtraction, multiplication, and division.
- Uses **Python logic** for calculations and displays results on a webpage.

Python-Powered Trivia Quiz

- Create a **quiz game** where users answer **multiple-choice questions**.
 - The app calculates **scores in real-time** and displays results dynamically.
-

Why Choose This Course?

This course makes learning **Python & web development fun and engaging** for kids! With **interactive lessons, real-world projects, and expert guidance**, students will gain valuable skills that can **kickstart their journey in tech**.

 **Start your child's coding journey today!** 