

Technical Test – Coding Languages

1. Web design

Types of languages:

- The main languages we normally use are HTML, CSS, and JavaScript

HTML- Is what gives the website its basic structure, almost like the frame of a house.

CSS- Is what we use to style everything, like adding colours, changing fonts, and making the page look neat.

JavaScript- is the one that makes the website interactive, so buttons, animations, and pop-ups actually work.

Python- For backend development(behind the scenes) python is used with frameworks like: Django and Flask. It enables smooth server side logic and database connections.

- These three languages usually work together.
- **The platform** that's best for using them is **Visual Studio Code** because it's simple, free, and most people who build websites actually use it.

2. App Design

Languages:

- The languages depend on what type of phone or device the app is for.

Android apps- mostly use Java or Kotlin, with Kotlin being the newer and easier one.

iPhone apps- use a language called Swift, which is made by Apple specifically for iOS apps.

- There's also **Flutter**, which uses a language called Dart, and the cool thing about Flutter is that you can build one app and it works on both Android and iPhone.

- The best platforms to build apps on are **Android Studio** for Android apps, **Xcode** for iPhone apps, and **Visual Studio Code** for Flutter projects.

3. Text Formatting

Languages:

- When it comes to text formatting, some coding languages help us format and organise text properly.

Markdown- is one of the easiest because we just use simple symbols to make headings, bold text, lists, and more.

LaTeX- is more advanced and is usually used for school projects, maths, science, or anything that needs a clean and professional layout.

HTML- can also be used to format text on websites.

- The platforms that work best for this are **Visual Studio Code** for **Markdown** and **HTML**, and **Overleaf** for **LaTeX**.

4. Database Creation

Languages:

- For creating databases, the main language that we depend on is SQL. Almost every type of database uses **SQL**.
SQL- helps us store information, search for data, update it, and organize everything properly.
- **Python-** is also useful because it connects well with databases and can automate tasks.
PHP helps websites talk to databases, especially in web apps.
- For working on these databases, we usually use platforms like **MySQL Workbench**, **phpMyAdmin**, or **SQLite** for smaller projects.