Web and App Development Orientation

Understanding the Basics and Real-World Applications

Understanding Computers

- Definition: Computers process data using software.
- What Computers Understand: Binary language (0s and 1s).
- Why Programming Languages: High-level languages like HTML and Python make communication with computers easier.

Why Programming Languages?

- Simplify communication with computers.
- Allow building applications for specific purposes.
- Examples: Websites, mobile apps, games, and more.

Why Choose Web Development?

- The web is a universal platform accessible on all devices.
- Essential for businesses, education, and entertainment.
- Cost-effective to develop and maintain.

Real-World Examples

- Static Websites: Personal blogs or event pages.
- Dynamic Websites: E-commerce platforms like Amazon.
- Responsive Design: News websites for various screen sizes.
- Real-time Apps: Chat apps like WhatsApp or video calls like Zoom.

Relating to Students' Lives

- Encourage personal projects: To-do lists, portfolios, or games.
- Everyday tech interactions: Ordering food, booking cabs, using social media.
- Project Idea: Student management system or budget tracker.

Languages and Tools to Learn

- Frontend: HTML, CSS, JavaScript
- Frameworks: React, Next.js
- Backend: Node.js, Express.js, firebase
- Database: MongoDB

Thank you