Lecture No. 1

■ Summary:

- Web development is divided into frontend, backend, and full stack development.

- Backend development requires essential skills such as programming language, version control system, data structures and algorithms, design patterns, databases, and web frameworks.

- Frontend development requires learning HTML, CSS, JavaScript, TypeScript, and a UI framework such as React.

- Additional skills for frontend development include CSS pre-processors, CSS frameworks, automated testing, and meta frameworks.

■ Key Terms and Concepts:

- Frontend development

- Backend development

- Full stack development

- Programming languages (JavaScript, Python, Ruby, Java, C, Go)

- Ecosystem of tools and libraries

- Version control system (git)

- Data structures and algorithms

- Design patterns

- Relational and non-relational databases (MySQL, mongod DB)

- Web frameworks (Django, spring boot, express.js, as.net core, Ruby on Rails, J)

- HTML, CSS, JavaScript, TypeScript

- UI frameworks (React, angular, Vue)

- CSS pre-processors (Sass, Less)

- CSS frameworks (Bootstrap, Tailwind)

- Automated testing (Jest, V test)

- Meta frameworks (Nextjs, Remix)

■ Review Questions:

1. What are the essential skills required to become a backend developer?

2. How long does it take to learn a programming language for backend development?

3. What are the key components of frontend development?

4. Why is JavaScript important for frontend development?

5. What are the additional skills recommended for frontend developers to increase job oppo rtunities?