

## Document for Software Engineers and Platform Engineers

### 1. Software Engineer

#### Role Overview:

A software engineer designs, develops, and maintains software systems. They focus on delivering high-quality, scalable, and efficient software solutions.

#### Key Responsibilities:

Writing and testing code to create software applications.

Debugging and optimizing existing code.

Collaborating with cross-functional teams (e.g., designers, product managers).

Designing software architecture for scalability and performance.

Maintaining documentation for code and system processes.

#### Essential Tools and Materials:

##### Development Environments:

Integrated Development Environments (IDEs): IntelliJ IDEA, Visual Studio Code, PyCharm.

Version Control Systems (VCS): Git (via GitHub, GitLab, Bitbucket).

##### Programming Languages:

Frontend: JavaScript, TypeScript, React.js, Angular.

Backend: Python, Java, Node.js, Ruby, C#.

Mobile: Swift (iOS), Kotlin (Android), Flutter.

##### Testing Tools:

Selenium, JUnit, pytest, Cypress.

##### Collaboration Tools:

Jira, Confluence, Slack, Microsoft Teams.

##### Code Quality and CI/CD:

Jenkins, GitHub Actions, Travis CI, SonarQube.

##### Databases:

SQL: PostgreSQL, MySQL.

NoSQL: MongoDB, Firebase.

Software Documentation:

Docusaurus, MkDocs, Notion.