Training & Development Plan for Software Developers (Frontend/Backend)

1. Identify Training Needs

Skills and Competencies Required:

- **Frontend Developers:**
    - Proficiency in HTML, CSS, JavaScript, and modern frameworks like React, Angular, or Vue.js.
    - Understanding of responsive design and cross-browser compatibility.
    - Familiarity with version control systems like Git.
    - Knowledge of frontend testing frameworks like Jest or Mocha.
- **Backend Developers:**
    - Proficiency in backend programming languages such as Python, Java, or Node.js.
    - Understanding of database management systems (SQL and NoSQL).
    - Experience with APIs (RESTful and GraphQL).
    - Knowledge of server architecture and cloud services (e.g., AWS, Azure).

Identified Training Needs:

- Technical skills gap in specific frameworks, tools, and languages.
- Advanced problem-solving techniques for debugging and optimizing code.
- Soft skills for effective collaboration and communication within teams.
- Exposure to Agile and DevOps methodologies.

2. Detailed Training Program

Objectives:

- Equip developers with the latest technologies and best practices.
- Improve code quality and efficiency through advanced tools and techniques.
- Foster teamwork and communication skills to enhance collaboration.
- Ensure familiarity with Agile workflows and DevOps integration.

Schedule:

Day	Topic	Mode	Duration
Day 1	Orientation & Role Expectations	In-person/Virtual	2 hours
Day 2	Advanced Frontend/Backend Fundamentals	Online Workshop	4 hours
Day 3	Framework-Specific Training (React/Node.js)	Instructor-led	6 hours
Day 4	API Development & Integration Techniques	Hands-on Session	4 hours
Day 5	Debugging and Optimization Best Practices	Lab Exercise	4 hours
Day 6	Agile and DevOps Overview	Seminar	3 hours
Day 7	Soft Skills for Developers	Interactive Workshop	3 hours
Day 8	Capstone Project & Feedback	Team Project	6 hours

Training Material:

- PowerPoint Presentation: "Advanced Techniques for Frontend & Backend Developers"
    - **Slides Overview:**
        1. Welcome and Objectives
        2. Key Technologies in Frontend/Backend Development
        3. Advanced Coding Practices
        4. Debugging Techniques
        5. Agile & DevOps Integration
        6. Team Collaboration Tips
        7. Capstone Project Guidelines

Assessment Methods:

- Quizzes after each module to test theoretical knowledge.
- Hands-on coding exercises to evaluate practical application.
- Final project reviewed by peers and instructors.

Follow-Up Plan:

- Regular feedback sessions to identify ongoing development needs.
- Access to an online learning portal with updated resources.
- Scheduled 1-on-1 mentoring sessions every month for the first 6 months.