**Combined Time Estimation – Full Stack (Backend + Frontend)**

**🔙 Backend Estimation**

| **Task** | **Time** |
| --- | --- |
| Project Setup (Spring Boot, DB, Security) | 4 hrs |
| JWT Auth (Login, Role-based) | 6 hrs |
| DB Design & Entity Setup | 3 hrs |
| Employee CRUD APIs | 6 hrs |
| Salary Calculation Logic & API | 4 hrs |
| Salary Slip Generation API | 4 hrs |
| Employee Slip Retrieval | 3 hrs |
| Spring Security Config | 3 hrs |
| Testing via Postman | 4 hrs |
| Error Handling, Validation, Cleanup | 3 hrs |
| **Subtotal (Backend)** | **40 hours** |

**🌐 Frontend Estimation**

| **Task** | **Time** |
| --- | --- |
| Project Setup (React, Router, Axios, UI Lib) | 2 hrs |
| Login & Role-based Navigation | 4 hrs |
| Admin – Add/View/Edit/Delete Employee | 7 hrs |
| Admin – Salary Calc & Slip Gen UI | 6 hrs |
| Employee – Profile & Slip View | 4 hrs |
| API Integration (Axios) | 5 hrs |
| JWT Token Handling (Storage + Protected Routes) | 3 hrs |
| Styling & UI Polishing | 3 hrs |
| Testing & Debugging | 3 hrs |
| **Subtotal (Frontend)** | **37 hours** |

**📊 Total Estimated Time: ~77 hours**

| **Mode** | **Duration** |
| --- | --- |
| **Solo Developer (Full Stack)** | 10–12 days (working 7–8 hrs/day) |
| **2 Devs (1 Backend + 1 Frontend)** | 5–6 days (parallel work) |

**🛠 Optional (Add Time if Included)**

| **Feature** | **Time** |
| --- | --- |
| PDF export of salary slip | +2 hrs |
| Toast notifications / Alerts | +1 hr |
| Forgot password / Reset flow | +2 hrs |