**🌐 Internship System API Workflow (Step-by-Step)**

**1. Authentication (Login & Register)**

🔑 Before anything, users (students, companies, supervisors, admin) need to register & log in.

* POST /api/Auth/register → Register a new user (student/company/supervisor/admin).
* POST /api/Auth/login → Login and get a **JWT token** (used for authorization in headers).
* POST /api/Auth/change-password → Change password (must be logged in).

✅ **Workflow**: Register → Login → Use token in Authorization: Bearer <token> for all requests.

**2. Admin Panel**

👨‍💼 The **admin** manages companies, students, supervisors, internships, reports, grades, and certificates.

**🏢 Companies**

* GET /api/Admin/companies/pending → View pending company registrations.
* PUT /api/Admin/companies/{id}/approve → Approve a company.
* POST /api/Admin/companies → Add new company.
* DELETE /api/Admin/companies/{id} → Delete a company.

**👩‍🎓 Students**

* GET /api/Admin/students → Get all students.
* POST /api/Admin/students → Add student.
* PUT /api/Admin/students/{id}/approve → Approve student.
* DELETE /api/Admin/students/{id} → Delete student.
* POST /api/Admin/students/{studentId}/assign-supervisor → Assign supervisor to student.
* GET /api/Admin/students/with-supervisors → View students with assigned supervisors.

**👨‍🏫 Supervisors**

**Company Supervisors**

* GET /api/Admin/supervisors/company
* POST /api/Admin/supervisors/company
* PUT /api/Admin/supervisors/company/{id}/approve
* DELETE /api/Admin/supervisors/university/{id}

**University Supervisors**

* GET /api/Admin/supervisors/university
* POST /api/Admin/supervisors/university
* PUT /api/Admin/supervisors/university/{id}/approve

**📑 Reports & Certificates**

* GET /api/Admin/reports → All reports.
* POST /api/Admin/certificates/{studentId} → Issue certificate for student.

**🎓 Internships**

* PUT /api/Admin/internships/{internshipId}/assign-university-supervisor → Assign university supervisor to an internship.

**3. Students**

👩‍🎓 Students apply, upload reports, view attendance, and request certificates.

* GET /api/Students → List all students.
* GET /api/Students/me/internships → My internships.
* GET /api/Students/attendance/{internshipId} → Attendance record.
* GET /api/Students/certificate/{internshipId} → Download certificate.
* POST /api/Students/companies → Apply to company.
* POST /api/Students/reports/weekly → Submit weekly report.
* POST /api/Students/reports/final → Submit final report.

**4. Companies**

🏢 Companies register & manage internships.

* POST /api/Companies → Register company.
* GET /api/Companies → Get all companies.
* GET /api/Companies/approved → Get approved companies.
* GET /api/Companies/{id} → Get company details.

**Company Supervisors**

* POST /api/CompanySupervisors/register → Register supervisor.
* GET /api/CompanySupervisors/students → List students under company.
* POST /api/CompanySupervisors/attendance → Mark student attendance.
* POST /api/CompanySupervisors/validate → Validate internship work.
* POST /api/CompanySupervisors/comments → Add performance comments.

**5. Internships**

* GET /api/Internships → List internships.
* POST /api/Internships → Create internship.
* POST /api/Internships/{id}/activate → Activate internship.
* POST /api/Internships/{id}/complete → Complete internship.

**6. Reports**

📑 Students submit → supervisors review → admins verify.

* POST /api/Reports/weekly → Student submits weekly report.
* POST /api/Reports/weekly/{id}/review → Supervisor reviews weekly report.
* POST /api/Reports/final → Student submits final report.
* POST /api/Reports/final/{id}/review → Supervisor reviews final report.

**7. Grades**

🎓 Admin/Supervisors manage grades.

* GET /api/Grades/internship/{internshipId} → Get internship grades.
* POST /api/Grades/internship/{internshipId} → Add grade.
* GET /api/Grades/student/my-grades → Student view my grades.
* PUT /api/Grades/{gradeId} → Update grade.
* DELETE /api/Grades/{gradeId} → Delete grade.
* GET /api/Grades/admin/all → Admin view all grades.

**8. Attendance**

* POST /api/Attendance → Mark attendance.
* GET /api/Attendance/internship/{internshipId} → View attendance for internship.

**9. University Supervisors**

* GET /api/UniversitySupervisors/students → Get students assigned.
* GET /api/UniversitySupervisors/reports/weekly/{internshipId} → View weekly reports.
* PUT /api/UniversitySupervisors/reports/weekly/{reportId} → Approve/Reject weekly reports.
* GET /api/UniversitySupervisors/reports/final/{internshipId} → View final report.
* PUT /api/UniversitySupervisors/reports/final/{reportId} → Approve/Reject final report.

**🔄 Typical Workflow Example**

1. **Student** registers & logs in.
2. **Company** registers → Admin approves it.
3. Student applies to **company internship**.
4. Admin assigns **supervisors**.
5. Student submits **weekly & final reports**.
6. Supervisors review → Admin monitors.
7. Company supervisor marks **attendance**.
8. University supervisor approves reports.
9. Admin assigns **grades & issues certificate**