**Software Requirements Specification (SRS)**

**Project Name:** DevPath  
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**1. Introduction**

**1.1 Purpose**

The purpose of **DevPath** is to provide students and early-career developers with an integrated platform to:

* Discover scholarships, internships, and hackathons.
* Showcase projects and build teams.
* Improve resumes and coding skills through peer and AI feedback.
* Track their DSA/Problem Solving progress and interview readiness.
* Share transparent reviews of internships to help others.

**1.2 Scope**

DevPath will be a **web-based platform (with possible mobile extension later)**, targeting students and young professionals in tech. The platform centralizes multiple fragmented tools (LinkedIn, Leetcode, Glassdoor, GitHub showcases) into one ecosystem.

The MVP will include:

* Scholarship/Internship boards.
* Peer Review Hub (resumes/code).
* Project Showcase.
* User authentication & profiles.

Advanced features will expand over time (AI interview coach, DSA tracker, hackathon team builder).

**2. Stakeholders**

* **Primary Users:** University students, recent graduates, junior developers.
* **Secondary Users:** Employers, mentors, recruiters, scholarship/fellowship organizers.
* **System Admins:** Platform maintainers.

**3. Functional Requirements**

**3.1 User Management**

* Users can create profiles (skills, education, resume, portfolio).
* Profiles can be public or restricted.
* Login via email/Google/GitHub.

**3.2 Scholarship & Internship Finder**

* CRUD (Create/Read/Update/Delete) entries for scholarships and internships.
* Filter by location, eligibility, deadlines.
* Internship transparency: Users leave reviews (rating, salary, culture).

**3.3 Peer Review Hub**

* Upload resumes, essays, or code snippets.
* Other users can review and give feedback.
* Reputation points for reviewers (gamification).

**3.4 AI Interview Coach**

* Coding interview simulation (Problem Solving problems).
* Behavioral interview mock with AI-generated feedback.
* Score tracking & improvement suggestions.

**3.5 DSA/Problem Solving Progress Tracker**

* Users log problems solved (manual entry or API sync).
* Leaderboards (university, global, friends).
* Weak-area detection & recommendations.

**3.6 Hackathon & Project Team Builder**

* Match users by skills & availability.
* Teams can form for hackathons or side projects.
* Integrated task board + chat/GitHub linking.

**3.7 Side Project Showcase**

* Users upload projects (title, description, repo link, screenshots).
* Others can like/comment/offer collaboration.

**4. Non-Functional Requirements**

* **Performance:** Must support at least 10,000 concurrent users in MVP.
* **Scalability:** Should allow global user expansion.
* **Security:** JWT authentication, encrypted passwords, role-based permissions.
* **Reliability:** 99.5% uptime target.
* **Usability:** Clean UI, minimal friction, student-friendly.
* **Compatibility:** Responsive design (desktop + mobile web).

**5. System Design Constraints**

* **Tech Stack Suggestion:**
  + Backend: Node.js (Express.js) or Django REST API.
  + Frontend: React + Tailwind.
  + Database: PostgreSQL or MongoDB.
  + AI Components: OpenAI API / HuggingFace for interview coach.
  + Hosting: Vercel/Netlify (frontend), Render/Heroku (backend).
* **Integration Needs:**
  + GitHub API (portfolio & project showcase).
  + Google OAuth (login).

**6. User Stories (Examples)**

* **As a student**, I want to find scholarships I’m eligible for, so I don’t waste time applying to the wrong ones.
* **As a student**, I want peers to review my resume, so I can improve before applying for internships.
* **As a coder**, I want to track my DSA progress, so I know what to focus on.
* **As a student**, I want to form a hackathon team, so I don’t have to rely on random WhatsApp groups.
* **As a recent intern**, I want to review my experience, so I can help others make informed decisions.
* **As a student**, I want to showcase my projects, so recruiters can notice my skills.

**7. Future Enhancements**

* Mobile App (React/React Native/Flutter/Swift).
* AI-powered project recommendations (“build X to strengthen your resume”).
* Integration with Coursera/Udemy for learning resources.
* Community Q&A (like StackOverflow but student-focused).

**8. Success Metrics**

* **Adoption:** 500+ active student users in the first pilot launch (e.g., Cairo University).
* **Engagement:** Average of 3 interactions per user per week (posting, reviewing, applying).
* **Growth:** Expand to other universities within 6–12 months.