Personal Questions:

1. Could you please share your current employment situation, including whether you're

employed full-time, part-time, or actively seeking new opportunities?

- I am now working as a cp mentor and developer of Sohoj Coding. Here my role is to discussed about various DSA related concept and post contest discussion as a cp mentor. As a developer at here I am working with various api related concept at here. I am a fulltime member at here. Here also I will get the time advantages at here, that's why I can involve with some other task also. I am also working as a employee of Driesource. I worked remotely at here. I also have a YouTube channel named Algo3370.

2. What are your salary expectations for this role, considering your experience, skills,

and the responsibilities involved?

My expectation salary is 40000 taka. As I am already working as a member of developer team and also worked with various project so I think I can fulfill my duties properly.

Technical Questions:

1. What programming languages, tools, and frameworks do you consider yourself

most proficient in? How do you decide which ones to use for a particular project?

- I am most comfortable in Java programming language. The most comfortable zone for me is to developed android application using android studio. I also can work as a backend developer with spring boot. Then I also can work as a backend developer in node.js (In present I am working with node.js based application in Sohoj Coding). As a backend developer I choose Spring boot at the first time for development. Then I

will prefer Node.js. I also can developed desktop application using java swing. If I have to developed cross platform application then I can developed it using codename one framework with java language.

2. How do you ensure the scalability, performance, and security of the software you develop?

Ensuring **scalability**, **performance**, and **security** in software development requires applying best practices across architecture, coding, infrastructure, and testing. Here's how each aspect is typically addressed:

✅ Scalability

To ensure your software can handle increased load or user growth:

1. **Modular Architecture**: Use microservices or layered architecture to decouple components and scale independently.
2. **Stateless Services**: Design services to be stateless so they can be replicated easily across servers.
3. **Load Balancing**: Use load balancers to distribute traffic evenly across servers.
4. **Database Scaling**:
    - Vertical scaling (stronger servers)
    - Horizontal scaling (replication, sharding)
5. **Caching**: Use tools like Redis or Memcached to cache frequent queries or API results.
6. **Cloud Infrastructure**: Leverage scalable platforms like AWS, Azure, or Google Cloud for autoscaling and elasticity.

□ Performance

To ensure fast, responsive, and optimized software:

1. **Efficient Algorithms and Data Structures**: Choose optimal algorithms for core logic.
2. **Code Profiling & Optimization**: Regularly profile and optimize code hot spots.
3. **Asynchronous Processing**: Use background jobs, queues (like RabbitMQ), or async calls for non-critical tasks.
4. **Minimize Network Latency**: Compress data, use CDN, and optimize API payloads.
5. **Database Indexing**: Proper indexes on queried fields to speed up data access.
6. **Front-End Optimization**: Minify JS/CSS, lazy-load images, and avoid render-blocking resources.

 Security

To protect software from threats and vulnerabilities:

1. **Authentication & Authorization**: Use industry standards like OAuth 2.0, JWT, or SSO.
2. **Data Encryption**: Encrypt sensitive data at rest (AES) and in transit (TLS/SSL).
3. **Input Validation & Sanitization**: Prevent SQL Injection, XSS, and other injection attacks.
4. **Security Testing**: Perform regular penetration testing, static code analysis, and vulnerability scanning.
5. **Least Privilege Principle**: Grant the minimum permissions needed to users/services.
6. **Secure Dependencies**: Regularly update libraries and monitor for known vulnerabilities (e.g., with tools like Dependabot or Snyk).

Would you like an example of applying these principles in a web or mobile project?

3. Can you walk us through a recent software engineering project you worked on, explaining the key challenges you faced and how you overcame them, along with the technologies you used?

InsAllah I can fulfill the duties at there.

Responsiveness Questions:

1. How do you prioritize and respond to development requests, bug fixes, or critical issues both during and outside of regular work hours?

Prioritizing and responding to development requests, bug fixes, and critical issues requires a structured and pragmatic approach to maintain product stability and team efficiency. Here's how I typically handle it:

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 1. Prioritization Strategy

✅**During Work Hours**

- **Use Triage Meetings or Task Boards** (e.g., Jira, Trello) to classify tasks:
  - **P0 (Critical):** System down, data loss, major user impact – fix immediately.
  - **P1 (High):** Core feature broken – fix in the current sprint.
  - **P2 (Medium):** Minor bug or enhancement – schedule for future sprints.
  - **P3 (Low):** Cosmetic issues or nice-to-haves – backlog for review.
- **Balance Tasks:** Mix quick wins with complex tasks to keep progress steady.

 Outside Work Hours

- **On-Call Rotation (if applicable):** Only respond to **P0/P1** issues unless otherwise arranged.

- **Clear Escalation Protocol:** Use tools like Slack, PagerDuty, or email alerts for urgent issues.
- **Communication First:** Always inform stakeholders or team leads before acting on urgent items outside of hours.

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 2. Response Process

1. **Acknowledge & Assess**
    - Quickly validate the issue.
    - Check logs, monitoring tools, or bug reports.
2. **Contain & Isolate**
    - If the issue is critical, apply a hotfix or rollback to the last known stable state.
    - Disable or restrict problematic functionality if needed.
3. **Resolve & Document**
    - Implement and test the fix.
    - Write clear commit messages and update the issue tracker.
    - Communicate resolution to the team/client.
4. **Post-Mortem (for major issues)**
    - Conduct a quick analysis to prevent recurrence.
    - Add automated tests or improve monitoring where applicable.

 Tools I Use

- **Issue Tracking:** Jira, GitHub Issues
- **Communication:** Slack, Microsoft Teams
- **Monitoring:** LogRocket, Sentry, or custom logs
- **Automation:** CI/CD pipelines for fast and safe deployments

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2. How do you manage multiple tasks and ensure the timely delivery of projects when working under tight deadlines?

Managing multiple tasks under tight deadlines requires strong planning, time management, and communication. Here's how I approach it:

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1. Break Down the Work

- **Divide the project** into manageable tasks using WBS (Work Breakdown Structure).
- **Set clear priorities** based on urgency, dependencies, and impact.
- Use **Kanban or Scrum boards** to track progress visually (Jira, Trello, GitHub Projects).

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2. Prioritize Ruthlessly

- Apply **Eisenhower Matrix** or **MoSCoW (Must, Should, Could, Won't)** methods to sort tasks.
- Focus on **high-impact** items first.
- Defer or delegate low-priority work when possible.

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3. Plan & Timebox

- Allocate fixed time blocks for each task (timeboxing).
- Use tools like **Pomodoro** or **Google Calendar** to stay on schedule.
- Leave **buffer time** for unexpected blockers or revisions.

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4. Communicate Clearly

- Provide **daily status updates** in team meetings or stand-ups.
- Proactively flag risks or blockers to team leads or stakeholders.
- Be honest about what can/can't be achieved within the timeframe.

□ 5. Iterate & Deliver in Increments

- Deliver in **small milestones** or MVPs to ensure continuous progress.
- Get quick feedback and make improvements iteratively.
- This keeps the project moving even if all features aren't fully polished at once.

□ 6. Use the Right Tools

- **Task management:** Jira, Notion, Trello
- **Version control:** Git, GitHub
- **CI/CD pipelines:** For fast testing and deployment
- **Time tracking:** Clockify or built-in project time logs

□ Real Outcome:

In a recent student registration system I built with Codename One + Node.js backend, I used this exact method to manage frontend coding, backend APIs, and MongoDB integration within 10 days. I met the deadline by working in focused 4-hour daily sprints with daily checklists and mid-week deliverables.

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3. How do you maintain clear and effective communication with remote teams, especially when working across different time zones or with distributed teams?

Maintaining clear and effective communication with remote and distributed teams—especially across time zones—requires structure, empathy, and the right tools. Here's how I approach it:

□ 1. Time Zone Awareness

- Use tools like **World Time Buddy** or **Google Calendar** to visualize overlapping hours.

- Schedule **core working hours** for live collaboration (even if it's just 1–2 hours/day).
- Respect time differences—avoid urgent late-night pings unless critical.

□ 2. Structured Asynchronous Communication

- Use **written updates** (Slack, Teams, email) for daily standups, blockers, and status reports.
- Share **clear documentation** of project requirements, specs, and decisions (e.g., in Notion or Confluence).
- Record meetings or demos so others can view them later.

□ 3. Set Clear Expectations

- Define **roles, responsibilities, and deadlines** up front.
- Break tasks into **actionable items** in task boards (e.g., Jira, Trello).
- Set **response time expectations** (e.g., "24-hour turnaround on comments").

□ 4. Use the Right Tools

- **Chat:** Slack, MS Teams – for fast, threaded, real-time convos
- **Docs & Planning:** Google Docs, Notion, Confluence
- **Project Management:** Jira, Trello, Asana
- **Video Meetings:** Zoom, Google Meet – only when necessary
- **Code Collaboration:** GitHub, GitLab with Pull Requests and code review comments

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□ 5. Foster Team Culture

- Schedule **virtual check-ins** and non-work chats (e.g., monthly coffee calls).
- Celebrate small wins across time zones.

- Be mindful of tone in messages—text can feel cold, so I use emojis or quick calls when clarity is needed.

 Example:

In a recent project with teammates in Bangladesh, Germany, and the US, we used Slack for async updates, Jira for daily task tracking, and met twice a week in the shared 2-hour overlap window. Every team member recorded quick Loom videos explaining their work if someone couldn’t attend live.
