

OnSite Interview

My name is yejia Yang, I was a graduate student in Computer science, and my undergraduate background is in network engineering. so I have learnt a little knowledge of network protocol. During the past year since I was a freshman until now, I still keep learning, I can use some back-end frameworks(spring-boot), front-end frameworks (Layui, bootstrap, elementUI, uni-app, angular and so on), database(rational DB and non-rational DB).

In 2020, I was working in an IoT and construction company, and although I was a java developer I still did other work, including front-end design, database design, UI design, and server configuration by using Nginx. My main work was developing REST-style services using Spring Framework based on MQTT and HTTP protocol and upgrading our online software.

Sense of accomplishment 成就感

Cumulative 累计

trajectory 轨迹

I can't think it out at the moment 我一时之间想不出来

Code specification and cleanliness are fundamental to the longevity of a project.代码规范和整洁是项目维持长久的根基。

I try to identify what my main priorities are first. 我试图首先确定我的主要优先事项是什么。

Plagiarism 抄袭

Agile software development is a process that focuses on incremental delivery by the team as a whole. The project is broken up into small chunks that are able to be completed within a given timeframe called 'sprints.' 敏捷软件开发是一个专注于整个团队的增量交付的过程。项目被分解成小块，能够在给定的时间范围内完成，称为 "冲刺"。

daily standup meetings to keep everyone synced on team progress 每日召开会议，使每个人都能同步了解团队的进展情况

insufficient 不足

Consistency—一致性

Fully learn my role and the company's needs

I want to spend the next 5 years developing deep expertise in Software Engineering

Leadership Style Lead by example

I like to lead by example. I lead from the front by taking action, demonstrating what needs to be done, and keeping my team organized to make sure we're all on the same page and contributing equally.

I am certainly interested in learning more, 对role感兴趣

make a big impact

I have the necessary skills and qualities already that match your job description.

- Requirement analysis
- Specification
- Software architecture
- Implementation
- Testing
- Documentation
- Training and support
- Maintenance

1. Why Did You Decide to Become a Software Engineer?

That's a long story. After I finished my college-entrancing exam, gaokao, I feel like I'm standing at a crossroads, I chose my major randomly, like the majority of students, I like to participate in something I am really interested in, like sport club. Frankly, I wasn't attracted by my major until I finished the fundamental courses at first. In my sophomore year, my professor who taught us network and I started up a sudoku club, it was the first time I use the knowledge I have learnt. I built a platform which is based on RBAC(Role-based access control) to manage club members. It was the first time I use the Spring MVC framework, although I didn't involve too deep knowledge about this useful framework at that time. For the next two years, I maintained the platform.

our admin posted pluzz every day and is verified by the suduko algorithm, sometimes we could post our activities, such as sudoku competitions and suduko-related news reports. Unfunenatly, after I graduated, no one maintains the platform, it was abandoned. during the whole four years, I built my personal website version one, I learnt how to deploy the program to the cloud, and I feel a sense of accomplishment in the continuous learning process, I think I found my career trajectory, and I like it and I enjoy it.

1.1.what was the toughest challenge you've faced ?

Currently no, I am optimistic, but when I got my first job, I was allocated a task that was real-time monitoring I need to add a new function to our mini-program. Before I wrote the code, I had to know the business my previous company did, my IT manager gave me the source code, that's really complicated because they didn't use any framework, in the next two weeks, I tried to debug and clean up the logic parts, and considered how to add my parts and imitate their code style. As a rookie, I wanted to prove myself quickly, I searched many articles, such as how to call API provided by Hikvision, and how to slice each frame in real-time video streaming, two weeks later, I tested it and thought, I can merge my request, however, when my other senior colleagues said when the program starts to slice each frame, the program got a collision, at that time, I realise my code has a fatal mistake, Whenever that function was clicked, threads were constantly created in the back-end, causing deadlocks.

I realised my mistake. I shouldn't do this work without any questions to ask my talented colleagues, I shouldn't have been in such a hurry to submit my code.

2. What programming languages do you prefer?

Java definitely. I use Java for many years, but I know java has many features I still need to learn.

3. What's important when checking a team member's code? 在检查一个团队成员的代码时，什么是重要的?

在团队合作中代码规范显得尤为重要,别人能看懂代码这是十分重要

It is very important that team members can understand each others' code. Don't feel troublesome to write notes and comments. If they don't understand the code in the merge request, they won't say anything. It would be a complete nightmare! It is important to speak my mind, especially for junior developers like me.

4. What project management tools have you used?

Jira(ji rua) is a project management and issue-tracking tool.

5. Talk about a project you completed successfully

Reading app, MANET project

python crawler

6. What Are You Looking for in This Job?

- Skill
- Motivation
- Career journey
- Personal circumstances
- The company specifically interests you

Firstly, Improve my skill and learn from a talented development team, including programming language, frameworks, Logic and code specification.

Secondly,

7. Why Should We Hire You?

According to the job description for Java developer, you are looking for somebody who graduated in Computer Science, is proficient in software development with Java and has experience in RESTful services with Spring Boot, I have the necessary skills and qualities already that match your job description. I would like to show what my skillset can do for the company.

8. Talk about some mistakes you learned from

To be frank, every project I work on more or less has some sort of mistake. Recently I help my friends build an online shop based on WeChat. If the title/description/comments(String) of the products include some emojis, the page only shows question marks which replace emojis, To solve the problem, I came out with two methods, one is that ignore emoji text or transfer emoji to Unicode. So whatever user text, the page won't show unexpected question marks. Now when I build a new database or table, I will define the character set as utf8mb4, in case of the 500 error. As an optimistic person, 500 error is better than I got 404.

Others, emm, Actually many, I can't think it out at the moment 我一时之间想不出来

9. How Did You Solve a Problem You Faced?

Typically, When I come across a problem, the first thing I will do is gather more related information before I make a decision or write the code. Because not all problems I have encountered before and have the experience to solve, think twice before I act. For example,

10. How Do You Come Up With Estimates?

11. What Are You Working On right now?

No, Currently I don't have any work, but I've been maintaining my previous projects

12. How Do You Assure Software Quality?

尽早测试

Testing aims to catch defects early during the design phase so they don't snowball and grow into bigger issues later.

Test on Multiple Devices

There is an overwhelming number of devices, screen sizes, and OS configurations in the market, so it's important to test as many variations as possible.

13. Do You Enjoy Working With a Team or Alone?

Absolutely, a Team. I have been working alone for a long time, I lack knowledge of code specification, and each project I made based on my mind, sometimes I face or struggle with some problems, and I have wasted my time solving them, moreover, for example, every time I build front-end part firstly, my aesthetic is not as good as a professional's, I need to refer to a professional website, then build the layout. After that writing code to finish the interaction, and lastly test, I think it takes me longer to tackle each module step by step when I'm working on the whole project by myself. Most importantly, maybe I cannot get progress when I work alone, all logic, technique I use and code styles are limited by my level.

If I work with a team, I can focus on some parts rather than all parts, which can improve my specific skills. I can learn more in-depth in a certain section.

14. What Are Your Career Goals?

I want to be a senior developer and can be an interviewer in the future. Training a new employee allows me to develop my leadership and interpersonal skills.

15. When writing your own database server what should you consider?

Good database design is essential to building scalable, high-performance applications.

Considering my business requirements and every Viewpoint During Planning

Select Database types, such as rational DB or non-rational,

Normalize the data, Ensure that the field name does not appear more than once, I mean, each table might have a unique id, I usually name table_id not simply just id.

Performance: Creating indexes for frequently used queries

Transparent structure: the database I created should let every developer can understand, I don't want to make things difficult for those who may need to modify the database at some point.

deploy in the cloud.

16. How do you keep your skills sharp and up to date?

That's a good question. typically I try to write some mini projects to familiarize new techniques. for instance, my friend told me that they now use a new framework called uni-app, so in order to learn a deeper understanding I wrote a mini-program which is a reading app, I can show you, all the books I use python crawlers to fetch.

I would like to say, we live in an open-source world, there are tons of tutorials we can search on YT & Google. Technology has changed year and year, so Learning is never-ending.

17. What Questions Do You Have for Us?
