Screening Test/Interview Questions for Software Engineer (Remote) Position

Instructions: Please precede all your answers with the question you are answering.

Use acronyms only after you've explained them.

Use correct spelling and grammar

Be sure to write your name and the interviewer's name.

***Candidate's Name*: Rixio Barrios**

***Interviewer's Name*: Dev Naugain**

1. Are you currently employed?

No

2. Will you be able to devote 20 to 40 hours of your time weekly for Synergistic IT?

Yes

3. What qualities and skills should a good Software Engineer have?

I am a certified Software Engineer. I have several projects under my belt, I am organized, professional and can learn anything I put my mind to.

4. What are the important categories of software?

1. Free software
2. Open source software
3. Shareware
4. Freeware

Sorry but the question is a bit vague. I answered to the best of my understanding.

5. What advice would you give to a new team member? What's the best way to onboard a new hire?.

Depending on the area that the new hire is going to. If it is software engineering, making the new hire see and feel the platform and technologies he or she would be using is a good start.

6. What is the main difference between a computer program and computer software?

Computer program: A set of instructions telling a computer what to do.

Computer software: Programs or operations used by a computer. Computers can utilize more than one program to execute a task.

7. Describe the software development process in brief:

Planning: Decide purpose, structure, technologies to use and desired output.

Analysis: Look at the performance expectancy in various stages and make necessary modifications according to results.

Design: Use results of analysis to build the architectural structure of the project.

Development: Coding the project and its various functions.

Implementation: The application goes to a pilot program to study and see its functionalities

Testing: The software goes to a series of tests to look for errors and to debug.

Maintenance: the software is given a route to updates and scheduled revisions to keep it running properly.

Deployment: The program goes live on the internet or to the public on a package.

8. In software development process what is the meaning of debugging?

Debugging is finding error in the written code or its functionality/logic and correcting them.

9. How can you make sure that your code is both safe and fast?

Refactoring code makes sure that your code is clean, easy to read, safe and fast. Also, there are many testing frameworks and tools to ensure your code is up to part.

10. Name two tools which are used for keeping track of software requirements?

Jira and ReQtest

11. What is the main difference between a stubs, a mock?

In unit testing a Stub is a a dummy piece of code that lets the test run, but you don't care what happens to it.

A mock is a dummy piece of code, that you verify is called correctly as part of the test.

12. What is computer software?

Computer software: Programs or operations used by a computer. Computers can utilize more than one program to execute a task.

13. Tell me about yourself and your last job

I was a diplomat for a forieng government.

I was in charge of office management, public engagement, consular services and human resources.

14. According to you which SDLC model is the best?

I am not familiar with Software Development Lifecycle Models but doing a little goggle search tells me that the best one might be Agile.

15. Who is the software project manager? What is his role?

The Software Project Manager Plans and leads all software projects. His or her role is to plan, implement, monitor and control all aspects of the software planning.

16.How to find the size of a software product?

1. Counting the lines of code in the application source code.
2. Functional size measurements to express functionality size.

17.What are the software project estimation techniques available?

1. Top-Down Estimate
2. Bottom-Down Estimate
3. Analogous Estimating
4. Parametric Estimate
5. Three-point Estimating
6. What-If Analysis

18.What are the first things you would check in a legacy system that has frequent downtime?

1. Overload

2. Noisy neighbor
3. Bad dependency
4. Scaling boundaries
5. Bad deployment
6. Monitoring gaps
7. Failure domains

19.How do you stay up-to-date with changes in technology? For example, do you ever attend seminars or contribute to open source software projects?

I attend webinars, read articles and have frequent conversations with my colleagues about the latest technology tools.

20.How do you meet tough deadlines? Tell me about a time you completed great work under pressure.

I think planning is important so before any project is conceived I'd like to plan it so we can save time and energy while building it. However, if time becomes an issue I personally devote my time to the project and encourage others to do the same. We divide the work and keep each other updated at all times.

21.What type of software have you worked with? How much will you request per hour if you are hired?

I have worked mostly with React as a framework with many others in a long list of dependencies and testing software. The standard pay rate for a Software Engineer in my area with my qualifications is $50 per hour.

22.DUTIES: Developing software solutions by studying information needs; conferring with users; studying systems flow, data usage, and work processes; investigating problem areas; following the software development lifecycle. Determines operational feasibility by evaluating analysis, problem definition, requirements, solution development, and proposed solutions. Documents and demonstrates solutions by developing documentation, flowcharts, layouts, diagrams, charts, code comments and clear code. Prepares and installs solutions by determining and designing system specifications, standards & programming. Can you handle all of these duties effectively?

I can handle all of those duties to the best of my abilities.