Candidate's Name: Kevin Chancey

Interviewer's Name: Marcus Cannady

1. Are you currently employed?

No, but I am doing some small projects for a client as a freelancer. No contract.

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

Yes, and more hours if needed.

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

I think they should have the ability to learn and learn quickly as technologies are always changing. They need great communication and collaboration skills as they need to work in teams and be able to talk about their code.

4. What are the important categories of software?

Application software, System software, and computer programming tools

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

I think the best way to onboard a new hire is to get them familiar with the work team, the environment of the workplace, what will be expected of them, and just make them feel welcomed. I feel that a new hire will work better and become a great addition to the team, the sooner they feel comfortable.

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

A software is a set of instructions, data, or programs used to operate computers and complete specific tasks. A program is a collection of instructions that performs a specific task when executed by a computer.

7. Describe the software development process in brief:

software development process or the software development life cycle, are the stages of development. Analysis & planning, Requirements, Design & Prototyping, Software development, testing, deployment, and maintaining.

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

Debugging is finding what is broken in your code. Finding what line and code is not working properly such as a typo or missing bracket.

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

The most important thing for checking if it is safe is by testing. You can check if it is safe by inputting bad data(i.e. For a login page, duplicated email address, bad passwords, etc). You can also input null, or a string when something is expecting a number. You can test the speed of it by using a profiler or log the timestamps of the run.

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

Modern Requirements and Visure Requirements

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

A stub is an object that holds predefined data and uses it to answer calls during testing. Mocks are objects that register calls they receive. In testing, we can verify on mocks that all expected actions were performed.

12. What is computer software?

Computer software is a collection of data or instructions that tell the computer how to work and what to do.

13. Tell me about yourself and your last job.

I am from Las Vegas, NV and I joined the air force for 4 years working in operations/dispatch. After being stationed in Anchorage, AK for 4 years, I got out of the military and moved to Seattle, WA where I continued my career in operations. I hated it and thought it was the companies I was working for, but then realized that I just hate logistics & transportation. My last job at Apex Facility was a moving company that worked with large companies like Facebook, Amazon, and Smartsheet. I would go out on move sites in these buildings and that's where I heard about software engineers. I started teaching myself a little on FreeCodeCamp.org and decided I needed to quit my job and go to a coding bootcamp. I completed the course at Coding Dojo and right out of graduation, I started doing projects for J Taylor Education.

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

To me, I think the Agile method is best as it is most used by large companies and has been around for a long time. Also, I have worked in a Scrum team in school which I liked.

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

They are the person in charge of defining the requirements of the project and builds the team. They lay out the blueprints for the whole project including the scope, parameters, and goals.

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

By the amount of lines in the code or the functional size (Function point analysis).

17. What are software project estimation techniques available?

Effort estimation, Cost estimation, and resource estimation

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

If the system is outdated and needs to be modernized or no longer supported.

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 constantly follow all the coding subreddits, follow active popular coders on youtube, check on the newest questions/answers on StackOverflow, and receive up to date emails about the software development world.

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

I do whatever it takes to meet a deadline. If I can meet it working normal hours in a week, I will do that or even work to get it done sooner as a buffer. If I know it's going to take longer, I will work more hours in a day/week if needed to get it done. My whole first project for my first client was working under pressure because he wanted features on his site that I didn't know how to accomplish. I had to learn quickly and test out the site so I could give him updates on my progress. In the end, he is very happy with the outcome and I am amazed with what I learned in the process.

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

I have worked with Python, Django, MERN (MongoDB, Express, React, NodeJs), C#, Asp.Net, HTML, CSS, JQueary, JavaScript, Bootstrap, SQL. For my pay, I was hoping to be around \$60,000/year.

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?

Yes.