Software Developer Internship (OJT) Interview Guide

Complete Beginner to OJT-Level Interview Preparation

PART 1: INTRODUCTION & BASICS

Q: Tell me about yourself.

A: I'm currently a student applying for a software developer internship. I have basic programming knowledge and have worked on small projects using fundamental concepts like variables, loops, and functions. I'm eager to learn real-world development and improve my skills.

Q: Why software development?

A: I enjoy problem-solving and building logical solutions, which is why software development interests me.

Q: Why should we accept you as an intern?

A: I may still be a beginner, but I'm motivated to learn, open to feedback, and willing to put in the effort to improve and contribute.

PART 2: CORE PROGRAMMING (BEGINNER / OJT LEVEL)

Q: What programming languages do you know?

A: I have basic knowledge of my chosen programming language and understand the fundamentals.

Q: What is a variable?

A: A variable stores data that can be used and changed in a program.

Q: What are data types?

A: Data types define what kind of data a variable can hold, such as numbers, text, or true or false values.

Q: What is a loop?

A: A loop repeats a block of code while a condition is true.

Q: Difference between for and while loop?

A: A for loop is used when the number of repetitions is known, while a while loop depends on a condition.

Q: What is a function?

A: A function is a reusable block of code that performs a specific task.

Q: Why use functions?

A: Functions help avoid repeating code and make programs easier to maintain.

PART 3: OBJECT-ORIENTED BASICS

Q: What is OOP?

A: Object-Oriented Programming organizes code using objects and classes.

Q: What is a class and an object?

A: A class is a blueprint, and an object is an instance of that class.

Q: What is encapsulation?

A: Encapsulation keeps data and methods together and controls access.

PART 4: WEB & SOFTWARE BASICS

Q: Difference between frontend and backend?

A: Frontend is what users see and interact with, while backend handles logic, data, and servers.

Q: What is an API?

A: An API allows different software systems to communicate with each other.

Q: What is a database?

A: A database stores and manages data efficiently.

Q: What is CRUD?

A: CRUD stands for Create, Read, Update, and Delete.

PART 5: DEBUGGING & LOGIC

Q: What is debugging?

A: Debugging is the process of finding and fixing errors in code.

Q: What do you do when your code doesn’t work?

A: I check error messages, review my logic, debug step by step, and research or ask for help when needed.

PART 6: VERSION CONTROL

Q: What is Git?

A: Git is a tool used to track changes in code.

Q: Why is Git important?

A: It helps manage code history and supports teamwork.

PART 7: POSSIBLE ADVANCED QUESTIONS

Q: Difference between stack and heap?

A: The stack stores local variables, while the heap is used for dynamically allocated objects.

Q: What is recursion?

A: Recursion is when a function calls itself to solve smaller parts of a problem.

Q: What is an algorithm?

A: An algorithm is a step-by-step process used to solve a problem.

Q: What is Big-O notation?

A: It describes the efficiency of an algorithm in terms of time or space complexity.

Q: What is multithreading?

A: Multithreading allows a program to perform multiple tasks at the same time.

PART 8: CODING TEST EXAMPLES

Q: Common simple tasks:

A: Print numbers from 1 to 10, check if a number is even or odd, reverse a string, or find the largest number in a list. If unsure, explain the logic clearly.

PART 9: SCENARIO QUESTIONS

Q: What if you don’t know how to do a task?

A: I research, try to understand the task, and ask questions when necessary.

Q: What if you make a mistake?

A: I report it, fix it, and learn from the experience.

PART 10: CLOSING

Q: Do you have questions for us?

A: What technologies will interns use, and how does the mentoring process work?