**JavaScript**

Question: What is the object type?

Answer: An object type defines what an object can do( its data or properties ) and what actions it can perform( its methods or functions )

**TypeScript**

Question: What is the difference between .ts and .jsx extentions?

Answer:

* .ts is used to build pure TS files e.g for backend, utility files and logic
* .jsx is used to build react components with javaScript(no ts features)

**HTML5**

Question: What is the purpose of alt attributes in images

Answer: The alt attribute explains the content of the image should in case the image is not rendered which could be caused by network or broken links.

**CSS**

Question: What are the three ways of applying CSS to a web document?

Answer: Inline CSS, external CSS and block CSS

**React**

Question: What are props in react?

Answer: Props is a short form of properties, they are a way of passing data to child components

React-hooks

Question: What are react hooks?

Answer: **React Hooks** are special functions that let you use **state, side effects, and other React features** in **functional components** (without classes).

**OOP**

Question: what is inheritance??

Answer: Inheritance is a core concept in Object-Oriented Programming (OOP) where a child class (subclass) inherits properties and methods from a parent class (superclass).

Redux

Question: Do you need to keepls all component states in Redux store?

Answer: No you don’t need to keep all component state in redux store, it is better to use local component state for certain cases and redux for global management

**Git**

Question: What is the difference between Git vs SVN?

Answer: Git is a distributed version control system while SVN is a centralized version control system

**Web Security**

Question: What is DDOS attack??

Answer: A DDoS attack (Distributed Denial-of-Service attack) is a malicious attempt to disrupt the normal traffic of a targeted server, service, or network by overwhelming it with a flood of internet traffic from multiple sources. Unlike a DoS attack (Denial-of-Service), which comes from a single source, a DDoS attack uses a large number of compromised devices (often called a botnet) to launch the attack simultaneously.

Unit Testing

Question: How to unit test an object with a database?

* Answer: If your objects are tightly coupled to your data layer, it is difficult to do proper unit testing. Your objects should be *persistent ignorant*. You should have a *data access layer*, that you would make requests to, that would return objects.
* Then *mock* out your calls to the database. This way, you can leave that DB dependants part out of your unit tests, test them in isolation or write *integration tests*

**Agile and Scrum**

Question: Name roles in Scrum?

Answer:

The **Scrum Master** serves as a facilitator and coach, ensuring the team adheres to Scrum principles and practices. This role focuses on removing obstacles, organizing key Scrum events like the Daily Standup and Sprint Retrospective, and protecting the team from external disruptions. Unlike a traditional project manager, the Scrum Master does not assign tasks but instead empowers the team to self-organize while guiding them toward continuous improvement.

The **Product Owner (PO)** acts as the bridge between stakeholders and the development team, ensuring the product delivers maximum value. This role is responsible for defining and prioritizing the Product Backlog, refining user stories, and setting clear acceptance criteria. The PO makes critical decisions about what features to build next, balancing business needs with technical feasibility. Unlike a traditional business analyst, the Product Owner has the final say on priorities and works closely with the team to clarify requirements throughout the Sprint.

The **Development Team** consists of cross-functional professionals—developers, testers, designers, and others—who collaborate to deliver a working product increment each Sprint. This team self-organizes to determine the best way to accomplish its goals, estimates tasks, and ensures quality through continuous integration and testing. Unlike traditional siloed teams, Scrum emphasizes collective ownership, where members share responsibility for success. The Development Team also participates in retrospectives to refine processes and improve efficiency