

Name: Arnar Singhal

Reg no: 219301216

1. The role of WebRTC API is to provide developers with a set of standardized and easy-to-use APIs for enabling real-time communication between web browsers.

The role of WebSockets API is to provide developers with a simple and efficient mechanism for establishing persistent connections between a client and a server. It enables real-time communication, reduces latency, and provides a more responsive and interactive experience for users.

3. Web Development Technologies: Web development technologies such as HTML, CSS, JavaScript, and various frameworks like React, Angular, and Vue are commonly used to create the frontend of an E-commerce website.

Backend Technologies: Backend technologies such as PHP, Python, Ruby, and Java are commonly used to build the backend of an E-commerce website. These

technologies handle the business logic, database management, and server-side scripting that enables the website to function.

**Payment Gateway:** Payment Gateway services like PayPal, Stripe, and Authorize.net enable secure and reliable online payments.

4. XML (Extensible Markup Language) is a markup language that is used to describe and store data in a structured format. It uses tags to define elements and attributes to provide additional information about the elements.

AJAX (Asynchronous JavaScript and XML) is a technique used to create dynamic and interactive web pages. AJAX allows web pages to request and receive data from a server without reloading the entire page.

JSON (JavaScript Object Notation) is a lightweight data interchange format that is easy for humans to read and write and easy for machines to parse and generate.

5. Keyword research: SEOs conduct keyword research

to determine which keywords and phrases users are searching for and then optimize the website's content and metadata accordingly.

**On-page optimization:** This involves optimizing the website's content, metadata, images, and other on-page elements to make it more visible to search engines and improve its ranking.

**Off-page optimization:** This includes building backlinks and promoting the website on other relevant websites to improve its authority and visibility.

**Technical optimization:** SEOs optimize the website's technical aspects such as site speed, mobile-friendliness, and website structure to ensure that search engines can crawl and index the website effectively.