QUIZ

Which of the following sets of words describe a WebSocket connection?

- bidirectional, stateful, persistent

👏 Correct!

- bidirectional, stateful, request-response cycle
- bidirectional, stateless, persistent
- unidirectional, stateful, persistent

Which type of application does NOT benefit from WebSockets?

- Multiplayer games.
- Stock tickers.
- A static web page.

👏 Correct! An application that wants the current state of a resource when first loaded and does not want or require ongoing updates does not need a WebSocket connection.

- Social feeds.

Fill in the blanks to complete the sentences about secure WebSocket connections.

The `wss://` protocol works in the same way as the ws:// protocol, except that the initial handshake takes place over `HTTPS` instead of `HTTP` .

👏 You got it!

Which of the following is NOT TRUE of the upgrade headers between client and server involved in a WebSocket handshake?

The initial client request includes a header `Connection: Upgrade`

The initial client request includes a header `Sec-WebSocket-Version: 13`

The initial client request includes a header `Sec-WebSocket-Key: q4bvcO32u222gldruKaSOv==`

The server responds with an `HTTP 200 Maintaining Protocols` response code along with its upgrade headers.

👏 Correct - this is not the right response code header! The response code should be `HTTP 101 Switching Protocols`.

The initial client request includes a header `Upgrade: websocket`

Fill in each blank to match the three scenarios with the correct WebSocket communication pattern.

`Client > Server` : A user likes a post in their news feed.

`Server Broadcast` : All users in a chatroom are notified of a new message.

`Server > Client` : A welcome message is sent to a user who just joins the server.

👏 You got it!

Before WebSockets, to provide real-time data, applications had to abuse the HTTP protocol resulting in the following issues EXCEPT:

- [x] Only a limited number of clients could connect to the server at once
- [ ] Multiple TCP connections for each request-response cycle were needed to keep data up to date.
- [ ] Necessity of cookies or sessions ids to sync state of client and server.
- [ ] Buildup of latency due to headers passed between client and server for each TCP connection.

👏 Correct - this was not an issue caused by using HTTP!

Fill in the blanks to describe the handshake protocol to initiate a WebSocket connection:

A WebSocket handshake begins with a `request-response` protocol over an HTTP connection. The `client` sends a request to the `server` to open a WebSocket connection. If capable the server responds and completes the handshake, opening up a connection. The `WebSocket` connection now replaces the `HTTP` connection.

👏 You got it!

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👏 You got it!