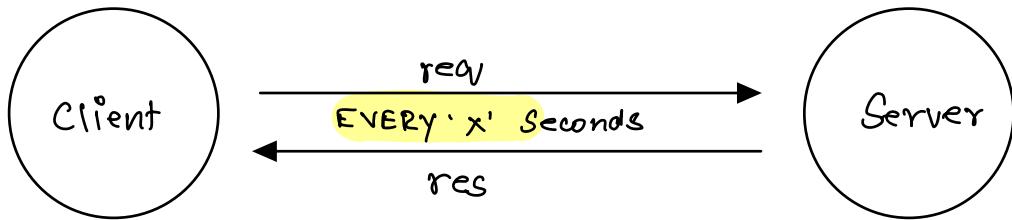
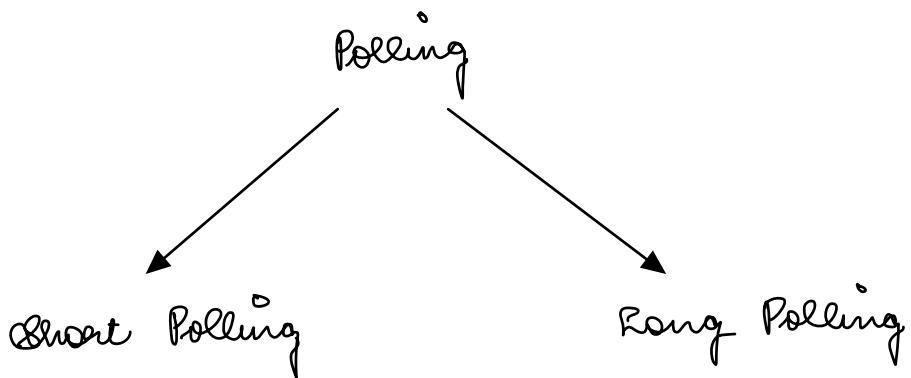


Polling And Streaming

Polling



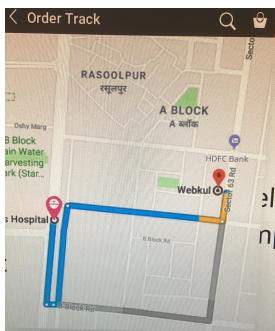
Polling is the process where a client requests a particular piece of data at regular intervals and the server responds with the required data.



Short Polling

In short polling the client sends request to the server at regular intervals and the server will respond back irrespective

of whether it has the data or not.



USAGE: Short polling can be used

in Swiggy / Zomato live delivery tracking (i.e. get the location

The main disadvantage of short polling is there can be many unnecessary and empty checks

long Polling

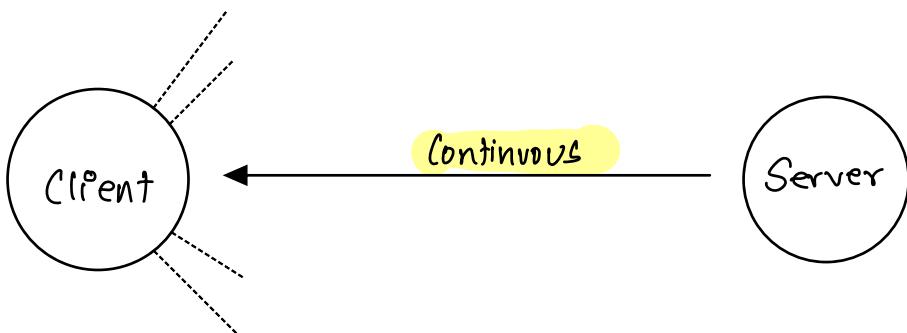
Instead of returning an empty response when no updates are available, in long polling the connection is kept idle until an update is available (or) the timeout of the request is over. The main advantage of long polling is data is sent immediately to the client once it becomes available on the server. Once an update is delivered, the long poll request is finished and the client can request another long poll request.

USAGE: Checking for new Email messages

Disadvantages of Polling

i) Polling should not be used for high frequency messages where delays cannot be tolerated.

Streaming



Streaming is where a server pushes messages to the client as soon as they arrive. This is done by keeping an open connection between the server and the client. Unlike in polling where the client requests data, in streaming the client keeps listening for the server to send data.

Example where polling is used

i) Price update of stock price.

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② Messaging application

Protocol used

- RTMP (Real Time Messaging Protocol)
- Web Socket Protocol