Webhooks

Before knowing about the webhooks, we will look into the 'polling'.

Polling:
It is a technique where a client repeatedly queries or "polls" a server at regular intervals to check for updates or new information.

- It is "pull-based = client actively pulls data from the server".
- It involves short-lived HTTP requests.

Example:
A client application periodically sends requests to a server to check for new email messages. It repeatedly asks the server, "Do I have any new emails?" and the server responds with the latest email messages, if any.
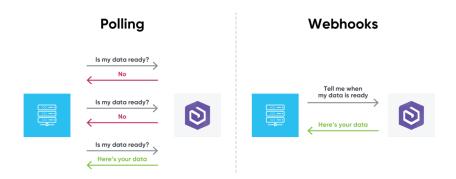

Fig: Polling Vs. Webhooks

Webhooks:
Webhooks are HTTP callbacks or "reverse APIs" that allow servers to notify clients or other servers about specific events or updates in real-time.

Workflow: The client or server subscribes to specific events or triggers and provides a callback URL (webhook URL) to the server. When the event occurs, the server sends an HTTP POST request to the subscribed webhook URL, containing relevant data about the event.

Characteristics:
- Push-based: The server actively pushes data to the client or subscriber.
- Event-driven: Only triggers callbacks when specific events occur, reducing unnecessary requests and network overhead.
- Typically involves longer-lived HTTP requests (initiated by the server).

Example:
A server sends a webhook notification to a client's server whenever a new order is placed in an e-commerce application. The client's server is configured to receive these notifications and perform actions such as updating inventory or sending order confirmation emails.