A red and blue logo

AI-generated content may be incorrect.

# SDE Skills System Design Session Handout

Live comments refer to real-time, interactive messages posted by viewers during a live video stream, allowing for immediate feedback, engagement, and conversation. These comments appear instantly for both the streamer and other viewers, creating a dynamic and engaging viewing experience

Functional Requirements

* Real-time text comments
  + Users should be able to post comments in real-time during the live video stream.
  + Comments should appear instantly on the streamer's screen and on the viewers’ screens.
* Emojis and reactions
  + Users should be able to include emojis in their comments.
  + Reactions such as likes or thumbs-up should be allowed for individual comments.
* Infinite scrolling
  + Comments should be paginated or support infinite scrolling to avoid overload of data.
* (Optional) User mentions and replies
* (Optional) Moderation and replies
* (Optional) Only allow subscribers to comment

Non-Function Requirements

* Scalability: should be able to handle millions of live videos with thousands of comments per second.
* Latency: low latency comment broadcast (~300ms)
* High availability for comment creation
* Ensure that comments appear in the right order