

# Stateful Transformation

# What are Stateful DStreams?

- If we have a use case to track data across batches then we need what are called stateful DStreams.
  - Examples: Tracking a user's interaction in a website during the user session, Tracking a particular twitter hashtag across time.
- Two Types of Stateful DStreams:
  1. window based tracking
  2. full session tracking



# Stateful Transformations

- `updateStateByKey(func)`: Return a new "state" DStream where the state for each key is updated by applying the given function on the previous state of the key and the new values for the key. This can be used to maintain arbitrary state data for each key.
- `mapWithState(StateSpec)`
  - *NOT AVAILABLE WITH PYTHON API*