

This diagram models the Data Access Layer, showing how raw signals from different sources are normalized and persisted:

## 1. Input Sources

o InputFileData, WebSocketInput, and TCP Data Input represent three entry points. Each invokes its corresponding listener to begin streaming raw, encoded data.

### 2. Listeners

o FileDataListener, WebSocketDataListener, and TCPDataListener each know how to start and stop their specific stream (from a filepath, WebSocket URL/protocol, or TCP port) and how to decode the incoming bytes into a String. They feed every decoded chunk into the next stage.

# 3. DataParser

Central parsing component that takes each raw string (parseData()) and transforms it into a structured Data object, exposing the parsed payload via getData().

## 4. DataSourceAdapter

Orchestrates end-to-end flow: it accepts parsed Data from the parser, further processes or enriches it (processData()), and then hands it off to storage via sendDataToStorage().

### 5. DataStorage

 Final sink, responsible for persisting the processed data array. It exposes writeProcessedData() for writes and readData() for downstream consumers.