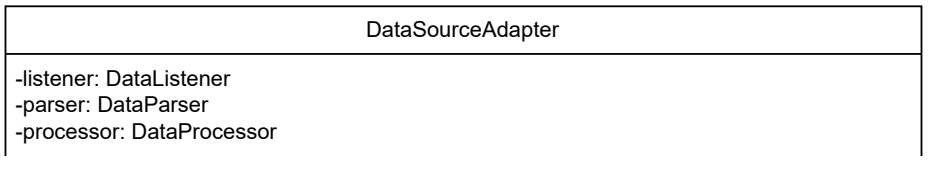
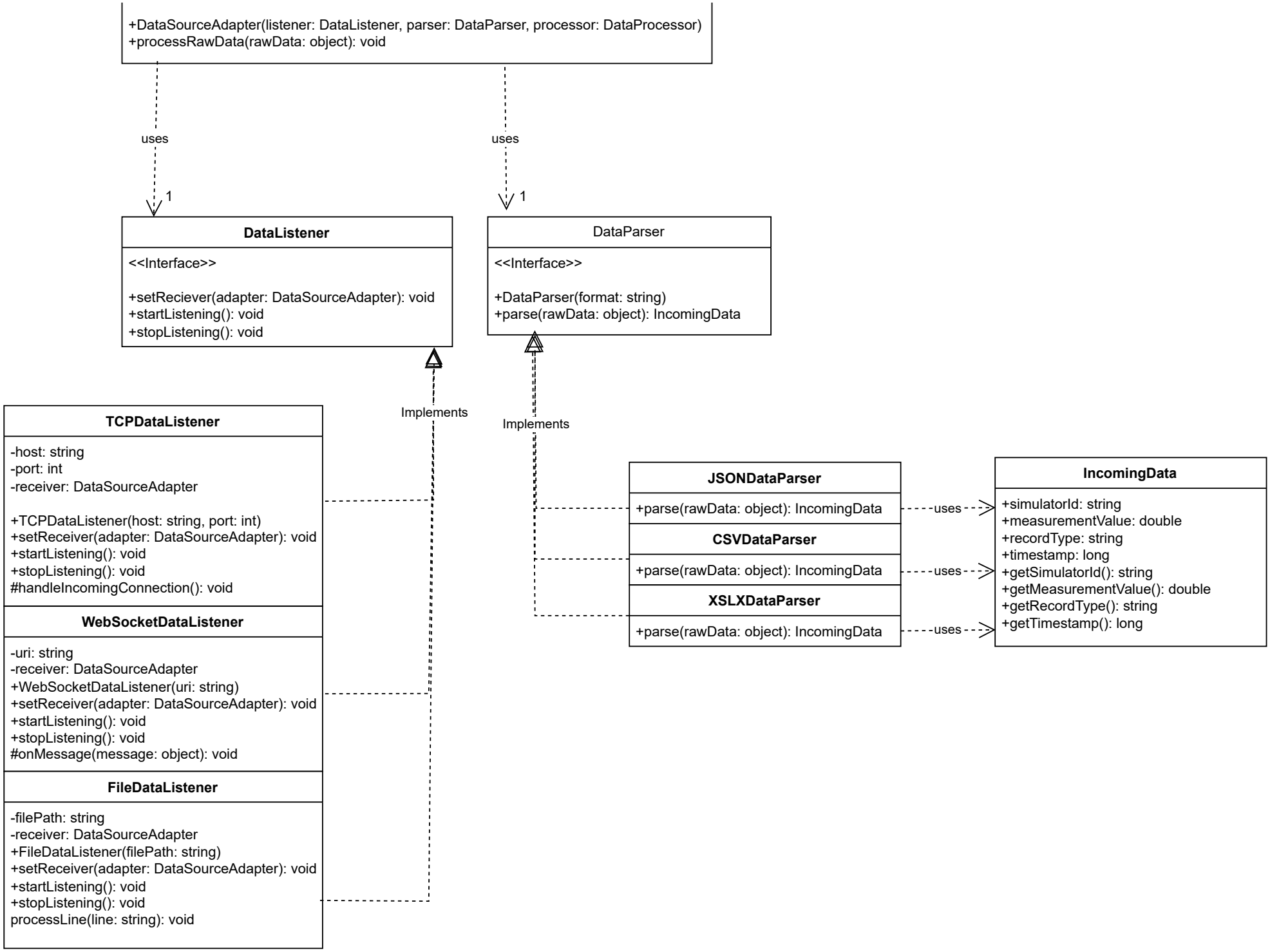

DataSourceAdapter
-listener: DataListener
-parser: DataParser
-processor: DataProcessor


+DataSourceAdapter(listener: DataListener, parser: DataParser, processor: DataProcessor)
+processRawData(rawData: object): void
uses
1
uses
1
DataListener
<<Interface>>
+setReciever(adapter: DataSourceAdapter): void
+startListening(): void
+stopListening(): void
DataParser
<<Interface>>
+DataParser(format: string)
+parse(rawData: object): IncomingData
Implements
Implements
TCPDataListener
-host: string
-port: int
-receiver: DataSourceAdapter
+TCPDataListener(host: string, port: int)
+setReceiver(adapter: DataSourceAdapter): void
+startListening(): void
+stopListening(): void
#handleIncomingConnection(): void
WebSocketDataListener
-uri: string
-receiver: DataSourceAdapter
+WebSocketDataListener(uri: string)
+setReceiver(adapter: DataSourceAdapter): void
+startListening(): void
+stopListening(): void
#onMessage(message: object): void
FileDataListener
-filePath: string
-receiver: DataSourceAdapter
+FileDataListener(filePath: string)
+setReceiver(adapter: DataSourceAdapter): void
+startListening(): void
+stopListening(): void
processLine(line: string): void
JSONDataParser
+parse(rawData: object): IncomingData
CSVDataParser
+parse(rawData: object): IncomingData
XSLXDataParser
+parse(rawData: object): IncomingData
uses
uses
uses
IncomingData
+simulatorId: string
+measurementValue: double
+recordType: string
+timestamp: long
+getSimulatorId(): string
+getMeasurementValue(): double
+getRecordType(): string
+getTimestamp(): long

Description:
This subsystem retrieves and parses external data. The DataSourceAdapter coordinates the process,
using a DataListener (configured via ListenerConfig) to receive raw data from sources like TCP, WebSocket, or files.
The adapter then instructs a DataParser (e.g., JSONDataParser, CSVDataParser) to convert this raw data into a standard IncomingData object, which holds structured measurement details.