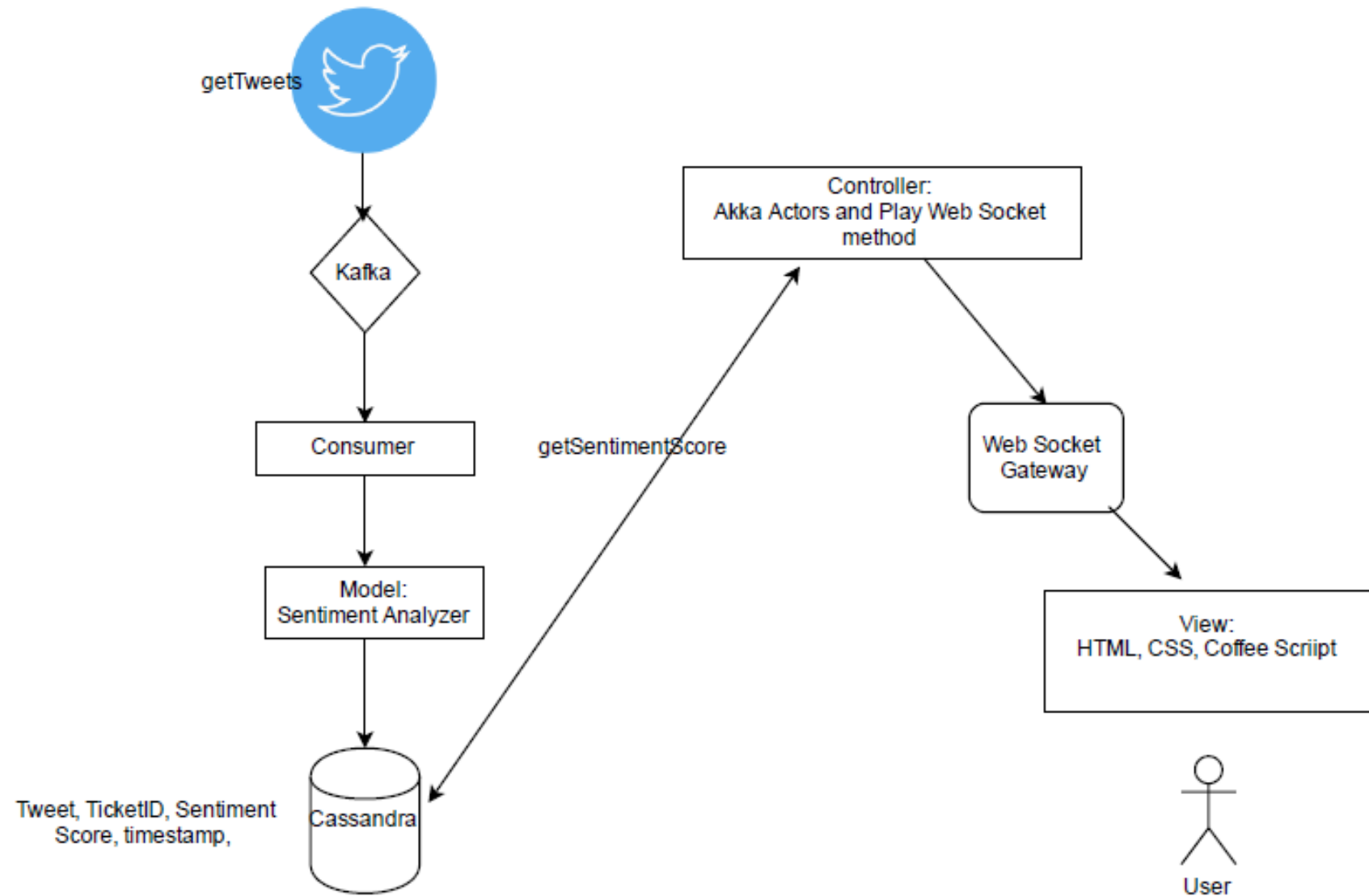




# REAL TIME MARKET SENTIMENT ANALYZER

Anup Rawka



Architecture Diagram

# Technologies Used:

## 1) Client Side:

HTML, Coffee Script, Web Sockets.

## 2) Server Side:

Scala, Akka (Makes the application reactive), Kafka, Play Framework (used to push data in real time from Server to client), Stanford Open NLP.

## 3) Data Storage:

Cassandra.

GitHub: <https://github.com/AnupRawka/MarketSentiments>



## Project Description:

- MARKET SENTIMENT ANALYZER- A real-time and historical sentiment analyzer service for Twitter Finance.
- (Technologies: Play Framework –Reactive Web application using Akka Actors, Kafka, Cassandra, Natural Language Processing, Scala, SBT, HTML5, JavaScript, CSS)
- The application analyzes real time relevant tweets for Major Stock Indices, Bonds, Commodities and Currencies and assigns a sentiment score using standard Stanford Core NLP library.
- Sentiments and corresponding tweets are sent to Kafka queue which are then sent to Cassandra.
- Akka actors are used to continuously get the sentiments from Cassandra.
- Play is used as the Web Application framework; it uses Akka Actors to communicate new Quotes to the client.



# Project Application:

- There are various factors that are currently used to predict financial forecasting like Technological Advances, State of Economy and Industry, etc.
- Market Sentiment Analyzer can provide real time sentiments analysis of twitter Users across the world and will provide one more factor for forecasting.
- Users sentiments can provide the idea about their expectations and speculations about particular stock/commodity.