



Black Swan Impact Predictor

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What is Black Swan

- Actual bird which is rare
- Term coined by Nassim Nicholas Taleb
- A metaphor that describes an event that comes as a surprise and has a major effect

Examples of Black Swan Events

- COVID 19: Recent BlackSwan event
- 2008 Housing Market crash
- 9/11 terrorist attacks





Objectives (Use cases)

- Predict a score for a particular news article and analyze its impact on the stock market.
- Help both the institutional and individual investors prepare in advance for future black swan events.
- Protect individual portfolio's from market crash by giving them a heads up about potential market swings based on global headlines.



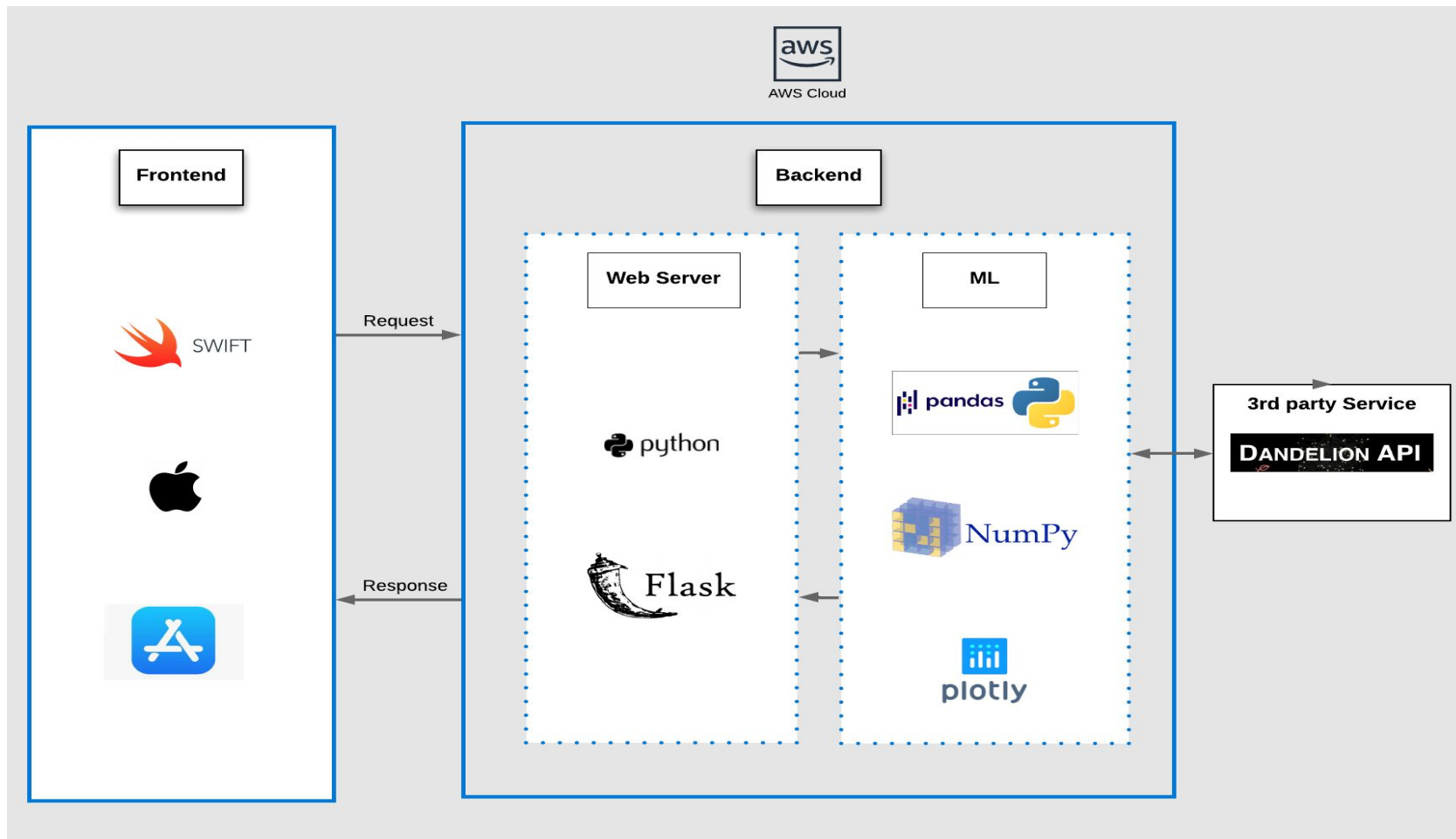
Persona

- Investment Bankers
- Institutional Investors
- Fund managers
- Individual Investors

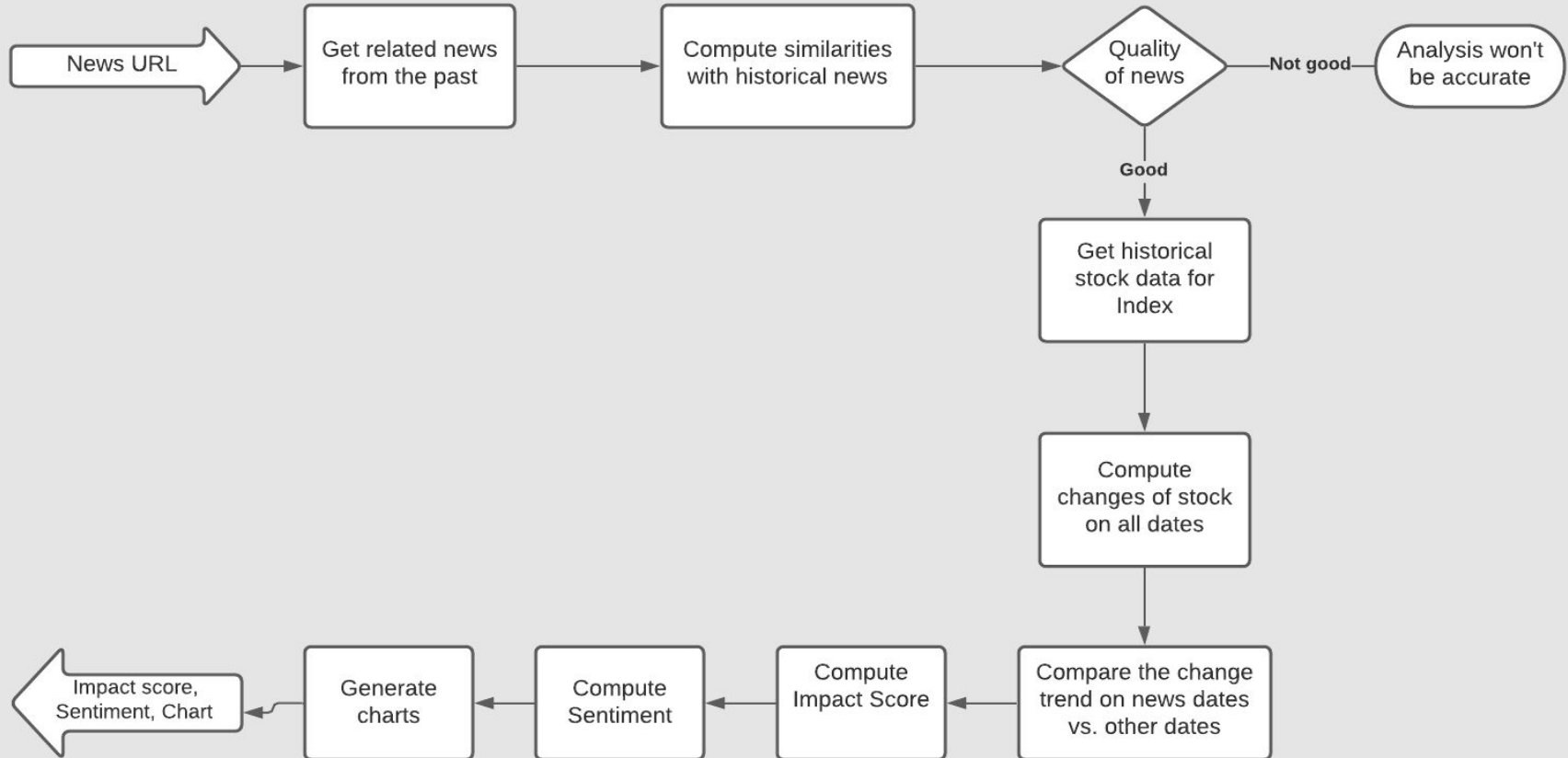


Demo

Architecture Diagram



ML Model Flow





Further improvements

- The news analysis service can be exposed as a public API (SaaS) to be used by multiple news portals.
- In the future, we can train the model with more data to increase the accuracy.
- Alert the users with a push notification so that action can be taken promptly.
- With the help of a large dataset, we can introduce automatic prediction function, which can help people broaden their vision and avoid market risks.



Conclusion

- Understand how news events have an impact on the stock market.
- Prepare investors protect their portfolio's against a black swan event
- Investors and hedge fund managers can use our app to analyze the stock market before investing.
- Investors can think about the results and understand why a particular Black Swan event had a positive or negative impact on the stock price



Thank you