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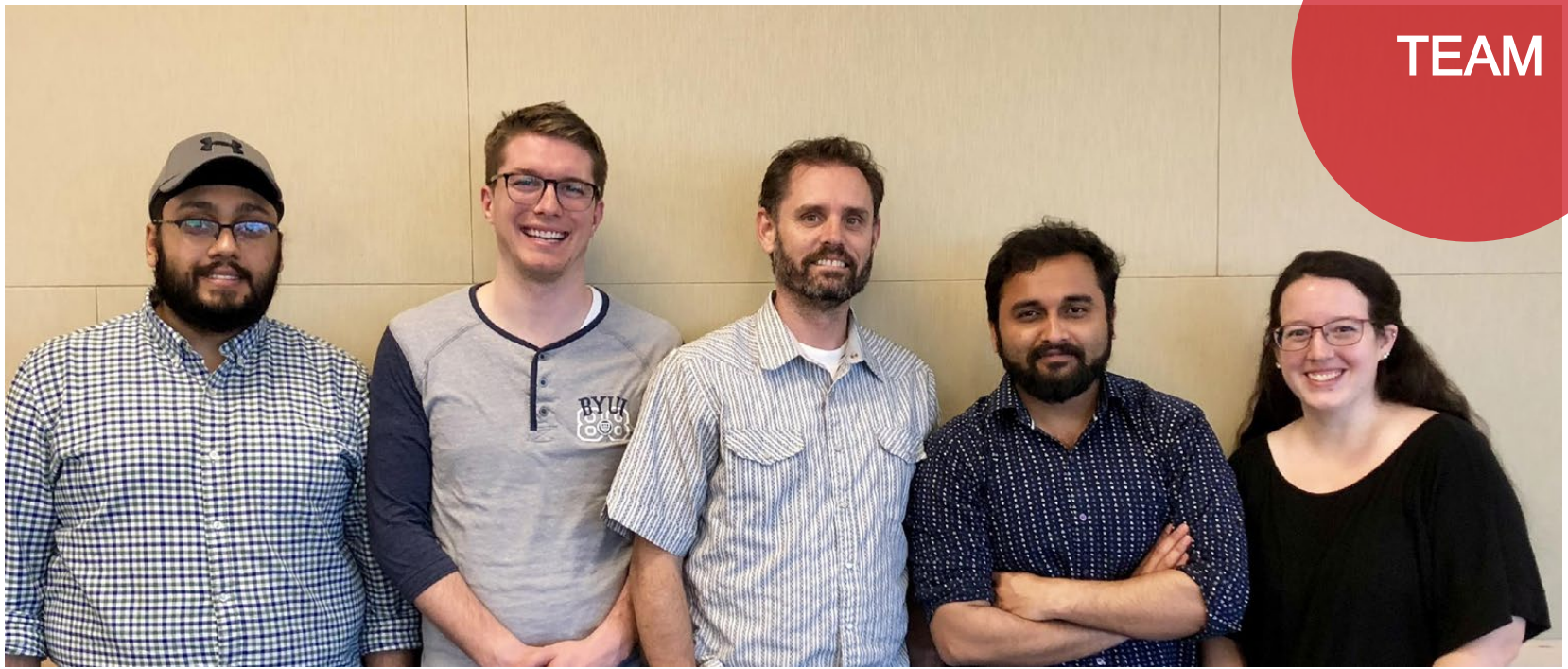
Social Media Sentiment Analysis

TEAM



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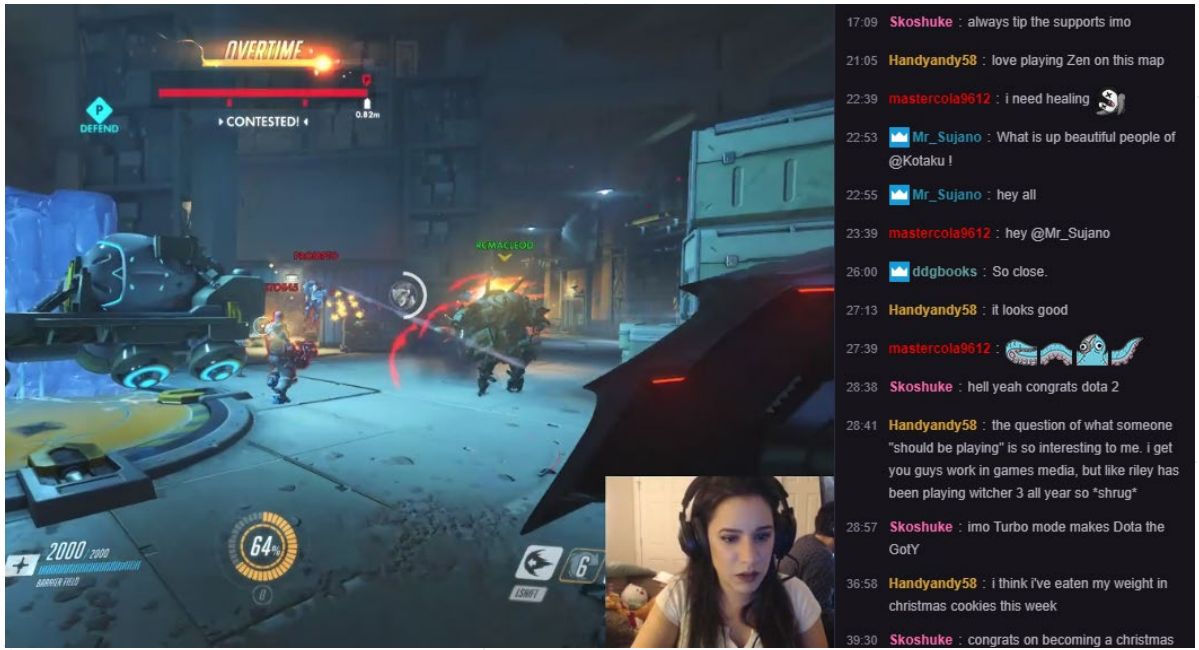
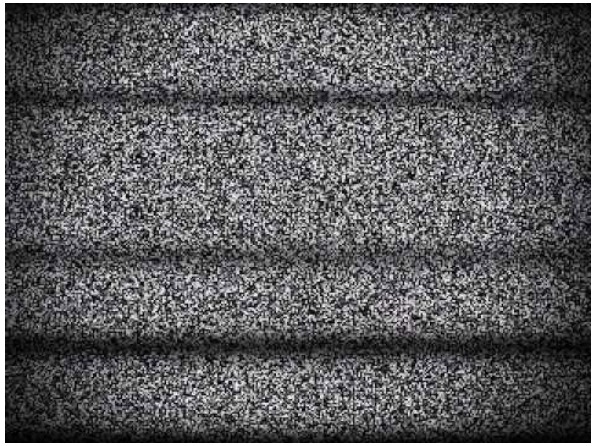
Twitch - a leading company in live video streaming



The Challenge



Streaming Outage

+

Angry Customers

The Challenge

Negative Social Media Sentiment

The Big Idea

Improve Twitch Operations Team response time to service downgrade/outages:

- Perform Analysis
- Identify relevant content
- Post alert to Twitch team via Slack

The Solution

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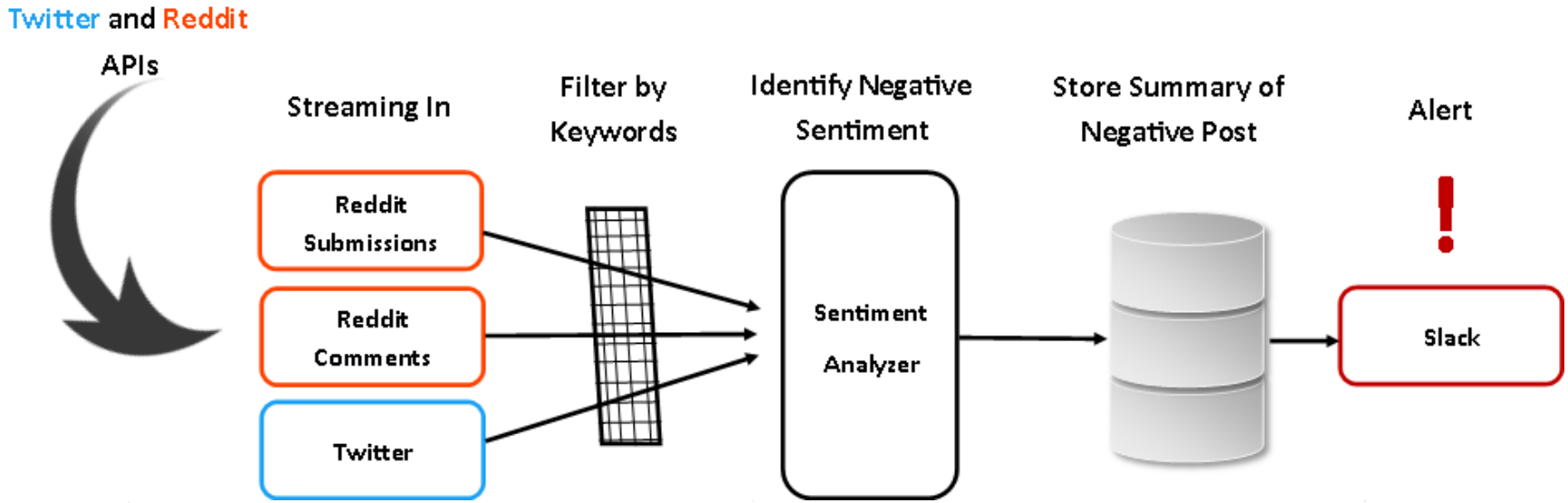
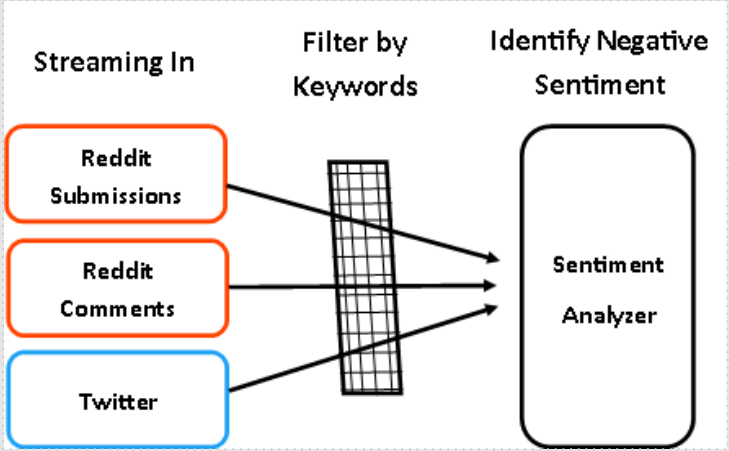
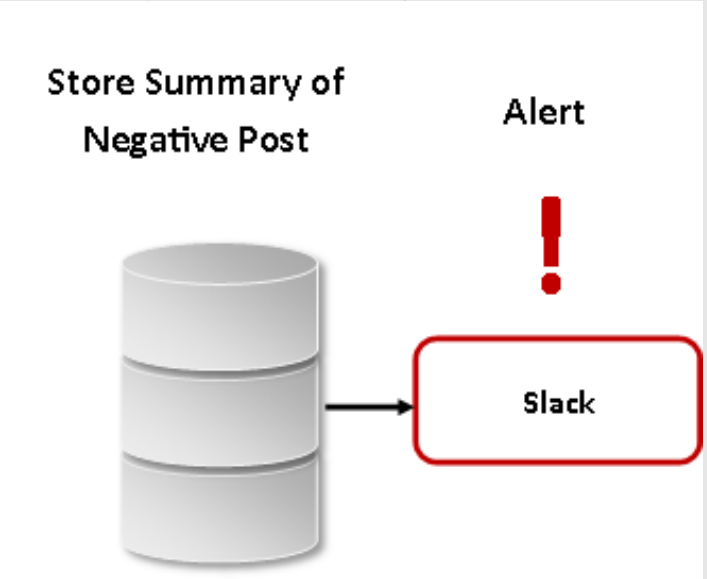


Data Manipulation and Score Assignment



- Data Manipulation to gather information from the unstructured data
- Filtering the extracted data
- Calculation of semantic similarities between previously recorded alerts and incoming posts
- Calculation of sentiment scores to remove posts with no complains in them

Pushing Alerts



- Storing what we have learnt about the data
- Creating a Notification Bot to handle complaints
- Bot gather opinions every 15 minutes every 5 minutes
- If threshold of 7 opinions is breached- Push an ALERT!!

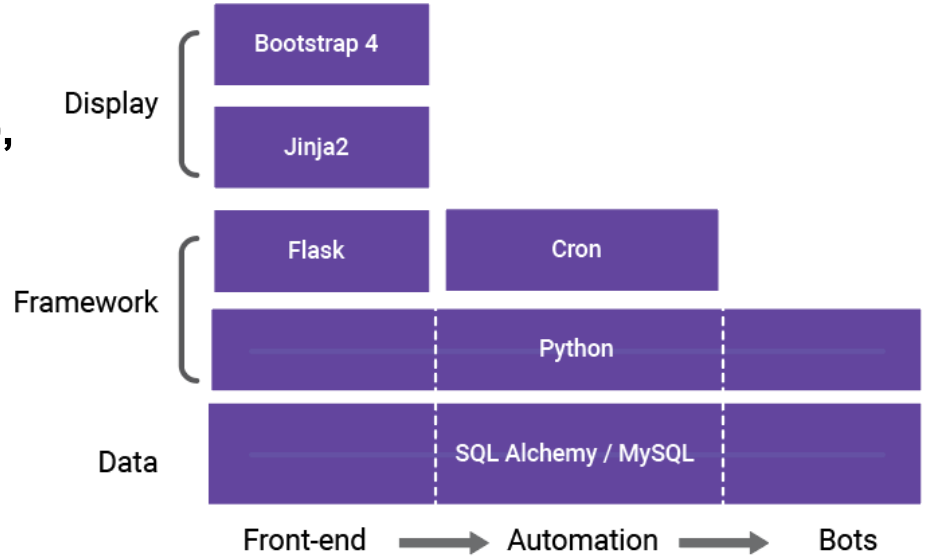
Environment

Server Technology Stack

- Linux on EC2, Apache (WSGI), Python, MySQL
- Google Charts

Automation

- Cron driven system
- Web front-end provides insight into bot processes



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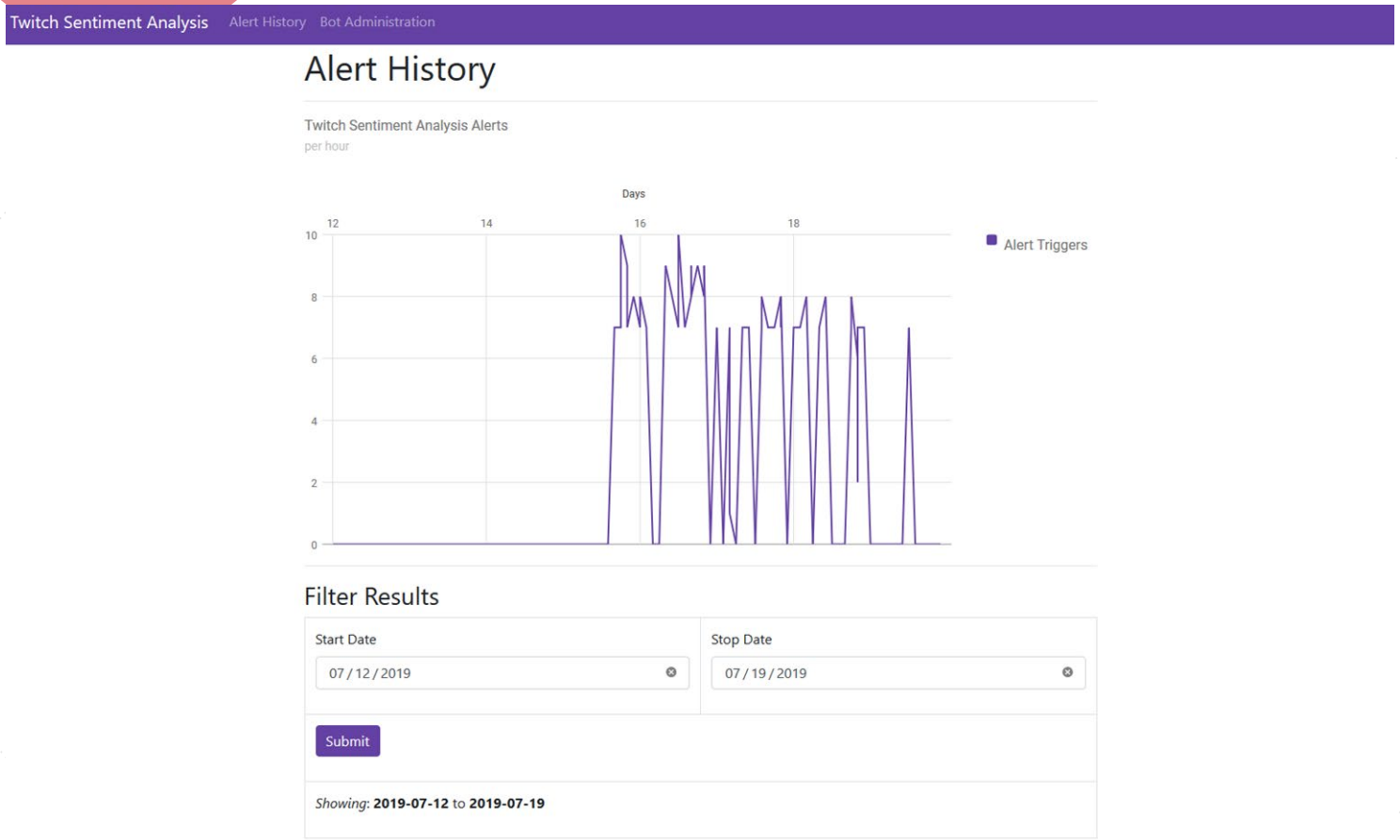
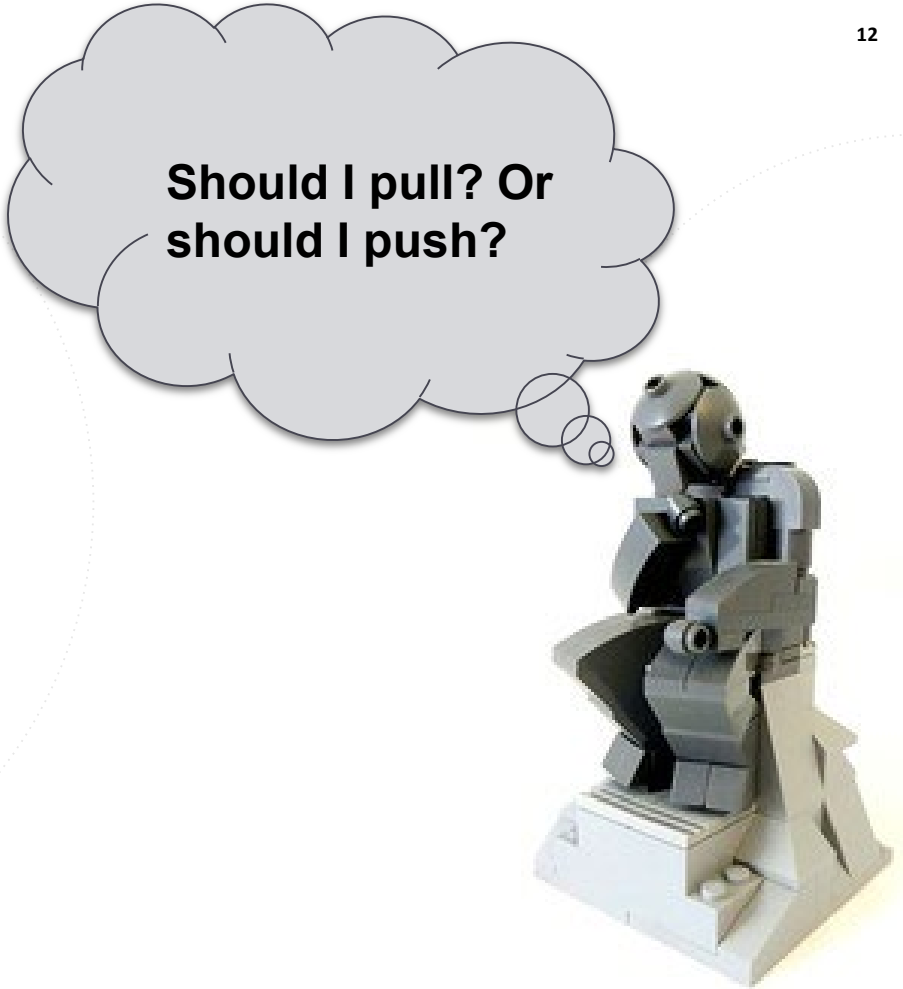


Challenges Along the Way

- API limitations
- Flask environment
- Cohesive team vision



Keeping It Simple

- Keywords are “tuneable”
- No black-box
- Over-alert
- The time loop which runs the Slack notifier can be adjusted as per requirements

Lessons Learned

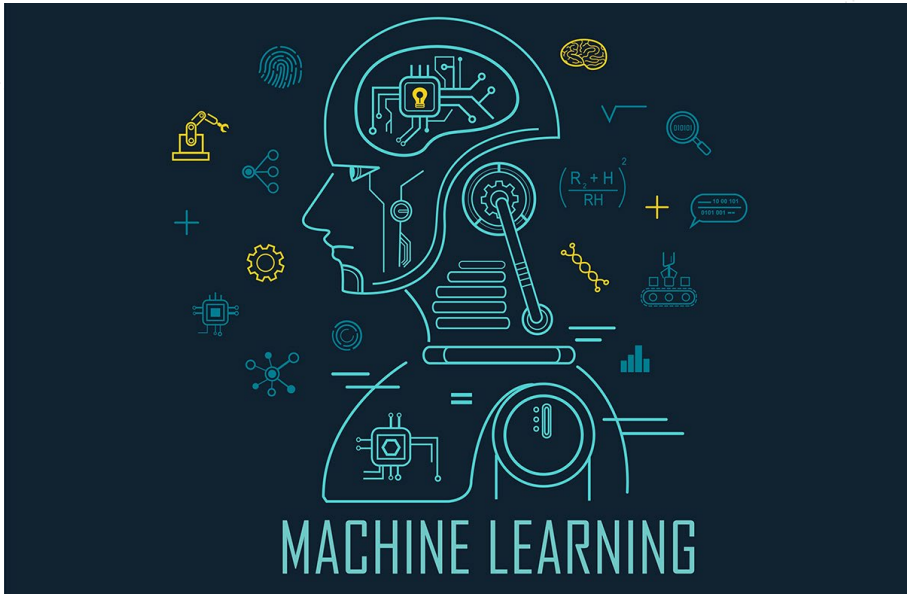
- Communicate effectively early
- Be careful what assumptions you make
- Personal task management

A great experience - everyone on the Team was challenged in new ways.

Next Steps

A foundation-based project:

- Building analyses
- Building machine learning
- Building reports/dashboards



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Questions