Software
Product Sprint

Team #87

Idea Analysis Portal

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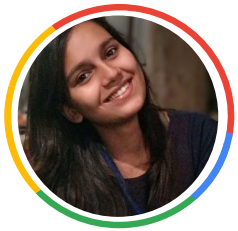
Product Sprint

Who We Are?

PA: Rahul Gurjar

Udbhav Chugh

Navya Srivastava



Sudhi Awasthi

Yashasvi Gour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6:01 PM
You
You
Udbhav Chugh
Rahul Gurjar
Navya Srivastava
Yashasvi Gour

GOAL

The aim of the project is to build a web portal to provide a platform for any organization’s employees to post any new product idea and get their peer’s reviews and detailed analysis using statistical and sentiment analysis techniques.

TECHNOLOGY STACK

1) **Frontend**: Using HTML and CSS. Javascript is used to interact with the backend to display fetched data.
2) **Database**: NoSQL (Firestore in Datastore Mode)
3) **Backend**: Java servlets are used to interact with the database for post and get queries.
4) The website is deployed and hosted using **AppEngine**.

DEMO

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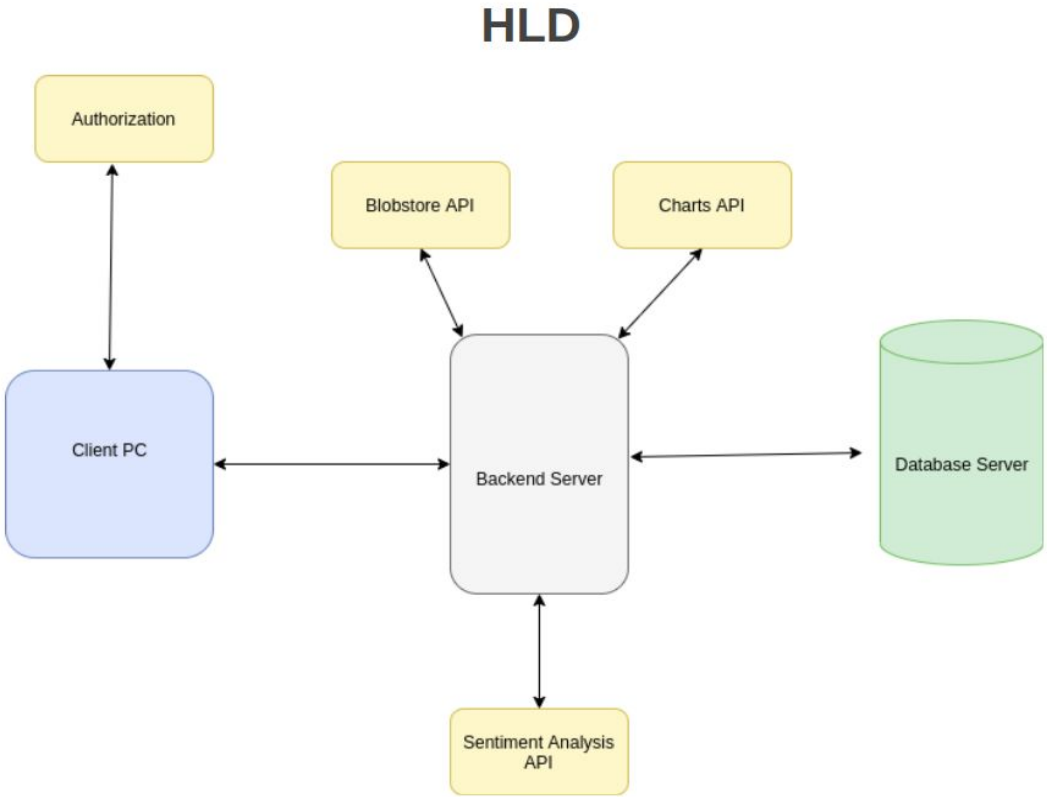
HIGH LEVEL DESIGN



PUBLIC APIs USED

(1) **Authentication**: Any user will be required to authenticate oneself using company email to use the portal.

(2) **Blobstore:** To store profile images of each user, image for each product.

(3) **Sentiment Analysis:** To find a score (between 0 and 10) depicting relative positive/negative sentiment associated with the comment.

(4) **Charts**: To show all the info about the idea in the form of charts. The data will be taken from the database and the Charts API will just convert the data into charts.

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STATS COMPUTATION

1.The **sentiment analysis** result is normalised to 10 and average sentiment score is stored. Pie chart is used to display percentage of users considering idea very poor, poor, average, good or very good.

2. Total **Upvotes and downvotes** are calculated when stats page is loaded for a particular product and are displayed on a pie chart.

3.For **age groups**, based on user responses, we display the percentage of suitable age groups on a pie chart.

4.We used **TF-IDF** to extract important keywords from suggestions like competitors information, etc. and display them along with the suggestions.

CHALLENGES

- For most of us, this was the first project in web development which made it challenging.
- Virtual Collaboration over a project was both challenging and fun.

LEARNINGS

- Fundamentals of interaction between client and server are much clear now.
- Collaborating in a team virtually was the most important learning for us.

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