Overview Team Idea

- **Problem :** As a youtuber what kind of videos do I want to produces?

- **Questions:** What does a successful video look like?
    - What is trending?
    - How many likes?
    - How many views?
    - What time period is this?

- **Solution:** Top 10 tags at a given timeframe determine popularity by views.
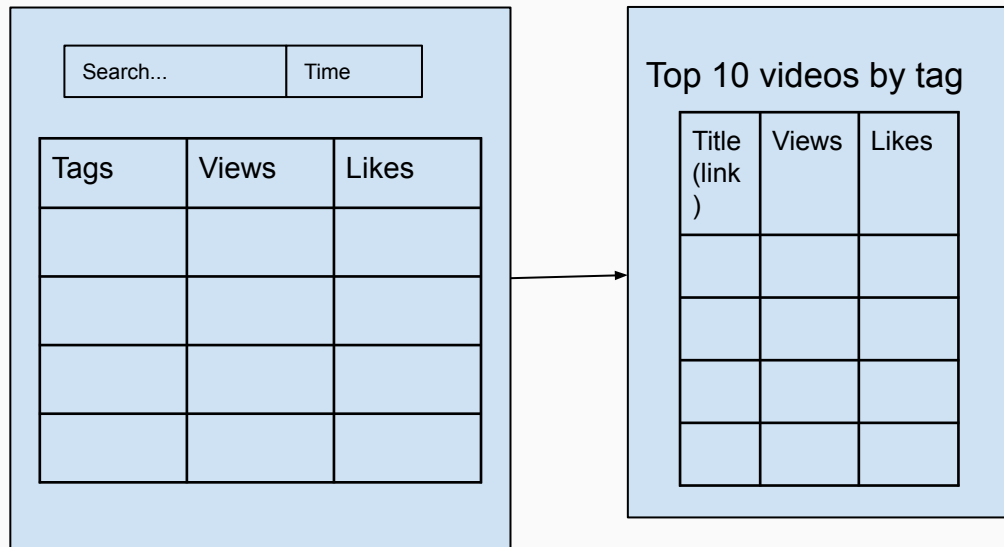
Story

- User uses application to get ideas for new video

- Top 10 trending tags

- Search to see if their idea for new video is trending recently (week, month)

Contribution: Planning

- **Planning:**
  - Start layout appearance of application
  - Top 10 tags by given timeframe (default week)
  - Search for tags by specific time frame show top 10 by views and likes

Search...	Time	

Tags	Views	Likes

Top 10 videos by tag

Title (link)	Views	Likes

Contribution: Backend Implementation

- **Backend**
  - Upload data into PostgreSQL
  - Setup connect Database/Server/Frontend
  - Setup Search tag API
  - Setup top 10 tags (videos)

```
const getAllTags = () => {

  const query = `SELECT tags,views,likes FROM youtube ORDER BY views DESC LIMIT 10`;
  console.log(query);
  return new Promise((resolve, reject) => {
    connection.query(query, (err, res) => {
      if (err) {
        console.log(err);
        return reject(err);
      }
      resolve(res.rows);
    });
  });
};

/*Allows user to search term and show top 10  */
const searchTag = (term) => {
  const query = `SELECT views,tags, likes FROM youtube WHERE tags LIKE '%${term}%'
  ORDER BY views,likes DESC LIMIT 10`;
  console.log(query);
  return new Promise((resolve, reject) => {
    connection.query(query, (err, res) => {
      if (err) {
        console.log(err);
        return reject(err);
      }
      console.log(res);
      resolve(res);
    });
  });
};
```

Contribution: Frontend Implementation

- **Frontend**
  - Takes top 10 videos and split tags to show total views and likes for each tag

```
componentDidMount() {
  axios.get('/api/tags').then((response) => {$
    this.processData(response.data);
  })
}


/*Return list of tags with view count and likes */
processData(data) {

  let tagsCount = {};

  for (let x = 0 ;x < data.length; x++) {

    let tags = data[x].tags.toLowerCase().split('|');
    for (let i = 0;  i < tags.length; i++) {
      let tag = tags[i];


      if (tagsCount[tag] === undefined) {
        tagsCount[tag]= {'views': data[x].views, 'likes': data[x].likes};

      } else {
        tagsCount[tag].views += data[x].views;
        tagsCount[tag].likes += data[x].likes;
      }
    }
  }
}
```

What's next?

1. **Understanding Data**
   a. These show top 200 per day
   b. What does it mean to be trending? (duration of tags, views)
   c. How long are the terms trending
2. **Data processing - accuracy of information**
   a. Category (comedy, nature, travel)
   b. Eliminating outliers
      i. Discovery channel, CNN