Team 26 Project Charter YouDash ©

Team Members:

Steven Schonlau, Jose Pagan, Sohaib Qureshi, Abdul Wajid Arikattayil

Problem Statement:

Our generation spends more time than ever on YouTube. While productivity can be gained from this, many spend their time watching what the algorithm recommends, without clear insight into their activity. Currently, YouTube has a financial incentive to provide videos that benefit its platform rather than the user's quality of life or goals. We aim to provide transparency along with tools to help users utilize YouTube in more productive ways.

Project Objectives:

- Create dashboard for users to view youtube usage analytics by category/type of video and time of day or day of week of view
- Provide Al generated recommendations to improve user productivity based on user data
- Obtain users YouTube viewing usage
- Obtain YouTube metadata for each video
- Enable individual user login to provide a personalized experience and each user account would be synchronized across different devices.
- Implement sharing feature of data/dashboard
- Users can set goals such as limiting watch time, watching certain ratios of categories, limiting categories, or limiting watching to certain times of the day
- Provide users' motivation to meet their goals through social means, game-ification, and reminders

Stakeholders:

- Users: Any Youtube user that wants to improve their productivity using their Youtube analytics.
- Developers: Abdul Wajid Arikattayil, Jose Pagan, Steven Schonlau, Sohaib Qureshi
- Project Managers: Steven Schonlau
- Project Coordinator: Robert Dickerson

Project Deliverables:

- Chrome extension

- This extension will obtain the user's YouTube viewing by recording the YouTube URL
- This extension will have login functionality to allow users to have a personalized and synced experience across multiple devices
- This extension will send the URL to the webapp's backend database via a user specific API key
- Will provide motivation to meet their viewing goal while watching YouTube

WebApp Dashboard Backend

- Will store user login and account information, their videos watched, and time of viewing to gain insights into their watch time
- Will store chat room discussion data including comments, up/down votes, user groups, messages, and timestamps (when the message is sent)
- Integrates with YoutubeData API to get video-specific metadata
- Will use OpenAl API to generate better recommendations based on data
- It will use the following technologies/frameworks:
 - Use Spring Boot
 - Hosting on AWS
 - OpenAl API
 - YouTube Data API v3
 - AWS Dynamodb

- WebApp Dashboard Frontend

- Use ReactJS
- Users will have a menu to define goals such as limiting watch time, watching certain ratios of categories, limiting categories, or limiting watching to certain times of the day
- Will provide users with YouTube analytics through visual graphics and tables.
- Users can look at public profiles and people they follow along with their analytics.
- They can also share their account via social media with a link and image of their progress
- In order to provide personalized and synchronized experience, this will provide login and sign up functionality
- To provide a smoother experience for users, we will have viewing settings (darkmode, font size, and username color/profile picture) and have accommodations for alternative screen sizes (ie phone, iPad)
- Make a leaderboard where users are ranked based off of their watch time to provide social incentives to reach goals. This resets at the end of the week.

- To provide a community to assist reaching goals, interest groups can be created that match users by categories
- Users will have the ability to comment, up/down vote comments, and tag timestamps in videos in order to enhance the community and social motivations
- A group moderator can add or delete people from groups
- Users can choose to block videos based on goals
- Game-ification of goals
- Users can be recommended to other users with similar interests and have the ability to connect with those individuals