

Team 26 Backlog - YouDash

Team: 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.

Background Info

Audience

- YouTube implements an algorithm designed to keep users more engaged with the platform, with the goal of increasing viewer interaction. Unfortunately, this approach often doesn't prioritize the mental well-being and time management of its audience. Instead of recommending videos that would be beneficial and informative, YouTube tends to suggest content that prolongs users' time on the platform. To address this issue, YouDash aims to cater to YouTube users who wish to break free from the cycle of endless video consumption. It would serve as a tool to help users take control of their viewing habits, encouraging mindfulness about what they watch and how they engage with content.

Relevant Products

- Our biggest competitor at the moment is YouTube itself, as there aren't many other applications addressing this issue. Clearly, YouTube's goals and YouDash's goal of increasing user engagement come from different moral standpoints. Additionally, we plan to draw inspiration from Reddit by creating a forum-style application where users who have watched similar videos can be grouped together and discuss them further.

Limitations

- YouTube: YouTube's primary goal is to maximize user engagement, often without considering the impact on users' quality of time and mental health. We tackle this by prioritizing the user's goals and intentions, tailoring our application to support their well-being and mindful content consumption.
- Reddit: Reddit allows users to post anything, resulting in a vast community with loosely connected subgroups. In contrast, our forum page will focus specifically on discussions about particular YouTube videos. By keeping the forum minimal and centered on specific content, we aim to build a community of individuals who share a deep interest in a subject, united by the commonality of having watched the same video.

Functional Requirements:

Chrome Extension:

1. As a user, I would like to be redirected to the YouDash website when I want to register for a YouDash account.
2. As a user, I would like to login into my YouDash account on the Chrome extension by being redirected to the YouDash website.
3. As a user, I would add or remove a category of videos from my blocked videos.
4. As a user, if I go to the blocked category of videos, it would redirect me to a screen reminding me to stay focused.
5. As a user, I would like the chrome extension to send my watch history to the YouDash backend.

Profile/Usage Features:

6. As a user, I want to have login functionality that is synchronized across devices.
7. As a user, I want to have signup functionality that is synchronized across devices.
8. As a user, I want to be logged into the chrome extension if I log into the website
9. As a user, I can set the goal of minimizing my watch time on youtube
10. As a user, I can set the goal of improving the quality of videos I watch (improve productivity)
11. As a user, I would like to be able to register for a YouDash account using an email and password.
12. As a user, I would like to be able to register for a YouDash account using Google.

- 13. As a user, I want to be able to change my profile settings of dark mode
- 14. As a user, I want to be able to change my profile settings of profile picture
- 15. As a user, I want the app to have responsive design.
- 16. As a user, I want the ability to change account settings of email
- 17. As a user, I want the ability to change account settings of bio
- 18. As a user, I want to be able to reset my password if needed.

Social Features:

- 19. As a user, I want to be able to view public profiles and analytics of people I follow to be able to compare my progress with others and gain inspiration.
- 20. As a user, I want to be able to share an image of my progress to my followers to celebrate the progress I've made.
- 21. As a user, I want to see weekly leaderboards of watch time per category of video so that I can be motivated socially to work towards my goals if they include watch time.
- 22. As a user, I want to see weekly leaderboards of goal progress so that I can be motivated socially to meet my goals.
- 23. As a user, I want to join a per interest group leaderboard
- 24. As a user, I want to join an overall leaderboard group.
- 25. As a user, I want to be able to join interest communities so that I can be socially motivated to meet my goals and interact with other users.
- 26. As a user, I want to be matched with interest communities that share interests in watch categories so that I can join these groups easier
- 27. As a user, I want to be matched with users that share interests in watch categories so that I can follow these people easier
- 28. As a group manager, I want to be able to create interest groups
- 29. As a group manager, I want to be able to invite users in order to moderate communities
- 30. As a group manager, I want to be able to kick users in order to moderate communities
- 31. As a group manager, I want to configure the group setting community name
- 32. As a group manager, I want to configure the group setting description
- 33. As a group manager, I want to configure the group setting picture
- 34. As a group manager, I want to be able to delete comments made on posts.
- 35. As a group manager, I want to be able to give announcements in order to moderate communities
- 36. As a user, I want to be able to view announcements of the groups I am in
- 37. As a user, I want to post videos in forums both in and out of communities in order to facilitate discussion

- 38. As a user, I want to post video timestamps in forums both in and out of communities in order to facilitate discussion
- 39. As a user, I want to post comments in forums both in and out of communities in order to facilitate discussion
- 40. As a user, I want to be able to up/down vote comments in order to facilitate discussion
- 41. As a user, I want to be able to up/down vote videos in order to facilitate discussion
- 42. As a user, I want to direct message another user
- 43. As a user, I want to be able to search messages and users to facilitate the community and social organization.
- 44. As a user, I want to have the option to reformat my messages using AI in order to communicate messages more clearly.
- 45. As a user, I want to be able to block someone's direct messages
- 46. As a user, I want to be able to follow someone
- 47. As a user, I want to be able to unfollow someone
- 48. As a user, I want to view a list of my followers
- 49. As a user I want to view a list of those I follow
- 50. As a user I want to be recommended users to follow based on my followers and followed users networks
- 51. As a user I want to be able to choose to create a public and private account

Analytics Features:

- 52. As a user, I want to be able to set goals like limiting my watch time, watching specific ratios of categories or restricting my watching to certain times of the day, in order to better manage my watching habits.
- 53. As a user, I want to be able to view my Youtube analytics with the help of visual graphics and tables so I can easily view my progress towards my set goals.
- 54. As a user I should be able to view my data daily/ weekly/ or annually using a heat map
- 55. As a user, I want to be able to see a month to month comparison of my watchtime, in order to see my progress over time.
- 56. As a user, I want to be able to view my progress towards my watchtime goals in a pie chart so that I can easily track the percentage of my progress.
- 57. As a user, I want my YouTube analytics to be viewed over multiple customizable time frames.
- 58. As a user, I want to see my goal progress through a customizable visual of a cactus growing to motivate meeting my goals.

- 59. As a user I want to be able to share my profile using the website link (to show my progress)
- 60. As a user I want to be able to share my profile by downloading an image of my progress.
- 61. As a user, I want to see AI recommendations on demand on how to meet my goals so that I can gain insights and motivation to meet my goals.
- 62. As a user, I want to be able to export my data and dashboard as a csv in order to have more portability
- 63. As a user, I want to be able to export my data and dashboard as a pdf in order to have more portability

Nonfunctional Requirements:

Architecture and Performance:

We're using React for the frontend of our web application, while Spring Boot handles the backend, managing HTTP protocols sent from the frontend. Although Spring Boot is a robust framework, which might seem excessive for a small-scale application, it offers the flexibility to scale with multiple developers in the future. Additionally, we plan to implement a secure login feature using a Google API to ensure user safety. We'll also utilize AWS tools such as DynamoDB for storing user information and EC2 for running the application. Once user data is stored in DynamoDB, a recommendation by Open-AI API will be generated on-demand of the user based on the click of a button..

Security:

The secure storage of users' credentials is a top priority as we'll store users' passwords into our database. We will salt/hash the passwords and then store it inside DynamoDB which is a trusted database. Users will only have access to their own data, with the option to share insights publicly, if they choose to do so. Permission settings will be clearly defined to maintain privacy.

Usability:

The UI should be easy to use and navigate for the users. The app will have smooth transitions between screens like logins and analytics charts to allow the best experience for the users. We will include customizable display options like dark mode, adjustable font sizes, and responsible design for optimal viewing across different devices.

Hosting/Deployment:

Hosting and deployment can be done on AWS EC2 instance. We would choose the t2.micro instance which is given on the AWS Free Tier will be able to cover all of the functionalities this project needs by balancing out the number of users entering the website and how fast the data is retrieved and added.

The free 1 year plan of AWS includes 25 GB on indexed data storage each month. Also, it has the ability to do 2.5 million read requests and 1 million write requests.