<div align="center">**Final Report**</div>

ProjectName : YoutubeTrends

Team name: Group 9

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Did you fulfill your value proposition? Explain.

Yes, we did.

At the very beginning of Milestone 1, we proposed to create a website that provide a service for a user to interact with raw data of YouTube Trend to help creators present more high-quality videos to the target user. And now, we have completed our original idea. Users who use our website can get the detailed data about the video directly by searching the title. Or searching the hottest videos based on the time. Users can interact with the data in our database and get the information they need and they want.

Creators can use our website and get a clear picture of what is the trend in current time. They can get the number of likes and dislikes of different videos. They can learn the preferences of people in different regions by searching for the number of views of videos in different regions, so as to make videos that are more popular with the public.

To sum up, whether from the user's point of view, or from the creator's point of view, we have fulfilled our value proposition.

List what you initially planned to deliver (as stated in Milestone 1), and compare to what you actually delivered.

Yes, we have almost accomplished all the features we originally envisioned.
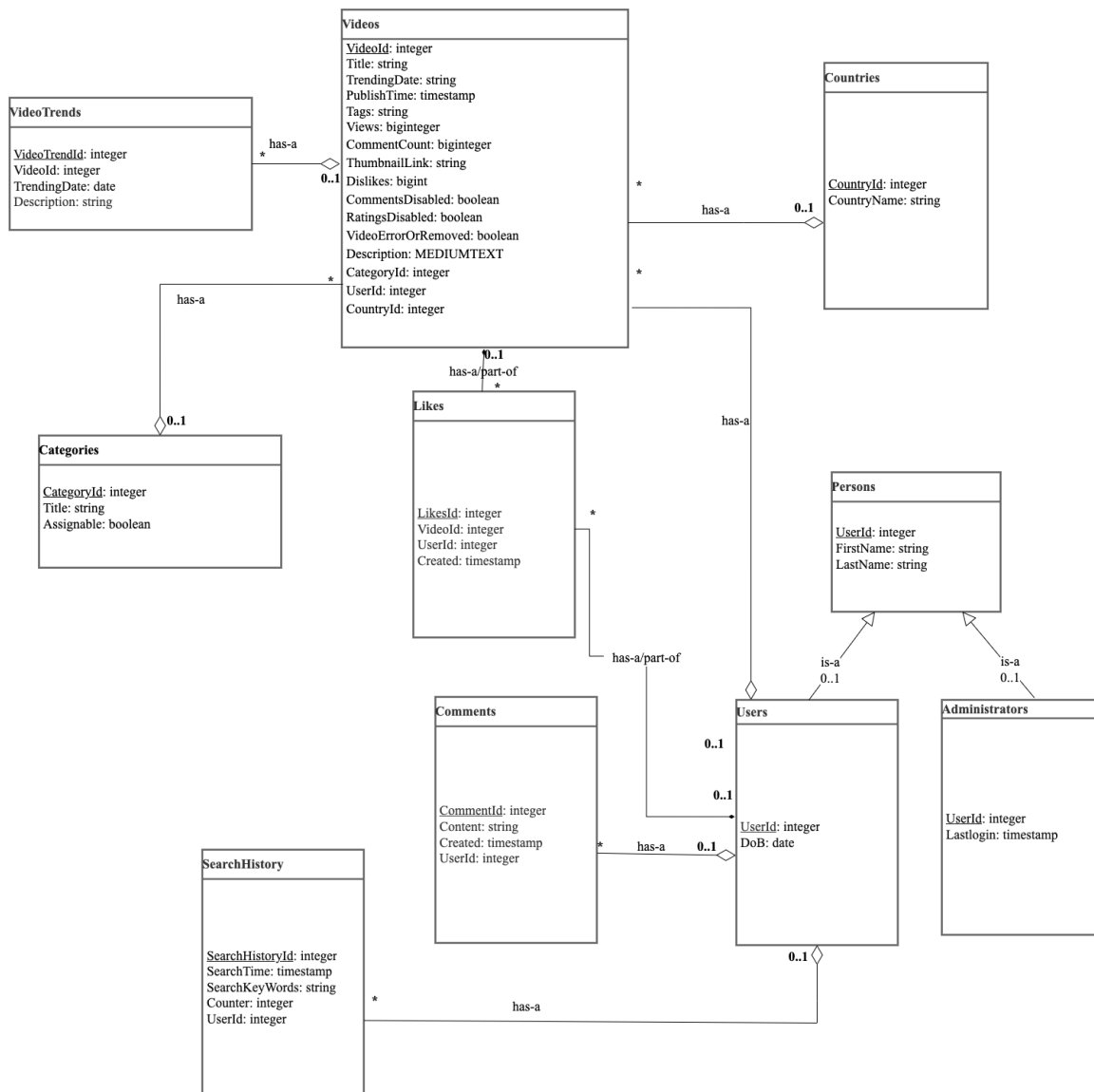
At the beginning, we planned to deliver four features which are find out the most popular videos based on a specific time; analyze the likes or dislikes ratio for specific videos/video topics; find the valuable/optimal advertisers time/topic for Companies to gain more targeted users; customize search conditions/scope to find the most effective result for users.

Currently we used JSP and bootstrap generate 9 pages. By using the pages, users can search for the videos which is hottest at the given time. They can get the number of likes and dislikes and analyze them. Creators can find the particular day which will attract more users to watch videos so that they can put advertisement at target time. Generally speaking, we completed the first three features which we wanted to deliver initially and might complete the fourth feature if possible in the future.

Your final UML. Include a description of what changed in your UML (including which milestone did you make changes and why).

They are the same. We didn't change our UML.

The UML is as below.

VideoTrends

VideoTrendId: integer
VideoId: integer
TrendingDate: date
Description: string

Videos

VideoId: integer
Title: string
TrendingDate: string
PublishTime: timestamp
Tags: string
Views: biginteger
CommentCount: biginteger
ThumbnailLink: string
Dislikes: bigint
CommentsDisabled: boolean
RatingsDisabled: boolean
VideoErrorOrRemoved: boolean
Description: MEDIUMTEXT
CategoryId: integer
UserId: integer
CountryId: integer

Countries

CountryId: integer
CountryName: string

Categories

CategoryId: integer
Title: string
Assignable: boolean

Likes

LikesId: integer
VideoId: integer
UserId: integer
Created: timestamp

Persons

UserId: integer
FirstName: string
LastName: string

Comments

CommentId: integer
Content: string
Created: timestamp
UserId: integer

Users

UserId: integer
DoB: date

Administrators

UserId: integer
Lastlogin: timestamp

SearchHistory

SearchHistoryId: integer
SearchTime: timestamp
SearchKeyWords: string
Counter: integer
UserId: integer

has-a • • 0..1 • has-a 0..1 • has-a/part-of • has-a • is-a 0..1 • is-a 0..1 • 0..1 • has-a 0..1 • has-a

What went well?

Our communication throughout the process was relatively smooth. In most cases, everyone can complete their corresponding part of the task in time. What we do especially well is that some students have sufficient experience and some students are relatively immature, but the experienced students selflessly helped newbies, so as to ensure the smooth progress of the whole project.

What were the biggest challenges?

The biggest challenges is when we merge the work that we did separately. Due to differences in everyone's environment configuration, variable settings, programming habits and many other factors, we met many bugs when merging our work.

What would you do differently?

We think there are a few things we need to improve. Firstly, it would be better and more efficient if we could make uniform at the beginning before every one did their job. For example we could make our variable names uniform before we broke down our tasks and delegated among member. What's more, we could merge in advance. Therefore, we could have more time to figure out the bugs.

What do you plan to do next?

In the future, we plan to :customized search and personal recommendation.

1.The search results are customized based on profile information.

2.Provide personal youtube trends based on profile information, published channels and search history.