

WEBGIST

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I. ABSTRACT

Growth of internet touched upon every sphere of life. There is some evidence that online videos are increasingly used by people for informal scholarly communication and teaching. According to one study students can learn more fastly and effectively using videos but now a days videos are used as a tool to advertise and promote the Business so, it is difficult to find most relevant and useful video content. People tend to choose the top ranked and the most viewed videos irrespective of their relevance.

To provide students most relevant and useful content free of cost we choosed the 2nd most visited application on internet which is YouTube. According to one survey YouTube uploads 5000 hr duration videos pern minute. With respect to time this number is increasing constantly so peoples are facing problems regarding finding useful video contents. WebGist enable users to take advantage of constantly growing video resources like, for example, video on demand, Internet television and YouTube, for a wide variety of applications including entertainment, education and communications.

Keywords— *WebGist, Youtube API, Video Search Engine, Online Learning, Gist,API.*

II. INTRODUCTION

There has been tremendous growth in online learning because whole world is going online also due to pandemic COVID-19. Publishing a video on the internet is the cheapest source of advertisement as compared to conventional TV advertising campaign. Therefore, many commercial organisations are emerging with their channels on video search websites where they publish and earn money though the traffic fetched by the video, also it is easy for them to link it with company's main website & other social media. By using WebGist we have an option of watching different videos and whatever we choose to watch fetches suggestions for other related videos. Many believe that delivering lot of related videos will result in top ranking, but it is true only if the content is purely excellent, it will get views by people and thus reinforcing the prominence of the content. The videos that are ranked at top in search results do not only rely on the content but also on content delivery's right format.

Though creating great content to attract the traffic to your video is the key to get high rank, but if the objective is to increase the number of views then the content must be helpful to the user, informative, shareable and powerful. There are

different criteria on which WebGist searches the video, although these criteria are specific to the WebGist provider but there are some basic criteria which are common to all search engines.

III. PROPOSED MODEL

When we are in 3rd Year of engineering suddenly due to covid 19 lockdown is happened and all tuition, classes are suspended. Everything Shut down including colleges and private classes. This was big loss of students. Then virtual training concept introduces largely in whole world. But as this pandemic hit suddenly it was really tough job for students to search good institutes who can able to give best virtual training to students. As a student we also did lot of struggle to find good programming courses in pandemic. As things are changes quickly virtual training is get essential for learning. So we decided to make a web application which gives students or which shows students courses or any classes that they want to learn and that available on youtube.

Why only youtube?

According one survey youtube is 2nd most visited site on internet. On youtube every minute 500 hours data or videos are uploaded and it contain variety of contents. We knows that all students cannot afford fees of classes whatever it online or offline, so in youtube there are many courses related to any side are available and all the courses are free of cost. Also we don't want to promote any other online tutorial platforms so we decided to gives best courses of any stream that student wants and that too free of cost. It will surely helps to that students who want's to learn online but unable to pay fees. WebGist will give best tutorials that available on youtube.

There are some search engines to find most relevant content in video. But in WebGist we are using Youtube API which provide us access to video statics and youtube channel data. Its working is easy to understand the working of WebGist.

When we get the idea we searched for related sites but their are very few and with some lack of technologies so we finally decide that we are going to add Youtube API in our project. Then we started implementing the idea. Now the task is to choose best technologies, languages and libraries. So, by considering our requirements and latest trends we sort listed our requirements.

1) Python :- Python is a popular general-purpose programming language that can be used for a wide variety of applications. It includes high-level data structures, dynamic typing, dynamic binding, and many more features that make it

as useful for complex application development as it is for scripting or "glue code" that connects components together. It can also be extended to make system calls to almost all operating systems and to run code written in C or C++. Due to its ubiquity and ability to run on nearly every system architecture, Python is a universal language found in a variety of different applications. Currently python is most popular and widely used language due to its healthy, active and supportive community.

2) Flask :-Flask is a web framework written in Python. It is classified as a micro framework because it doesn't include an ORM(Object Rational Manager) or any such features. When developers developing web application it gives developer varieties of choices, provides you with tools, libraries and mechanics.It provides simplicity, flexibility and fine grained control when ever your developing any web application.

3) JSON :- JSON stands for JavaScript Object Notation.JSON is commonly used to transmitting data in web applications (e.g. sending some data from the server to the client, so it can be displayed on a web page and also vice versa). Mostly it is used to provide public data in web services and APIs. Due to its more lightweight and other features it becomes popular alternative of XML.

4) Jinja Templating :- Jinja template contains variables and/or expressions, which get replaced with values when a template was rendered.It is a text-based template language and thus can be used to generate any markup and source code.We generally use jinja templating to reduce length and complexity of code also as loop in markup text.

5) HTML :- The HyperText Markup Language is the standard markup language for documents designed as web application or to be displayed in a web browser. HTML is most popular markup language all over the world. We are using it for front end of our project due to its simplicity and understandable syntax.It can be assisted by technologies like CSS and scripting languages like JS and much more.

6) CSS :- CSS stands for Cascading Style Sheet. It is a style sheet language mostly used for describing the presentation of a document written in a markup language.

When we search for the query in WebGist it simply takes request from client and send it to youtube servers using JSON and youtube API. In Youtube servers it searches for related videos on youtube. Then it sort result using its views and likes, arranges result in order such that most relevant videos to query shows first.

It arrange video by using views, like and comment given by viewers on that video.

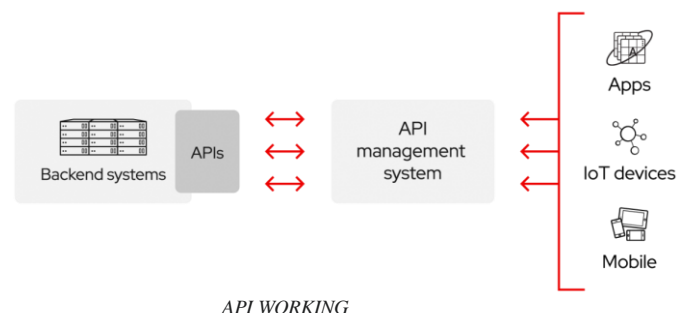


Working of WebGist

IV. YOUTUBE API

1) API:-

API stands for Application Programming Interface.If you've ever wondered how the modern digital experience got so interconnected and convenient, the answer is **APIs**. In simple words API is a software intermediary that allows two applications to speak with each other. It is an information gateway that allows the back ends of software and services to communicate with one another.



API WORKING

The YouTube Application Programming Interface allows developers to access video statistics and youtube channel data of youtube via two types of calls, REST and XML-RPC. The YouTube Data API v3 lets developer incorporate YouTube functionality into their application/software. You can use the API to fetch search results and to retrieve, insert, update, and delete resources like videos or playlists on youtube.In conjunction with the YouTube Player APIs and the YouTube Analytics API, the API lets your application provide a full-fledged YouTube experience that includes search and discovery, content creation, video playback, account management, and viewer statistics.

The APIs has since extended and are now compatible with many mobile operating platforms like Android and iOS. It is obvious that the Android API's are more complete with the iOS resources somewhat lacking. A list of this API's available for both platforms are below:

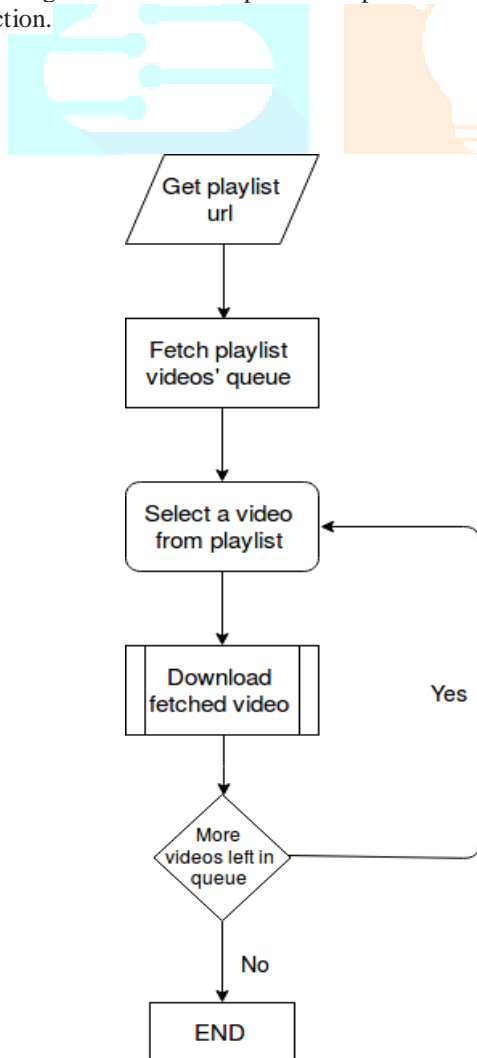
Other YouTube API's (the traditional API's) include:

1)YouTube Data API:

YouTube data API(v3) allows developers incorporate YouTube functionality into their application.This API is used to fetch results and to retrieve, insert, update and delete videos or playlists of YouTube.

2)Reporting and Analytics API's:

The YouTube Analytics and Reporting allow developer retrieve analytics data to automate complex reporting task, build custom dashboards,etc. YouTube Reporting API supports applications that can retrieve and store bulk reports, then provide tools to filter, sort, and mine the data.The YouTube Analytics API supports targeted, real-time queries to generate custom reports in response to user interaction.



Youtube API working

V. ADVANTAGES

- In virtual world this is best platform for students, not only for students it is best for all self learners and interested people, who want to learn something.
- In low cost as compare to institutions students can learn various courses.

VI. DISADVANTAGE

- If student have any doubts in course it is difficult to solve their problems as compare to coaching in institutions.
- It is necessary for users to have good network.

VII. CONCLUSIONS

For learners who want to learn something from home during free time In low cost this web application is perfect for them. In today's virtual world this is one of the best platform for Students to learn various courses. It also help them to watch most relevant content and save their time.

LEARNERS CAN LEARN FORM ANYWHERE, AT ANYTIME FREE OF COST.

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