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STUDYTUBE

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Abstract: - YouTube is often used for learning and reference for knowledge, but it can be distracting due to clickbait videos that YouTube offers as suggestions. Students love using YouTube for learning. YouTube is easy to use, free, and a language platform for preparation and knowledge acquisition, but various elements such as advertisements and other suggestion videos are a constant distraction. YouTube often displays videos such as music and entertainment on the side while browsing academic videos. This can be a distraction as students tend to click. It's also a problem that there are no filters to classify videos/links by subject or research area. YouTube is given a direct incentive to generate as many views and ad clicks as possible. The result is a flood of delicious thumbnails and ads from every angle. It may be good for people who want to kill time, but it is not so suitable for those who want to concentrate on acquiring knowledge. Solve the distraction problem by filtering content from YouTube and putting all filtered content in one place. Ensure that users can easily access videos and are not distracted by other videos focused on music, entertainment, etc. You can use YouTube's Data API to exclude YouTube videos. You can use the YouTube Data API to add various YouTube features to your application. The YouTube Data API can be integrated into Android applications using libraries such as Retrofit and Volley. Users can view all educational related videos through the app itself.

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1. Introduction

The advent of technology and the proliferation of the internet have transformed the landscape of education, enabling new possibilities for learning and knowledge dissemination. Online learning platforms have emerged as a key player in this transformation, offering accessible and convenient educational resources to a wide range of learners. StudyTube is one such online learning platform that aims to revolutionize the way people learn and acquire knowledge. StudyTube provides a comprehensive and interactive learning experience, offering a diverse range of educational content in various subjects and disciplines. Through a combination of video lectures, tutorials, quizzes, and interactive exercises, StudyTube aims to make learning engaging, effective, and personalized. Learners can access the platform from anywhere and at any time, allowing them to learn at their own pace and convenience.

One of the key features of StudyTube is its extensive library of educational videos. These videos cover a wide range of topics, presented by knowledgeable and experienced educators. Whether it's mathematics, science, languages, humanities, or professional skills, StudyTube offers a vast collection of video lectures that cater to learners of different levels and interests. The videos are designed to be engaging and easy to follow, enhancing the

learning experience and promoting better understanding of the subject matter.

In addition to video lectures, StudyTube offers interactive exercises and quizzes that help learners assess their understanding and reinforce their knowledge. These exercises are designed to be interactive and provide immediate feedback, allowing learners to track their progress and identify areas for improvement. Furthermore, StudyTube provides personalized recommendations based on learners' performance and preferences, guiding them towards relevant content and optimizing their learning journey.

StudyTube also fosters a sense of community and collaboration among learners. Through discussion forums, learners can interact with peers, ask questions, share insights, and participate in collaborative learning activities. This social aspect of StudyTube enhances the learning experience by providing opportunities for peer-to-peer learning, knowledge exchange, and support.

In conclusion, StudyTube is a powerful online learning platform that empowers learners with accessible, engaging, and personalized educational resources. By leveraging technology and interactive features, StudyTube aims to transform traditional learning methods and make education more inclusive and effective. With its extensive library of video lectures, interactive exercises, personalized recommendations, and community engagement, StudyTube is poised to revolutionize the way people learn, empowering learners to acquire knowledge and skills in a flexible and interactive manner.

2. Literature Review

[1] Choosing YouTube Videos for Self-Directed Learning, 2022, Mohamed, F., &Shoufan, A. A key resource for independent learning is YouTube. University students can easily choose from the top results if they want to use YouTube for self-directed learning. There is no obvious downside to doing this. Students need to exercise caution when using YouTube for conceptual learning. They should use a variety of strategies, such as watching numerous videos, picking videos with higher viewer ratings, or watching videos with relevant procedural expertise, to aid in the learning of new concepts.

[2] The impact of YouTube videos on the student's learning, 2012, Chtouki, Y., Harroud, H., Khalidi, M., & Bennani, S.The quality of students' education is significantly influenced by how well they learn. One way to do that is to make the information as understandable and transparent as you can. Databases, operating systems, networking, and the internal hardware of computers are just a few of the complex computer concepts that these programmers are made to cover. connectivity, collaboration, connections, communication, network management, information exchange, communications, information sharing, sharing, collaborations, resource sharing, relationship building, mentoring, network security, messaging, conferencing, media, marketing, hosting, groupware, cloud computing, information management, This paper presents the results of a study on the use of YouTube videos to enhance student learning. The study's findings demonstrated that when exposed to a visual explanation video, students are much more likely to comprehend and retain difficult concepts.

[3] Learning from YouTube Videos using Drona Extension, 2021, Chidambaranathan, A., Krishnamoorthy, H., Chandu, C. N. S. P. M., Khandelwal, S., &Harikumar, The ICCCNT, or International Conference on Computing, Communication, and Networking Technologies The use of online learning resources has skyrocketed since the COVID-19 pandemic broke out. These online resources include instructional movies, which are a vital component and a huge help to students. The main objective of this work is to develop a smart Chrome browser extension that pulls quizzes and intelligent notes from tutorial YouTube videos. The extension is useful for anyone who learns from YouTube because it provides a dynamic environment for comprehension and self-evaluation. dynamic world challenging environment dynamic challenging system dynamic system surroundings microenvironment atmosphere visual interface continuous change circumstances fluid system unique environment competitive market landscape high level of complexity environments creative environment climate environment new challenges challenging job multicultural environment architecture structure static system challenge new challenge learning culture market environment conducive environment favourable environment structured environment destructible environment internal environment.

[4] Making Kids Learning Joyful using Artistic Style Transferred YouTube VCs, 2020, Kumar, S., & Chauhan, A., TENCON conference This paper proposes a novel method for choosing educational video clips (VCs) for young students. It satisfies the needs of working parents who can't adequately tutor their children. Since parents must choose their children's educational materials because they are unable to choose the suggested VCs on their own, the suggested system gives parents a thorough description of the suggested VCs.

[5] Recommendation of YouTube Videos, 2012, Brbić, M., Rožić, E., &Žarko, I. P. 35th International Convention, MIPRO The difficult problem of recommending YouTube videos to a single user cannot be solved by merely reusing the current recommendation techniques. The study outlines particular YouTube recommendation system that makes use of data gathered by the YouTube Data API. suggestion advice referral recommender systems recommender system proposal guideline review feedback rating assessment decision support prediction evaluation general advice classification search application classification content - based content - based filtering A cloud-based application with a web

interface for users incorporates the suggested algorithm. The paper offers an initial analysis of recommendation quality and highlights limitations of the YouTube Data API that have an impact on the development of recommender systems for YouTube videos.

[6] YouTube Data Collection Using Parallel Processing, 2020, Kready, J., Shimray, S.A., Hussain, M.N. and Agarwal, N 2020 YouTube, one of the most popular social media platforms, has a Data API that enables data collection on YouTube channels and videos for use in these studies. Currently, YouTube Data API requests are processed using time-consuming sequential methods. Presently, As of now, Nowadays, Now, Reportedly, Time of writing, For now, Today . in fact, Now also, Now in, Officially, Effectively, Today, Essentially, Generally, As yet, Till now, Commonly, Typically, Available today, Actually, Technically, Clearly, Supposedly, Globally, So far, Predominantly, Primarily, Basically, In this study, we developed a solution to handle YouTube Data API requests concurrently by utilizing Python's multiprocessing capabilities. Our tests show that multiprocessing boosts performance by 400%.

[7]YouTube informed 2018 Individualized Ranking System for ICT Education International Conference on Information and Communication Technology Convergence (ICTC), Lee, J., and Oh, H. Thanks to social media websites like Facebook, Twitter, and YouTube, a variety of other bit data formats are rapidly growing in popularity. A well-liked new development in the educational field is computational thinking software that supports STEAM (Science, Technology, Engineering, Arts, and Mathematics). In this paper, they present a customized YouTube-aware recommender system for future ICT education. U tube Google video Vimeo Video sharing Dailymotion To rank popular YouTube channels and videos automatically, this method makes use of the personalized learning subject. They did this by utilizing the R programming language along with the other tools, ggplot2, stringer, and the Selector Gadget Chrome plugin for direct data crawling.

[8] A YouTube channel and Open-Source Website for Embedded Systems Education, 2021, Deepan Lobo, Chris Berry, Vaishali Parikh, William Fligor, and William McIntyre, as well as Pramod Abichandani Conference on Education's Frontiers (FIE) for EEE The audiovisual materials (MATLAB and Arduino) produced as a result of this teaching project are described in detail in this document. In order to learn more about the demographics of the audience and how they interact with the videos, the YouTube channel's viewership data is examined. The viewer-posted comments on YouTube are qualitatively analyzed, and the highlighted comments that reveal recurrent themes are also presented. In the context of remote online education for embedded systems, challenges encountered in managing this website and YouTube channel are finally described.As physical computing-based online education becomes more commonplace, it is anticipated that open educational resources like MATLABArduino.org will be a significant source of learning for engineering students. For current and future open educational projects for remote learning for embedded systems, the conclusions drawn here may act as a road map.

[9] Students' perception in the use of self-made YouTube videos in teaching Mathematics, 2014, Ibrahima Faye International Conference of Teaching, Assessment and Learning (TALE).

This study examined the way lecturers teach math using their own YouTube videos. It has been emphasized in numerous studies how important it is to use YouTube in the classroom. A lecturer can create their own videos or use pre-existing YouTube videos as teaching resources. This project aims to investigate how students view and favor these two options. A sample of 213 first-year students responded to a survey asking about their thoughts on their lecturers' use of YouTube videos. The study also took into account the opinions of the students regarding the ideal length of video lectures on mathematical subjects.The results confirmed that students frequently use YouTube and prefer professor-produced movies to those that can be found online.

[10] Evaluating users perceptions of an electrical engineering YouTube channel's current and future educational value, 2022, Ricard Horta, Ruben Lijo, Eduardo Quevedo, Jose Juan Castro, and This study aims to contribute to the evaluation of video implications in the enhancement of engineering education quality through an analysis of the current pedagogical usage of a specific electrical engineering YouTube channel. In order to accomplish this, a quantitative methodology based on a 5-point Likert scale survey (Cronbach's alpha = 0.76) was used to describe how this channel was being used. Sample information was gathered from 912 respondents in order to evaluate consumers' perceptions of the channel's content and format, their preferences, and their opinions of the integration of video in educational settings.4.74 out of 5 users agree that using this kind of educational resource could raise the bar for instruction. The sample's underrepresentation of professors is one of several flaws that could be highlighted despite the fact that the student community is well represented. Overall, the results suggest that because of their format and cognitive load, YouTube channels for scientific dissemination are appropriate for pedagogical use as a way to improve the educational experience. This complementary use demonstrates the need for technological integration models to support their pedagogical insertion, and this need will be addressed in future research along with additional evaluations of associated dissemination channels.

[11] YouTube Data Analysis using MapReduce on Hadoop Shaikh, 2022, F., Paw Askar, D., Siddiqui, A., & Khan, U. 4.74 out of 5 users agree that using this kind of educational resource could raise the bar for instruction.

The sample's underrepresentation of professors is one of several flaws that could be highlighted despite the fact that the student community is well represented. Overall, the results suggest that because of their format and cognitive load, YouTube channels for scientific dissemination are appropriate for pedagogical use as a way to improve the educational experience. This complementary use demonstrates the need for technological integration models to support their pedagogical insertion, and this need will be addressed in future research along with additional evaluations of associated dissemination channels.

[12] Engaging the Net Generation via YouTube: An Academic approach for undergraduate teaching, 2017 , Sinemet Mthembu, Sumarie Roodt This study article investigates how academics might involve the Net Generation in higher education through the use of YouTube in order to enhance learning. This explanatory study focuses on the user behavior of both academics and students through interviews and questionnaires. An interpretive constructivism approach is used to examine how undergraduate students' learning demands relate to video-based interventions as well as how academics use YouTube to engage students in the classroom. Cross-sectional data collection and analysis techniques include semi-formal interviews and online surveys. According to the findings, children become more emotionally, intellectually, and behaviorally engaged when academics use YouTube in the classroom.The study's scope may have been constrained by the fact that all survey respondents were University of Cape Town second-year accounting undergraduate students.

[13] YouTube as a Source of Information and Support for Students with Disabilities, 2022, K. Ivatović and V. Vidaček-Hainš

Social networks offer helpful information for various aspects of a person's personal and professional life. For all students interested in increasing the participation of university students with disabilities, the Liter of Pride and Kilo of Prejudice (Litra ponosa Kila predrasuda) YouTube channel was created. Videos provide useful advice for helping students with disabilities overcome a variety of every day challenges. Videos cover a variety of subjects, including career planning, time management, free time, cultural events, and educational issues. Videos are produced based on the individual study habits of one disabled student. These videos' main objective is to motivate disabled students to enroll in higher education. Over the course of three and a half years (2016-2020), 50 videos were shot.The video content runs for about 6 hours in total. The audience is made up of young adults (18-34) who are 70% female and 30% male. The majority are from Croatia, but some are from other parts of Europe as well. The research's conclusions can be used to improve the lives of students with disabilities, help them get past the challenges they encounter every day in higher education, and improve communication about expanding access to higher education.

[14] The influence of social media to support learning process in higher education institution: A survey perspective, 2017, T. Oktavia, U. Fauziyah, S. H. Karin and A. F. Siregar

The purpose of this study is to ascertain the impact that social media has on learning processes in higher education institutions based on a range of variables, including individual characteristics, educational institutions, families, student awareness, resources, and the internet. We also attempt to examine nine of the most well-liked social media platforms in Indonesia: Facebook, Twitter, MySpace, LinkedIn, YouTube, Flickr, SlideShare, Blogs, and Wikis. This study uses a quantitative methodology and has a large sample size of respondents who are students in higher education. The study's conclusions include a number of social media components that can be used to support the educational process at higher education institutions as well as elements that have a significant bearing on a fruitful educational process.

[15] Creating a novelsemantic video search engine through enrichment textual and temporal features of subtitled YouTube media fragments, 2013, B. Farhadi and M. B. GhaznaviGhoushchi Semantic video annotation is a current area of study in the field of multimedia content understanding. As more videos are posted on well-known video sharing platforms like YouTube, more efforts are made to automatically annotate these movies. The framework for annotating subtitled YouTube videos that is suggested in this paper combines textual features, such as all of the portions extracted from web natural language processors in relation to subtitles, with temporal features, such as the duration of the media fragments where specific entities are identified.

3. System Design

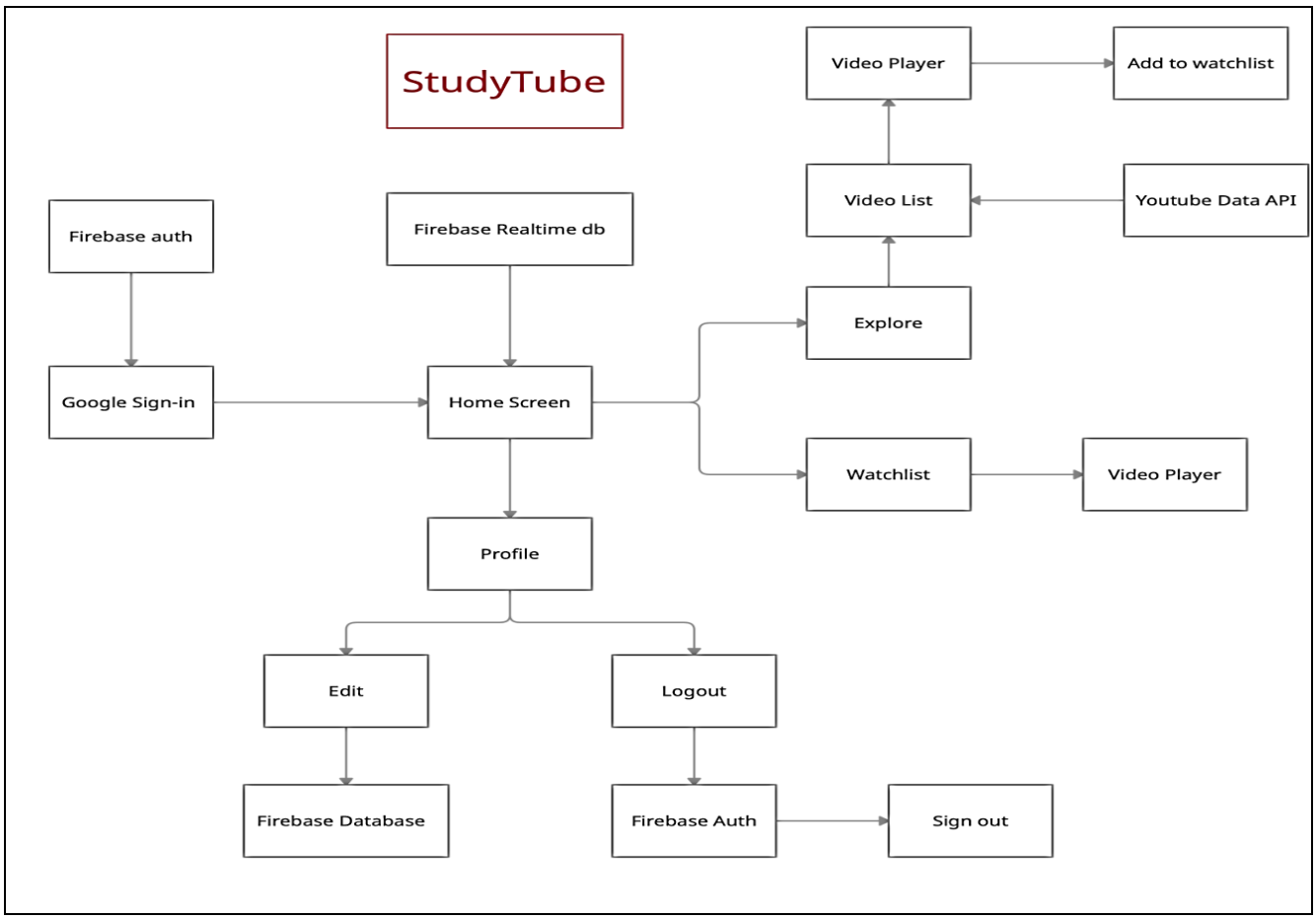

Figure 1 Frame Work of Study Tube

4. System Implementation

CODE

GoogleSignin-

class SignInAct:AppCompatActivity() {companionobject{

privateconstvalRC_SIGN_IN=120

}

privatelateinitvarmAuth:FirebaseAuth

private lateinit var googleSignInClient: GoogleSignInClientoverridefunonCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)setContentView(R.layout.activity_main)

//ConfigureGoogleSignIn


```
valgso=GoogleSignInOptions.Builder(GoogleSignInOptions.DEFAULT_SIGN_IN)
.requestIdToken(getString(R.string.default_web_client_id))
.requestEmail()
.build()
googleSignInClient =GoogleSignIn.getClient(this,gso)
//FirebaseAuthinstance
google_button.setOnClickListener {signIn()
}
mAuth=Firebase.auth
}
privatefunsignIn(){
 valsignInIntent = googleSignInClient.signInIntentstartActivityForResult(signInIntent,RC_SIGN_IN)
}
```

Dashboard :

```
class Dashboard_frag : Fragment(), DashboardVideoClick {privatevar_binding:FragmentDashboardFragBinding?=null
privateval bindingget() =_binding!!
privatelateinitvarmAuth: FirebaseAuth
private lateinit var viewModel: MainViewModelprivate lateinit var mAdapter: DashboardAdaptervar videos:
ArrayList<Dashboard> = ArrayList()overridefun onCreateView(
inflater: LayoutInflater, container: ViewGroup?,savedInstanceState:Bundle?
):View?{
_binding = FragmentDashboardFragBinding.inflate(inflater, container, false)val view=binding.root
//Inflatethelayoutforthisfragment
binding.dashdp.setOnClickListener {Navigation.findNavController(view).navigate(R.id.go_to_profile_frag)
}
returnview
}
override fun onViewCreated(view: View, savedInstanceState: Bundle?) {mAuth=FirebaseAuth.getInstance()
```



```
valcurrentUser=mAuth.currentUserGlide.with(this).load(currentUser?.photoUrl).circleCrop().into(binding.dashdp)mAdapter =
DashboardAdapter(this)binding.dashboardRecyclerView.layoutManager=LinearLayoutManager(context)binding.dashboardRecyclerView.adapter =mAdapter

valrepository=Repository()

valviewModelFactory=MainViewModelFactory(repository)

viewModel = ViewModelProvider(this, viewModelFactory).get(MainViewModel::class.java)getVideoID()

}
```

5. Results and Discussion

The design consists of colorful modules in the operation, starting with login, in which the stoner would have to login using their Gmail account and farther access the operation. Upon login, stoner comes across dashboard that suggests colorful vids and on searching pollutants and displays the contents according to stoner's watch history. Search and filter contents can be stoner to classify and study particular subjects and get happy according to what one has to learn. The operation is a simple operation with a videotape player that can be used to watch the vids. A stoner can also put the asked vids into watchlist to be watched latterly.

6. Conclusion

Study Tube runs successfully on android device. It was enciphered using Kotlin on Android Studio and matches the conditions of scholars to get filtered study accoutrements along with no distractions. The operation has a smooth and easy to use interface which can be used by a stoner of any age. It's a simple operation and has the functionality analogous to that of different videotape streaming operations which would make it easier for druggies to use it as there's nothing new to learn. The operation was made, keeping in mind the difficulties that the scholars face while studying from YouTube and the type of content do people prefer.

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