

# Online Streaming Platform

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**Abstract:** Video traffic demand over mobile networks have been difficult task, the quality of service get reduced when there is a gap between the traffic demand and link capacity. The quality of video streaming gets poor when there occurs the long buffering and intermittent disruptions. In the cloud computing technology, we propose a new mobile video streaming framework consist of AMES cloud, which is dubbed with: adaptive mobile video streaming and efficient social video sharing these construct a private agent to provide video streaming efficiently for each mobile user. AMO uses the scalable video coding technique to adjust the streaming. SOV monitors the social network interactions among mobile users and as to pre fetch video in advance. The website will have a user-friendly interface, allowing users to easily navigate and access the content of the website. The website will also provide features such as creating playlists, sharing content with friends, and rating videos. Additionally, the website will provide a way for users to upload and publish their own videos. The website will also include a search engine to help users find content quickly and easily.

**Keywords:** Streaming Platform

## I. INTRODUCTION

The work entitled “Video Streaming” is an application that allows the users to add videos. The users those who wish to add videos, can register for the website and get the Username and password. Video Streaming is a web-based application allow the users to browse the videos, and at same time. It provides the user up to date information at any appropriate location. Video streaming has become a popular way to enjoy entertainment from the comfort of your own home. Whether you’re looking for a new movie or TV show, or just want to catch up on old favorites, video streaming has made it easier than ever to access the content you love.

The goal of this work is to create an online video streaming website that will allow users to watch their favorite movies and TV shows in the highest quality available. This website will feature a wide selection of titles, as well as a simple and intuitive interface to make browsing and streaming quick and easy. We plan to use the latest technologies to ensure a smooth and enjoyable user experience.

By creating this website, we hope to provide an easy and convenient way for people to watch their favorite content without having to leave home. We look forward to bringing you the highest quality video streaming experience possible.

## II. OVERVIEW OF THE WORK

A streaming platform is an on-demand online entertainment source for TV shows, movies and other streaming media. For example, think of things like Hulu, Netflix, Amazon Prime Video, Vimeo. This paper is a video streaming website that allows users to create, stream and share videos with their friends and family. The website will have a user-friendly interface that will allow users to quickly and easily find what they are looking for users will be able to create their own channels and upload their own videos, as well as subscribe to other users’ channels to view their content. The website will also feature an extensive library of videos, categorized into different genres and topics, allowing users to easily find what they’re looking for. Finally, the website will also include a search feature that will allow users to quickly and easily find videos, as well as a chat feature that will allow users to interact and discuss videos with each other. This video streaming project in PHP is very unique and different in its approach when compared to the existing projects in the video-streaming segment. The project will be built across different software but with front end as PHP and would involve the teamwork of the entire development team. The software used and the project is meant to be completely

user-friendly to help garner more users into the platform. We have seen a lot of success in the recent times in the video streaming segment with the advent of YouTube and our project is targeted to ride on the current trend to reap benefits while meeting the customer's needs.

While this project is being built across different development areas, the primary features included are uploading videos by users, sharing of videos through social media and viewing of videos uploaded by others. The videos can also be downloaded, edited and uploaded online again. Being an online platform, it provides the flexibility of working on the project from remote locations with proper access codes. Some additional features which have been added to make the project more interactive are: Uploading and sharing videos using embedded links, setting up channels to categorize videos, broadcasting events/ meetings using invitation links and setting up advertisement avenues to gain income.

### **III. RELATED WORKS**

The Unified Theory of Acceptance and Use of Technology (UTAUT). Many theoretical models have been proposed to examine consumer acceptance and use of technology and new innovations. These include the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and Model of Personal Computer Utilization (Davis, 1989; Fishbein & Ajzen, 1975; Thompson et al., 1991). These theories combined different elements such as technology attributes, personal/individual attributes, and contextual factors. After a comprehensive review and synthesis of several theoretical models, Venkatesh et al. (2003) proposed the UTAUT, later modifying it in 2012 and proposing UTAUT-2. Bury and Li (2015) found that technology advancement has led to a change in the modes of viewing as it becomes more diverse and not limited to the traditional TV screens.

The work done by (Prabha Manuratne et al., 2021) Understanding user behavior in online video streaming is essential to designing streaming systems which provide user-oriented service. However, it is challenging to gain insightful knowledge of the characteristics of user behavior due to its high volatility. To this end, the paper provides an extensive analysis of user behavior in online video streaming, based on a large scale trace database of online streaming video access sessions. We categorize user behaviors into multiple patterns and probe the relationship between them. Our work puts emphasis on the statistical characteristics of user behavior patterns. Particularly, this study uncovers that the behavior of one individual user in a video streaming session is not only related to the popularity level of the video, but also has strong correlation with the user's behaviors in previous streaming sessions.

Research by Lee, Choi, Cho, and Lee (2016) attempted to determine the relationship between digital products (online media streaming) and physical products, focusing specifically on music from both records/CDs and online streaming. Their objective was to identify the factor that impact such decisions. They collected data between March 2011 to July 2013, focusing on the top 200 songs of those years, as well as the sales figures of the Gaon Music Chart (<http://gaonchart.co.kr>). The Gaon Music Chart tabulates the relative weekly popularity of songs or albums in South Korea, which is similar to Billboard Chart in America. To supplement the basic data, the research team collected information about how often an artist performed, album specific characteristics, and album ratings. Upon initial examination of the data, the team found that the numbers were skewed due to the sales, and consequently created an algorithm to continue the analysis. In addition to a correlation analysis model, they developed an econometric model to determine the impact of online music streaming and music record sales. The results show that there is a significant positive relationship between online streaming and record sales, but that price and album rating do not significantly impact record sales. Lee et. al. (2016) relates to our current research, as we are seeking to understand the effect on additional purchases when consumers look for online streaming or cable. Our research intent is to establish whether there are any significant relationships between these factors—that is, whether the choice between online streaming or cable services leads to more sales or the purchase of additional add-ons.

### **IV. METHODOLOGY**

The existing system does not have the option to broadcast events or meetings by sending invitation links. In order for any person to view a particular event, the event has to be recorded completely and uploaded on to the website and then the link can be shared. Thus, there was no possibility for remote and live viewing of events, which are happening in corporate environments. The chances for organizing live training and webcasts across different locations were also limited because of these limitations. Hence, most importantly, the clients cannot be sustained because they will not be

willing to go in for a subscription for a recorded event while if the videos are streamed live, the corporates will be interested in taking up subscriptions and adding to the stream of revenue.

**Limitations**

- Difficulty in adding videos manually.
- Doesn't provide effective mechanism.
- Difficulty in browse the all the information

The new video streaming system will have all the functionalities to broadcast live events and meetings online. The corporate can just login to our website and register for an event slot post which confirmation mail will be sent. The corporate can then forward the invitation to all the participants from their registered ID. The participant will get an automatic notification when the video is ready to start broadcasting from the corporate end. Subscription fees will be charged to organize such programs on a monthly basis, which will generate revenue on a regular basis. In addition, Advertisements can be displayed at the bottom of the broadcast, which will garner additional revenue for the website. This works leads to various advantage of the system these are, Managing the levels is very easy,. Storing the Videos is so easy, Giving input is as simple as just a single mouse clicks, Easy to maintain up to date information, Cheaper to maintain, No manual tracking is required. When an architect designs a building, he has a vision of the finished product and produces a result based on that vision. Client – server, on the other hand, is more like Darwinian model of evolution of a living species. No one has a vision of the finished products; rather, day-today events and gradual changes affect it over time in reaction to those events.

In the beginning, application were fairly simple, reading input transaction in a 'batch', processing them against a data store, and the output was paper. Record retrieval was usually a set of subroutines embedded in the updating program.

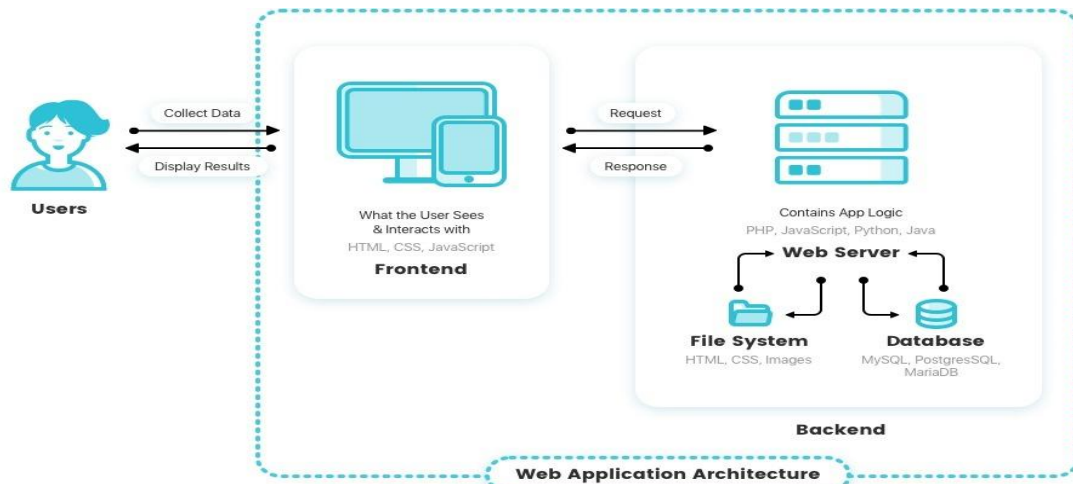


Fig.1: Block Diagram of System Architecture

Common functions gradually migrated from the application to the operating system. Database processing was one of the first major functions to be removed from application control. Much of the time database functions in the application included retrieval, replacement and insertion. Since it was function had to be introduced database administration. This new function was separated from the application code and involved defining the structure of the database, value ranges backup, rollback, and so forth.

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

An actor represents an outside entity- either human or technological. In this example its human (Stick man). Notice the curved rectangle on the diagram this represents the system boundary everything inside that is part of that system, and everything outside are actors (basically not part of system).

Use case diagrams can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do. Use case Diagram consists of use cases and actors and shows the interaction between the use case and actors.

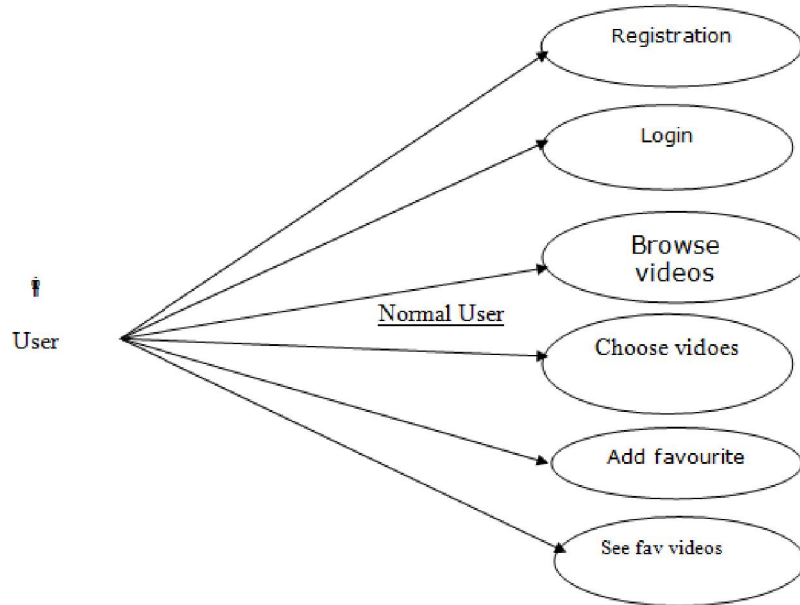
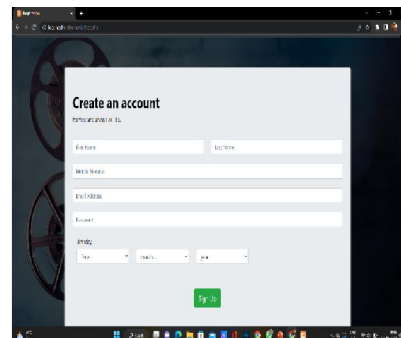
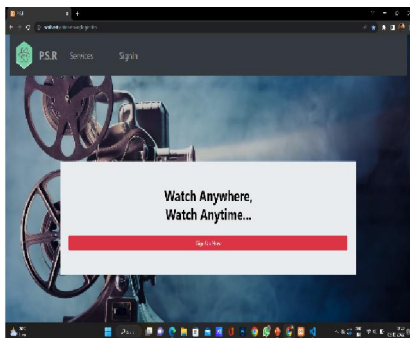


Fig.2 Research Framework

- **Administrator Module:** This module allows administrator to manage different videos that upload by the users. It allows him to add, modify and delete the videos
- **User Module:** It allows the candidate to register for the website and generate the ID and password. It allows the user login into this application and see the videos. He can view all the videos upload by the admin. He can add videos as Favorites.
- **Registration:** This module allows the users to register for the website. It allows the Users select an option for add favorites within the stipulated time and continues generating the videos.

**V. RESULTS AND ANALYSIS**

The main outcome of the work is the online streaming platform itself. This will be a web-based platform that can be accessed by users from anywhere in the world. The platform will allow users to stream video content on demand. The platform will also include a variety of other features, such as the ability to create and manage user profiles, create and manage playlists, and search for and discover new video content. The various stage of outputs demonstrate in the following Diagram.



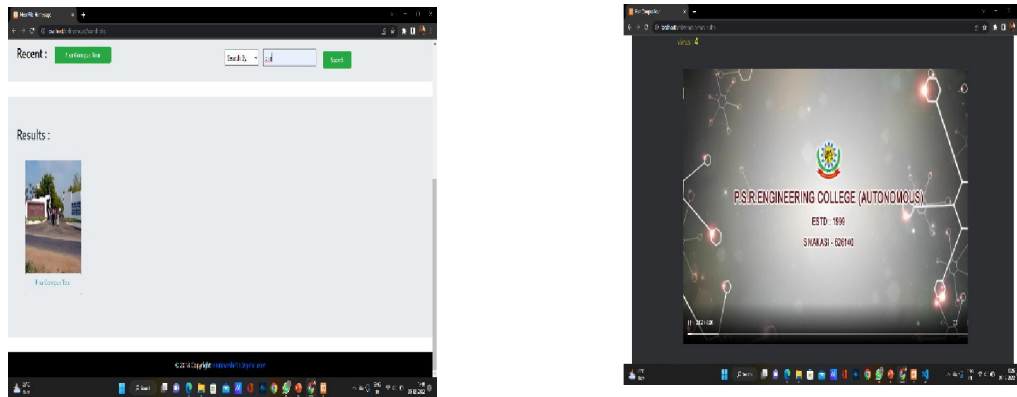


Fig.3 various stages of Output pages

## VI. CONCLUSION AND FUTURE ENHANCEMENT

The results show that people are watching less TV, which supports the hypothesis that there is a significant negative correlation between intention to use VPs and TV watching time. The intention to use VPs has a significant positive correlation with giving/sharing opinions, sharing video content, and creation of video content, but has no significant relationship to video mixes or modification. It is found that people who use VPs and consume less television spend more time on online surfing and online video watching time.

The prefetching of videos can be improved by using scalable video coding efficiently and also by predicting users' behavior. Digital media continues to evolve as new tools emerge, consumers make new demands, and the quality and accessibility of the technologies improve. The rise of mobile video, virtual reality (VR), augmented reality (AR), and the more refined use of data analytics will all influence the future of digital media.

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**BIOGRAPHY**



N. Krishnaveni received the bachelor's degree B.Tech (Information Technology), the masters M.Tech (Information Technology) and Ph.D from Anna University, Chennai .She has over eleven years of teaching experience since she started her career in 2009 as a Lecturer with P.S.R. Engineering College, where she is currently working as an Associate Professor with the Department of Computer Science and Engineering, Sivakasi. Her research interest includes data mining , data science and machine learning technologies .She actively supervises bachelor's and master degree levels. She hopes to extend her research to elevate the quality of teaching and learning.



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