# VIDEO STREAMING MANAGEMENT

Video streaming is a type of media streaming in which the data from a video file is continuously delivered via the Internet to a remote user. It allows a video to be viewed online without being downloaded on a host computer or device. We can watch the first half of a horror film, and later the second half of a romance to end the day on a good note. OTT platforms come with oodles of freedom. The ongoing pandemic has impacted several industries across the world — and the film and television industry is one of the most hit industries. Several producers have decided to release their films directly on the OTT platforms rather than in theatres.

In order to understand customer behavior, video streaming management needs to track its customers, its content, and the content that specific customers watch. Understanding which users watch which shows and movies will allow the firm to recommend similar content that the user will also likely enjoy. This type of data collection and analysis, in order to provide recommendations, offers customers an enjoyable, convenient streaming experience. Moreover, the database will track important metrics such as customer churn and poor performing content (content that receives poor ratings and content that is rarely streamed)

Since it is a very complex system, we would be modelling a small portion of it. Hence, we have applied some constraints to the system:

1. We assume this video streaming service is accessible throughout the world.
2. The basic package is a 1-year subscription.

**Data Description:**

**Content:**

* Content includes all the videos/movies uploaded to the website.
* Videos streaming management needs to compile a table listing all its content (Movies, TV shows, etc.)
* Each video is identified with unique id, title.
* On selecting particular video all the details are shown –(video length, release date)
* Few videos can also be released in more than 1 language.

Details:

Content Id, Title, Episode, Genre, Duration, Release date, Language, Origin.

**Streams:**

* All movies / Series Streaming on video management system come under this.
* Every video screened is given a unique stream Id.
* Every customer watching is given an id an individual customer Id.
* Streaming time of every video is recorded.
* All users can give a rating to the videos they have watched, which makes it easier for other users to know what kind of movie it is.

Details:

Stream Id, Customer Id, Content Id, Stream Id, Streamed Date, Stream rating.

**Customer Details:**

* All the subscribers are given distinct id.
* While creating an account, personal details of customer are stored such as date of birth to get to know the age further to set up restrictions to particular videos, also to send recommendations according to what his similar age customers are watching.
* Also contact number and Email are stored which used while logging in.
* Customers through the world can login and access any movie released in different countries too.

Details:

Customer Id, DOB, Phone Number, Email, Country.

**Subscriptions:**

* Once the user subscribes with a package, he is given particular id.
* Date on which user subscribes is stored to further send reminders/updates when subscription is getting completed/expired.

Details:

Subscription Id, Customer Id, Subscription Start Date, Subscription’s count, IsActive (Derived Attribute from Last subscription Date).

**Device Info:**

* Device used by customer to create an account is stored.
* Log of all the devices user uses to watch the videos is recorded.

Details:

Device Id, Log Id, Customer id, Device type, Device Name, Ip Address.

**Log Info :**

* We keep track of the user logs like login and logout timings of each time.

Details**:**

Log Id, Customer Id, Logged In , Logged Out.

**Business goals:**

* To know the interest of customers, we shall generate a report of viewership of each Genre videos in a specific language with at least 10 streams , so that we can release similar content in that language.
* Generate a report of most viewed(top 5), of foreign content(user watching other than native originated content) in each country; to identify the interest of local customers towards different region content, to further release similar content.
* Generate yearly report of total customers, who didn’t renew the subscription with respect to each region/country; so that more strategies can be employed to increase the sales (Total & Each Region Counts).
* Generate a report of total views of a genre in each country; based on which we can know the interests of the subscribers.
* Generate a report of top viewed content(Title) in each genre.
* To avoid servers getting hung, maintaining infrastructure scalability of servers for smooth video streaming and good quality; we will get the analysis of active devices logged per year.
* We will get the report of which type of device the users are using to watch /subscribe. With this data we shall know user with what age is comfortable with which kind of device. (0-18 defined as Teen, 19-45 as Adult,

>45 as Senior Adults)

* Generate a report of total views of each genre based on age groups; to know the tastes of different sections of people so that similar videos of their interest can be released.
* Generate a report of active users who uses more than 2 different devices; to further restrict number of devices based on the analysis.
* Generate a report of ratings of each genres, each movie in particular genre & total rating of all movies (avg of all user rating) based on user’s rating.
* Generate a report of viewership rate of each language, genre and both language and genre.