



SUMMARY REPORT

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EXECUTIVE SUMMARY

Disney+ Hotstar, a subsidiary of The Walt Disney Company, is a major player in the competitive streaming industry. With millions of subscribers worldwide, it has garnered a reputation for delivering diverse and high-quality content. To sustain its success and stay ahead in the rapidly evolving streaming landscape, it's imperative for Disney+ Hotstar to continually enhance the user experience and optimize content delivery efficiency.

This report presents a comprehensive project proposal designed to address these objectives. Our proposal focuses on the introduction of new and innovative features, particularly Hotstar music videos and Hotstar shorts, with the ultimate goal of enhancing overall platform performance. By embracing these enhancements, Disney+ Hotstar aims to consolidate its position as a market leader in the highly competitive streaming industry.

The entertainment industry has witnessed a remarkable transformation with the rise of streaming platforms. Disney+ Hotstar has established itself as a key player by offering a wide array of content to a global audience. With millions of subscribers and a diverse content library, Disney+ Hotstar is a prominent name in the streaming industry.

However, in an era characterized by ever-increasing user expectations and relentless competition, merely maintaining the status quo is insufficient. To thrive and remain at the forefront of the industry, Disney+ Hotstar must not only meet but exceed user expectations. It's in this context that this report introduces a project aimed at elevating the user experience and optimizing content delivery.

GENERAL BACKGROUND

Disney+ Hotstar, formerly known simply as Hotstar, is an on-demand streaming service owned by Novi Digital Entertainment, a subsidiary of Star India. Here is a background and history of Disney+ Hotstar:

Background and Launch:

- Hotstar was officially launched in India in February 2015. It was introduced as a streaming platform by Star India to provide access to a wide **range** of content, including TV shows, movies, sports, and news.
- Early Growth: Hotstar quickly gained popularity in India due to its vast content library, especially its sports offerings, which included live cricket matches, a major attraction in the cricket-loving nation.
- Expansion and Content Diversity: Over the years, Hotstar expanded its content library, including regional content in multiple Indian languages and exclusive sports coverage. It offered a mix of free ad-supported content and premium subscription-based plans.
- Strategic Acquisitions: In 2017, The Walt Disney Company acquired 21st Century Fox, which included Star India, and gained a majority stake in Novi Digital Entertainment.

Rebranding as Disney+ Hotstar:

In April 2020, Hotstar was rebranded as Disney+ Hotstar, aligning itself with Disney's global streaming service, Disney+. This move allowed Disney to leverage its extensive content library and expand its presence in the rapidly growing Indian streaming market.

Integration with Disney+ Content:

With the rebranding, Disney+ Hotstar integrated Disney+ content into its platform, offering a wide selection of Disney, Pixar, Marvel, and Star Wars content.

GENERAL BACKGROUND

Global Expansion:

Disney+ Hotstar's reach extended to international markets, making it available in several countries beyond India. The service has become an essential part of Disney's global streaming strategy.

Purpose and Scope of the Report

The primary purpose of this report is to outline a project proposal focused on enhancing the Disney+ Hotstar platform. Specifically, we aim to introduce new features, namely Hotstar music videos and Hotstar shorts, with the overarching objective of improving user engagement and content delivery efficiency.

The report covers a range of critical aspects, from Disney+ Hotstar's existing business requirements and ethical considerations related to data and privacy to the proposed enhancements, implementation plan, and risk assessment. Additionally, we delve into strategies for retaining existing customers and re-attracting those who may have discontinued their subscriptions.

This report is not confined to feature enhancements but extends to building a stronger and more loyal user base. By doing so, we aspire to bolster Disney+ Hotstar's position as a market leader in the highly competitive streaming industry.

OVERVIEW

Our project's core focus lies in three areas:

Hotstar Music Videos:

By integrating a dedicated section for music videos, we intend to tap into the immense popularity of music on the platform. Users will have access to a wide range of music videos, enhancing their entertainment choices and increasing engagement.

Hotstar Shorts:

Short-form content has gained immense traction in recent years. We propose the introduction of a dedicated section for Hotstar Shorts, enabling users to enjoy bite-sized content that aligns with their busy lifestyles.

Performance Optimization:

Alongside feature development, we will prioritize optimizing content delivery, reducing buffering times, and enhancing overall app performance. This will ensure that the user experience remains smooth and enjoyable.

To meet the requirements listed above, our team conducted a fundamental study on Disney+Hotstar and determined that the following exact tables must be built.

- Subscription Type
- Subscriber Profile
- Playlist
- Video
- Short
- Video music
- Login devices
- Feature
- Genre
- Devices
- Languages
- Variant
- Video genre

OBJECTIVES

Our project's primary objectives include:

Enhanced User Engagement:

By introducing Hotstar music videos and shorts, we aim to increase user engagement, keeping them actively entertained on the platform.

Improved Retention:

Engaging content and a seamless viewing experience will boost customer retention, reducing churn rates.

Market Leadership:

Our ultimate goal is to position Disney+ Hotstar as a market leader, known for its innovation, diverse content offerings, and superior user experience.

Benefits

The successful implementation of our project will result in several benefits:

Competitive Edge

Disney+ Hotstar will differentiate itself from competitors by offering unique content categories.

Increased Revenue

Higher user engagement and retention will translate into increased subscription and advertising revenue.

Brand Loyalty

Delivering a superior user experience will foster brand loyalty, further solidifying Disney+ Hotstar's position in the market.

NEW VENTURE

The Business Need for Our Proposal

Over the last three quarters, Disney+ Hotstar has lost 34% of its total subscriber base, reaching 40.4 Mn as of July 1, 2023. The downward spiral of Disney+ Hotstar started with the loss of IPL media rights, one of the key propositions that hooked subscribers to the platform. The loss of the HBO content partnership deal and persistent low-consumer sentiment in the Indian market may also have triggered the exodus of the paying subscribers. This propelled us to propose the shorts and music video as means to ensure:

1. User Engagement and Retention

While Disney+ Hotstar has successfully met many of its business requirements, the competitive landscape has evolved, and user expectations have grown. The need for innovative features that enhance user engagement and content delivery efficiency has become more pressing.

2. Addressing User Attrition

Recent data suggests that Disney+ Hotstar may have experienced a decline in its user base, which has left the platform looking to regain millions of users. This attrition may be attributed to several factors. For instance, as users' tastes evolve, they seek platforms that provide a more comprehensive and interactive experience. Consequently, Disney+ Hotstar must adapt to these changes and recapture lost users.

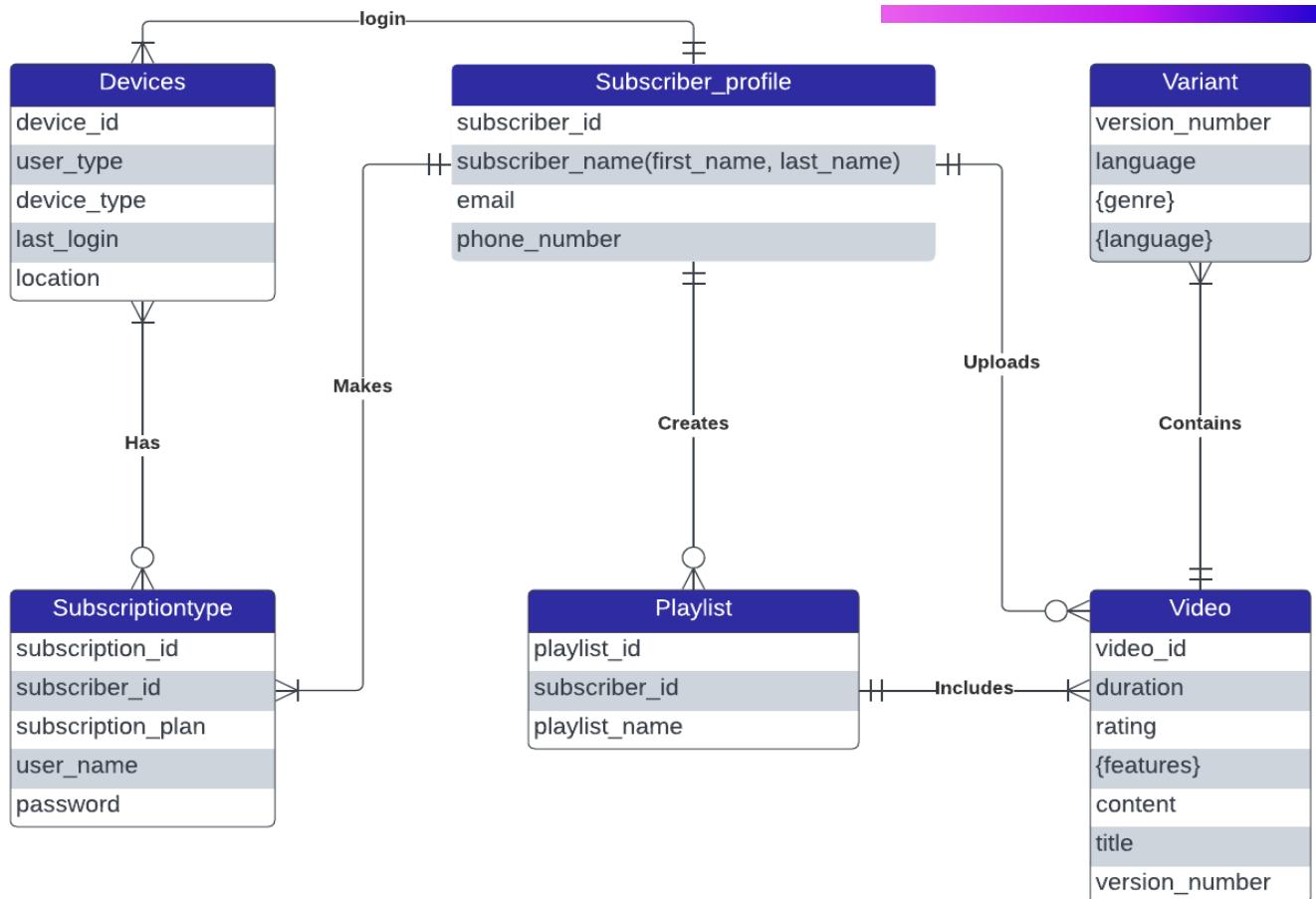
3. Relevance in a Competitive Market

The streaming industry is highly competitive, with multiple platforms vying for supremacy. Disney+ Hotstar's competitors have launched innovative features, such as music videos and short-form content, to cater to their user base's diverse interests. To remain relevant and distinguish itself, Disney+ Hotstar must offer similar features.

The Role of Hotstar Music Videos and Shorts

The proposed introduction of Hotstar music videos and shorts addresses these challenges. These features aim to capture users' attention, offer entertainment beyond traditional shows and movies, and drive higher user engagement. By doing so, Disney+ Hotstar expects to not only retain its existing user base but also recapture users who may have drifted away.

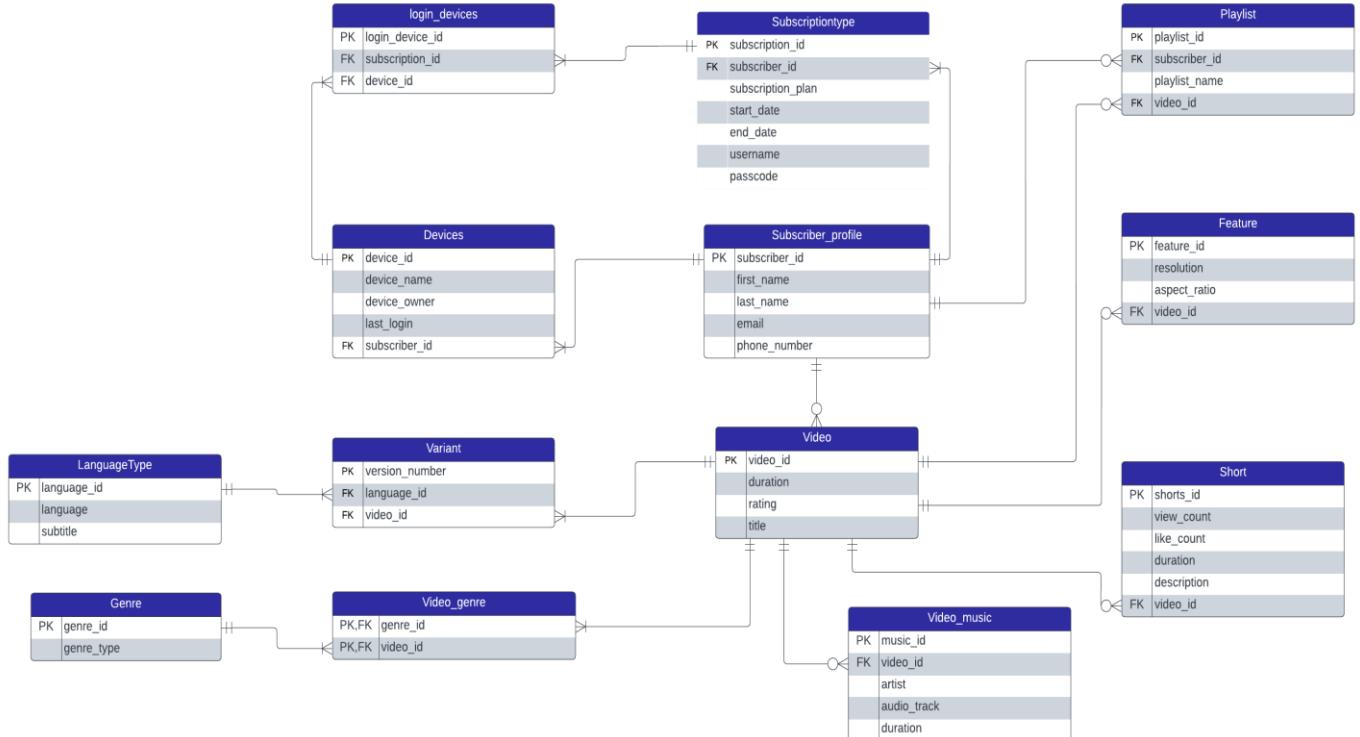
CONCEPTUAL MODEL



Initiating the database development involves crafting a conceptual model. The presented diagram represents the conceptual framework for the Disney+ Hotstar Streaming platform. This model is meticulously designed to align with the strategic objectives of Disney+. At the core of this model lies the subscriber. Every subscriber is intricately linked with a Subscription. A subscriber can synchronize their subscription across multiple devices, yet concurrently, a single device might accommodate multiple subscriptions.

A subscriber possesses the capability to curate numerous playlists, yet each playlist is inherently tied to a specific subscriber. Simultaneously, it's imperative for a playlist to comprise a minimum of one video, and every video is intrinsically associated with a particular playlist. This comprehensive conceptual framework encompasses user evaluations, critiques, and feedback on content. Additionally, it has the potential to monitor user engagements, such as pauses, rewinds, and skips.

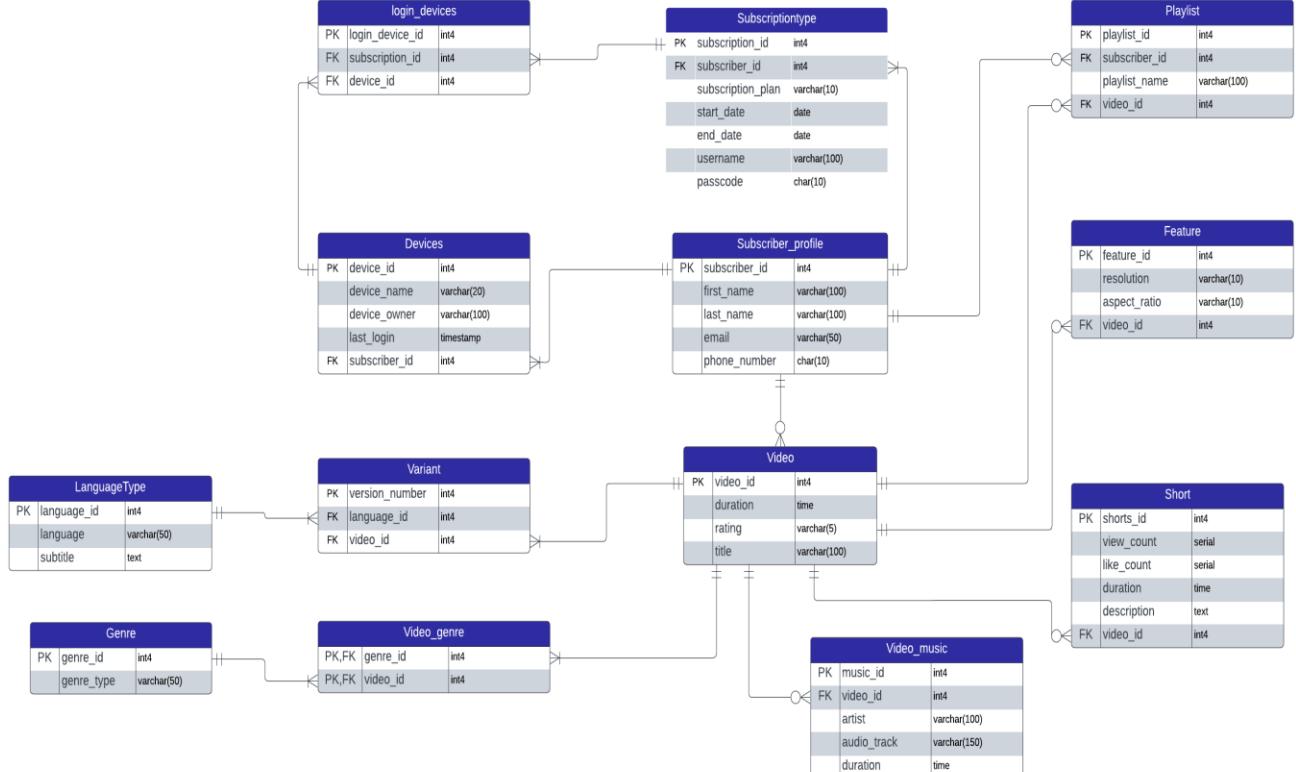
RELATIONAL MODEL



Transitioning to the subsequent phase of the database development process, the illustrated diagram delineates the Relational or Logical model, an evolution of the conceptual model. Primary and foreign keys have been meticulously annotated within each table. To circumvent the many-to-many associations between 'video' and 'genre', as well as 'Subscriptiontype' and 'devices', we instituted bridge tables titled 'video_genre' and 'Login_devices'.

Furthermore, dedicated tables were established for composite attributes and multi-valued attributes, ensuring the model adheres to the 3rd Normal Form. In the conception of the logical model, our objective was to mitigate data redundancy while preserving data integrity. This logical framework is pivotal for the design of the physical model, facilitating users to insert, remove, and alter data without instigating anomalies.

PHYSICAL MODEL



We posit that comprehending the firm's overarching goals is paramount before devising an apt solution. Our intention is not merely to construct a video streaming platform, but to foster a tool designed to augment the yearly subscription rates.

Our team diligently engaged with the actual application, immersing ourselves in its features to grasp its foundational principles. This hands-on experience provided invaluable insights into the core values of the app.

In conjunction with evaluating the Disney+ Hotstar application, we delved into the business tactics of platforms like Netflix, YouTube, and Amazon Prime Video. Our analysis revealed that YouTube's revenue surpasses that of other streaming giants. Consequently, we resolved to integrate 'shorts' and 'Video Music' functionalities into the Disney+ application.

In our endeavor, we meticulously adhered to the database development paradigm, commencing with the conceptual model before transitioning to the relational model.

Nonetheless, the trajectory of execution wasn't as linear as anticipated. During the formulation of our inaugural relational model, predicated on our conceptual blueprint, we discerned potential limitations in harnessing SQL to realize certain desired functionalities.

As an illustration, we architected a 'Video Music Recommendation' tableau with the ambition of generating and endorsing random music videos to a diverse user base. However, our introspection led us to conclude that a mere database might be insufficient for such aspirations, and a more sophisticated approach involving machine learning or specialized algorithms would be requisite.

Throughout the process, we engaged in iterative refinements of both conceptual and relational models to ascertain alignment with our overarching objectives. The relational framework served as an indispensable touchstone in the construction of the actual database. Upon the consummation of our relational model, the database instantiation via SQL became considerably streamlined.

Sample Data Used

For the sample data that we used in our database was categorized into the following lists:

- 30 Subscribers
- 30 Subscriptions
- 30 Devices
- 30 genres
- 30 Playlists
- 30 Videos, video music's and shorts
- 30 Languages

For the subscriber and subscription tables, we employed a sophisticated online generator to produce arbitrary data consistent with the designated data type and variable nomenclature provided during the database architecture phase. We incorporated 30 samples into each table to ensure each subscriber was allocated a distinct value.

REQUIREMENT REVIEW

High Priority:

- **Video Quality:** Ensuring high-resolution video streaming for an immersive viewing experience.
- **User Profiles:** Allowing multiple user profiles under a single account for personalized preferences.
- **Offline Downloads:** Enabling users to download content for offline viewing, especially for mobile devices.
- **User Data Security:** Implementing robust security measures to protect user data and privacy.
- **User Reviews and Ratings:** Allowing users to rate and review content for community feedback.

Medium Priority:

- **User Interface Enhancements:** Continuously improving the app's user interface for better navigation and aesthetics.
- **Content Curation:** Curating content collections, such as "Top Picks" and "Trending Now," to assist users in discovering new content.
- **Multilingual Support:** Offering content in multiple languages and subtitles for global accessibility.

Low Priority:

- **In-App Purchases:** Allowing users to make in-app purchases for premium content or subscription upgrades.
- **Personalized Playlists:** Enabling users to create and share custom playlists with their favorite content.
- **Parental Controls:** Providing tools for parents to control content access for children.

Non-Functional Requirements:

- **Accessibility:** Ensuring that the app is accessible to users with disabilities by complying with accessibility standards.
- **Scalability:** Handling user growth and traffic spikes while maintaining optimal performance.
- **Cost-Effectiveness:** Managing operational costs effectively while providing high-quality services.
- **Content Licensing Compliance:** Ensuring that content distribution adheres to licensing agreements and copyright laws.

ETHICAL CONSIDERATION

As a team, we ensured that the information obtained from subscribers are ethically managed and used in compliance with federal and local laws. They extend to protecting user data and respecting content creators' rights. These principles underpin the platform's commitment to delivering a safe, respectful, and enjoyable streaming experience for all users. They Include ;

1. Data Privacy: Protecting user data and ensuring compliance with data protection regulations are paramount. Disney+ Hotstar recognizes the critical importance of user data privacy. The platform is committed to implementing robust data protection measures to safeguard user information. This includes adhering to international data protection regulations such as the General Data Protection Regulation (GDPR) and region-specific data privacy laws.

- **User Consent:** Disney+ Hotstar ensures that user data is collected with clear and informed consent. Users are provided with detailed privacy policies and terms of use, explaining how their data will be used and shared.
- **Data Encryption:** To prevent unauthorized access and data breaches, Disney+ Hotstar employs strong data encryption protocols for data in transit and at rest. This safeguards user data from potential threats.
- **Transparency and Control:** Users have the right to control their data. Disney+ Hotstar offers tools and settings that allow users to manage their data, including the ability to opt out of certain data processing activities.
- **Data Security:** Stringent data security measures are in place to protect user data from internal and external threats. Regular security audits and assessments are conducted to identify and address vulnerabilities.

2. Content Distribution Ethics: Respecting content creators' rights and upholding licensing agreements are fundamental principles for Disney+ Hotstar. The platform understands that content creators invest time and effort in producing valuable content.

- **Licensing Agreements:** Disney+ Hotstar engages in fair and ethical licensing agreements with content creators. These agreements outline the terms under which content is distributed on the platform, ensuring that creators are fairly compensated for their work.
- **Copyright Enforcement:** Disney+ Hotstar actively monitors content to detect and address copyright infringements. Any unauthorized distribution of copyrighted material is promptly removed, maintaining the integrity of content ownership and licensing agreements.
- **Content Moderation:** Disney+ Hotstar employs content moderation mechanisms to prevent the distribution of inappropriate or offensive material.

CONCLUSION

In summary, our database project for Disney+ Hotstar is poised to revolutionize the user experience and content delivery efficiency of the platform. Our primary focus on introducing innovative features such as Hotstar Music Video and Hotstar Shorts aims to elevate the streaming service to a market leader in the competitive industry. The success of this project relies on a well-thought-out strategy, adhering to essential ethical considerations, and addressing a set of distinct requirements.

Ethical considerations are central to our project's implementation, encompassing data privacy, content distribution ethics, and ensuring accessibility and inclusivity for all users. These ethical principles are fundamental to maintaining user trust and upholding content creators' rights. Our project's feature priorities range from high to low, addressing essential user needs, enhancing usability, and expanding content offerings.

High-priority features include video quality, content recommendations, and user profiles, providing a seamless and personalized experience. Medium and low-priority features offer a balanced approach, improving the platform's interface, introducing in-app purchases, and promoting community engagement. Finally, non-functional requirements emphasize compliance with data protection, scalability, cost-effectiveness, and performance monitoring.

REFERENCES

- Disney+ Hotstar loses 12.5 million subscribers; CEO sheds light on 'strategic' options for TV business Read more at: https://economictimes.indiatimes.com/industry/media/entertainment/media/disney-hotstar-loses-12-5-million-subscribers-ceo-sheds-light-on-strategic-options-for-tv-business/articleshow/102591418.cms?utm_source=content_ofinterest&utm_medium=text&utm_campaign=cppst
- To import the SQL data we use content generater of open.AI <https://chat.openai.com/>
- Disney+Hotstar Statistics–Revenue, Total Subscribers, Demographic and Traffic <https://www.enterpriseappstoday.com/stats/disney-hotstar-statistics.html>
- SQL data generater <https://www.mockaroo.com/>

APPENDIX

Group Contribution Table

TEAM MEMBER	TOTAL HOURS SPENT	DESCRIPTION	ADDITIONAL COMMENTS
Munjuluri Omkar Sai	41.5	<ul style="list-style-type: none"> • Group Meetings : 16 Hours • Conceptual and Logical Models : 4 • Physical Model: 3 hours • Create Database, Insert Data : 5 hours • Collect Data Sample : 5 hours • Project Summary Report : 6 hours • Presentation Preparation : 1 hour • Collect Reference for report : 1 hour • Review Gathered Business Requirements : 0.5 hour 	<p>Team Collaboration (Online and In- Person) covers with Uchechi on reviewing our respective ER diagrams as well as communicating with here in the process of creating the tables, inserting the data required, and ensuring its accuracy.</p> <p>As a limited team, our tasks overlapped at some point and we were both involved in every process of the project.</p>
Uchechi Unamma	32.5	<ul style="list-style-type: none"> • Group Meetings : 16 Hours • Conceptual and Logical Models : 2 • Review Database, Insert Data : 3 hours • Collect Data Sample : 1 hours • Project Summary Report : 3 hours • Presentation Preparation : 3 hour • Collect Reference for report : 1 hour • Requirements Gathering : 3 hours • Upload document to Canva: 0.5 hour 	<p>Team Collaboration (Online and In- Person) covers with Omkar on reviewing our respective ER diagrams as well as reviewing the tables, business need for our new venture, and ensuring we met the timeline and scope of our project.</p> <p>Given the constraints of our team, our responsibilities frequently intertwined, necessitating our joint involvement in all aspects of the project.</p>

SQL Statements

```
drop table if exists Feature;  
drop table if exists Video;  
drop table if exists Subscriber_profile;  
drop table if exists SubscriptionType;  
drop table if exists Genre;  
drop table if exists Devices;  
drop table if exists Login_devices;  
drop table if exists Playlist;  
drop table if exists LanguageType;  
drop table if exists Variant;  
drop table if exists Short;  
drop table if exists Video_music;  
drop table if exists Video_genre;
```

```
CREATE TABLE Video (  
video_id int4,  
duration time,  
rating varchar(5),  
title varchar(100),  
PRIMARY KEY (video_id)  
);
```

```
CREATE TABLE Feature (
    feature_id int4,
    resolution varchar(10),
    aspect_ratio varchar(10),
    video_id int4,
    PRIMARY KEY (feature_id),
    CONSTRAINT FK_feature_video_id
        FOREIGN KEY (video_id )
        REFERENCES Video(video_id)
);
```

```
CREATE TABLE Subscriber_profile (
    subscriber_id int4,
    first_name varchar(100),
    last_name varchar(100),
    email varchar(50),
    phone_number char(10),
    PRIMARY KEY (subscriber_id)
);
```

```
CREATE TABLE SubscriptionType (
    subscription_id int4,
    subscriber_id int4,
    subscription_plan varchar(10),
    start_date date,
    end_date date,
```

```
username varchar(100),  
passcode char(10),  
PRIMARY KEY (subscription_id),  
CONSTRAINT FK_Subscription_subscriber_id  
FOREIGN KEY (subscriber_id)  
REFERENCES Subscriber_profile(subscriber_id)  
);
```

```
CREATE TABLE Genre (  
genre_id int4,  
genre_type varchar(50),  
PRIMARY KEY (genre_id)  
);
```

```
CREATE TABLE Devices (  
device_id int4,  
device_name varchar(20),  
device_owner varchar(100),  
last_login timestamp,  
subscriber_id int4,  
PRIMARY KEY (device_id),  
CONSTRAINT FK_Devices_subscriber_id  
FOREIGN KEY (subscriber_id)  
REFERENCES Subscriber_profile(subscriber_id)  
);
```

```
CREATE TABLE login_devices (
    login_device_id int4,
    subscription_id int4,
    device_id int4,
    PRIMARY KEY (login_device_id),
    CONSTRAINT FK_login_devices_device_id
        FOREIGN KEY (device_id)
            REFERENCES Devices(device_id),
    CONSTRAINT FK_login_devices_subscription_id
        FOREIGN KEY (subscription_id)
            REFERENCES SubscriptionType(subscription_id)
);
```

```
CREATE TABLE Playlist (
    playlist_id int4,
    subscriber_id int4,
    playlist_name varchar(100),
    video_id int4,
    PRIMARY KEY (playlist_id),
    CONSTRAINT FK_playlist_subscriber_id
        FOREIGN KEY (subscriber_id)
            REFERENCES Subscriber_profile(subscriber_id),
    CONSTRAINT FK_playlist_video_id
        FOREIGN KEY (video_id)
            REFERENCES Video(video_id)
);
```

```
CREATE TABLE LanguageType (
language_id int4,
language_name varchar(50),
subtitle text,
PRIMARY KEY (language_id)
);
```

```
CREATE TABLE Variant (
version_number int4,
language_id int4,
video_id int4,
PRIMARY KEY (version_number),
CONSTRAINT FK_version_video_id
FOREIGN KEY (video_id)
REFERENCES Video(video_id),
CONSTRAINT FK_Version_language_id
FOREIGN KEY (language_id)
REFERENCES LanguageType(language_id)
);
```

```
CREATE TABLE Short (
shorts_id int4,
view_count serial,
like_count serial,
duration time,
description text,
video_id int4,
PRIMARY KEY (shorts_id),
CONSTRAINT FK_short_video_id
FOREIGN KEY (video_id)
REFERENCES Video(video_id )
);
```

```
CREATE TABLE Video_music (  
    music_id int4,  
    video_id int4,  
    artist varchar(100),  
    audio_track varchar(150),  
    duration time,  
    PRIMARY KEY (music_id),  
    CONSTRAINT FK_music_video_id  
        FOREIGN KEY (video_id)  
        REFERENCES Video(video_id)  
);
```

```
CREATE TABLE Video_genre (   
    genre_id int4,  
    video_id int4,  
    PRIMARY KEY (genre_id, video_id),  
    CONSTRAINT FK_video_genre_video_id  
        FOREIGN KEY (video_id)  
        REFERENCES Video(video_id),  
    CONSTRAINT FK_genre_id  
        FOREIGN KEY (genre_id)  
        REFERENCES Genre(genre_id)  
);
```

SQL TABLES

Figure 1: Subscription Type

	subscription_id	subscriber_id	subscription_plan	start_date	end_date	username	passcode
1	1	101	Premium	2023-01-01	2024-01-01	JohnDoe	A1B2C3D4E5
2		2	Basic	2023-02-01	2024-02-01	AliceSmith	F6G7H8I9J0
3		3	Premium	2023-03-01	2024-03-01	BobJohnson	X1Y2Z3A4B5
4		4	Basic	2023-01-15	2024-01-15	CaraWhite	R6S7T8U9V0
5		5	Premium	2023-04-10	2024-04-10	DavidBrown	M1N2O3P4Q5
6		6	Basic	2023-02-20	2024-02-20	EvaGreen	L6K7J8H9I0
7		7	Premium	2023-01-25	2024-01-25	FrankWright	W1X2Y3Z4A5
8		8	Basic	2023-03-15	2024-03-15	GraceChen	C6D7E8F9G0
9		9	Premium	2023-02-28	2024-02-28	HarryStone	Z1A2B3C4D5
10		10	Basic	2023-05-01	2024-05-01	IvyLopez	T6U7V8W9X0
11		11	Premium	2023-04-05	2024-04-05	JackMiller	N1M2O3P4Q5
12		12	Basic	2023-03-21	2024-03-21	KaraGrey	J6K7L8M9N0
13		13	Premium	2023-02-18	2024-02-18	LiamClarke	Q1R2S3T4U5
14		14	Basic	2023-05-10	2024-05-10	MiaWatson	I6H7J8K9L0
15		15	Premium	2023-03-30	2024-03-30	NoahWilson	H1G2F3E4D5
16		16	Basic	2023-02-14	2024-02-14	OliviaHarris	S6T7U8V9W0
17		17	Premium	2023-05-20	2024-05-20	PaulLee	D1C2B3A4Z5
18		18	Basic	2023-01-20	2024-01-20	QuinnAdams	R6S7T8U9V0
19		19	Premium	2023-04-22	2024-04-22	RitaKing	A1B2C3D4E5
20		20	Basic	2023-03-05	2024-03-05	SamTaylor	F6G7H8I9J0
21		21	Premium	2023-01-10	2024-01-10	TinaMartin	X1Y2Z3A4B5
22		22	Basic	2023-04-18	2024-04-18	UmaBaker	R6S7T8U9V0
23		23	Premium	2023-02-10	2024-02-10	VictorJones	M1N2O3P4Q5
24		24	Basic	2023-01-28	2024-01-28	WendyChu	L6K7J8H9I0

Figure 2: Subscriber Profile

	subscriber_id	first_name	last_name	email	phone_number
1	101	John	Doe	john.doe@email.com	1234567890
2	102	Alice	Smith	alice.smith@email.com	1234567891
3	103	Bob	Johnson	bob.johnson@email.com	1234567892
4	104	Cara	White	cara.white@email.com	1234567893
5	105	David	Brown	david.brown@email.com	1234567894
6	106	Eva	Green	eva.green@email.com	1234567895
7	107	Frank	Wright	frank.wright@email.com	1234567896
8	108	Grace	Chen	grace.chen@email.com	1234567897
9	109	Harry	Stone	harry.stone@email.com	1234567898
10	110	Ivy	Lopez	ivy.lopez@email.com	1234567899
11	111	Jack	Miller	jack.miller@email.com	1234567800
12	112	Kara	Grey	kara.grey@email.com	1234567801
13	113	Liam	Clarke	liam.clarke@email.com	1234567802
14	114	Mia	Watson	mia.watson@email.com	1234567803
15	115	Noah	Wilson	noah.wilson@email.com	1234567804
16	116	Olivia	Harris	olivia.harris@email.com	1234567805
17	117	Paul	Lee	paul.lee@email.com	1234567806
18	118	Quinn	Adams	quinn.adams@email.com	1234567807
19	119	Rita	King	rita.king@email.com	1234567808
20	120	Sam	Taylor	sam.taylor@email.com	1234567809
21	121	Tina	Martin	tina.martin@email.com	1234567810
22	122	Uma	Baker	uma.baker@email.com	1234567811
23	123	Victor	Jones	victor.jones@email.com	1234567812
24	124	Wendy	Chu	wendy.chu@email.com	1234567813

Figure 3: Video

	video_id	duration	rating	title
1	201	00:15:00	4.5	Sunset Dreams
2	202	00:45:00	4.7	Rise of the Mountains
3	203	01:30:00	4.2	The Silent City
4	204	00:22:00	4.8	Whispers in the Wind
5	205	00:10:00	4.6	Dance of the Fireflies
6	206	00:50:00	4.4	Mysteries of the Deep
7	207	01:15:00	4.9	The Lost Civilization
8	208	00:55:00	4.3	Beyond the Stars
9	209	01:00:00	4.1	The Last Wilderness
10	210	00:20:00	4.0	Echoes of the Past
11	211	00:35:00	4.7	Guardians of the Forces
12	212	00:25:00	4.8	Journey to the Unknown
13	213	00:40:00	4.6	Realm of Shadows
14	214	00:32:00	4.5	Sands of Time
15	215	01:00:00	4.3	The Great Expedition
16	216	00:42:00	4.9	Voices of the Ancestors
17	217	00:30:00	4.2	Waves of Change
18	218	00:45:00	4.4	Embers of Memory
19	219	01:12:00	4.1	Flight of Destiny
20	220	00:15:00	4.0	Glimpse of Eternity
21	221	01:00:00	4.5	Harmony of Elements
22	222	00:28:00	4.6	Invisible Ties
23	223	00:50:00	4.7	Kingdom of Echoes
24	224	01:25:00	4.8	Legacy of the Titans

Figure 4: Playlist

	playlist_id	subscriber_id	playlist_name	video_id
1	901	101	John Favorites	201
2	902	102	Alice Chill Music	202
3	903	103	Bob Workout Tracks	203
4	904	104	Cara Night Vibes	204
5	905	105	David Top 10	205
6	906	106	Eva Jams	206
7	907	107	Frank Rock Classics	207
8	908	108	Grace Morning Mix	208
9	909	109	Harry RnB Selection	209
10	910	110	Ivy Golden Hits	210
11	911	111	Jack Sleep Mix	211
12	912	112	Kara Weekend Tunes	212
13	913	113	Liam Country Picks	213
14	914	114	Mia Study Music	214
15	915	115	Noah Shower Singal	215
16	916	116	Olivia Dance Mix	216
17	917	117	Paul Mood Boosters	217
18	918	118	Quinn Indie Discover	218
19	919	119	Rita Romantic Tracks	219
20	920	120	Sam Nostalgia Trip	220
21	921	121	Tina Pop Queens	221
22	922	122	Uma Jazz Night	222
23	923	123	Victor Hiking Mix	223
24	924	124	Wendy Workout Pur	224

Figure 5: Features

	feature_id	resolution	aspect_ratio	video_id
1	301	1080p	16:9	201
2	302	720p	16:9	202
3	303	4K	16:9	203
4	304	1080p	16:9	204
5	305	480p	4:3	205
6	306	4K	16:9	206
7	307	720p	16:9	207
8	308	1080p	4:3	208
9	309	4K	16:9	209
10	310	720p	4:3	210
11	311	1080p	16:9	211
12	312	480p	4:3	212
13	313	4K	16:9	213
14	314	1080p	16:9	214
15	315	720p	16:9	215
16	316	480p	4:3	216
17	317	4K	16:9	217
18	318	1080p	16:9	218
19	319	720p	4:3	219
20	320	480p	4:3	220
21	321	4K	16:9	221
22	322	1080p	16:9	222
23	323	720p	16:9	223

Figure 6: Devices

	device_id	device_name	device_owner	last_login	subscriber_id
1	501	iPhone 12	John Doe	2023-10-15 10:00:00.000	101
2	502	Samsung S21	Alice Smith	2023-10-14 12:15:00.000	102
3	503	iPad Pro	Bob Johnson	2023-10-13 14:30:00.000	103
4	504	MacBook Pro	Cara White	2023-10-12 16:00:00.000	104
5	505	Dell Laptop	David Brown	2023-10-11 09:45:00.000	105
6	506	Huawei P30	Eva Green	2023-10-10 17:30:00.000	106
7	507	Pixel 5	Frank Wright	2023-10-09 19:15:00.000	107
8	508	Apple Watch	Grace Chen	2023-10-08 20:45:00.000	108
9	509	Samsung Tab	Harry Stone	2023-10-07 18:30:00.000	109
10	510	OnePlus 9	Ivy Lopez	2023-10-06 11:00:00.000	110
11	511	Sony Xperia	Jack Miller	2023-10-05 15:30:00.000	111
12	512	Xiaomi Mi	Kara Grey	2023-10-04 16:15:00.000	112
13	513	Surface Pro	Liam Clarke	2023-10-03 10:45:00.000	113
14	514	HP Laptop	Mia Watson	2023-10-02 09:15:00.000	114
15	515	Lenovo Yoga	Noah Wilson	2023-10-01 12:00:00.000	115
16	516	iPhone 11	Olivia Harris	2023-09-30 11:45:00.000	116
17	517	Mac Mini	Paul Lee	2023-09-29 14:00:00.000	117
18	518	Samsung A52	Quinn Adams	2023-09-28 15:45:00.000	118
19	519	iPad Air	Rita King	2023-09-27 16:30:00.000	119
20	520	Google Nest	Sam Taylor	2023-09-26 10:15:00.000	120
21	521	LG Phone	Tina Martin	2023-09-25 17:00:00.000	121
22	522	Apple TV	Uma Baker	2023-09-24 09:30:00.000	122
23	523	Fire Stick	Victor Jones	2023-09-23 18:45:00.000	123

Figure 7: Genre

genre 1 ×

select * from Genre | Enter a SQL expression

Grid	genre_id	genre_type
1	401	Action
2	402	Adventure
3	403	Animation
4	404	Biography
5	405	Comedy
6	406	Crime
7	407	Documentary
8	408	Drama
9	409	Family
10	410	Fantasy
11	411	Film-Noir
12	412	History
13	413	Horror
14	414	Music
15	415	Musical
16	416	Mystery
17	417	Romance
18	418	Sci-Fi
19	419	Short Film
20	420	Sport
21	421	Superhero
22	422	Thriller
23	423	War

Record

Refresh Save Cancel

Figure 8: Login devices

login_devices 1 ×

select * from login_devices | Enter a SQL expression to filter results (0)

Grid	login_device_id	subscription_id	device_id
1	701	1	501
2	702	2	502
3	703	3	503
4	704	4	504
5	705	5	505
6	706	6	506
7	707	7	507
8	708	8	508
9	709	9	509
10	710	10	510
11	711	11	511
12	712	12	512
13	713	13	513
14	714	14	514
15	715	15	515
16	716	16	516
17	717	17	517
18	718	18	518
19	719	19	519
20	720	20	520
21	721	21	521
22	722	22	522
23	723	23	523

Record

Refresh Save Cancel

Figure 9: Language type

language 1 ×

select * from languagetype | Enter a SQL expression to filter results (use Ctrl+Space)

Grid	language_id	language_name	subtitle
1	1,001	English	Subtitle in English
2	1,002	Spanish	Subtítulo en Español
3	1,003	French	Sous-titre en Français
4	1,004	German	Untertitel auf Deutsch
5	1,005	Chinese	中文字幕
6	1,006	Japanese	日本語の字幕
7	1,007	Korean	한국어 자막
8	1,008	Russian	Русские субтитры
9	1,009	Arabic	الترجمة العربية
10	1,010	Hindi	हिन्दी में उपशोर्तक
11	1,011	Portuguese	Legenda em Português
12	1,012	Italian	Sottotitoli in Italiano
13	1,013	Dutch	Ondertiteling in het Nederlands
14	1,014	Swedish	Svensk textning
15	1,015	Danish	Dansk undertekst
16	1,016	Finnish	Tekstitys suomeksi
17	1,017	Norwegian	Norsk undertekst
18	1,018	Polish	Napisy w języku polskim
19	1,019	Turkish	Türkçe altyazı
20	1,020	Greek	Υπότιτλοι στα Ελληνικά
21	1,021	Hebrew	תרגומות בעברית
22	1,022	Thai	ซับไตเติลภาษาไทย
23	1,023	Hungarian	Magyar felirat

Figure 10: Variant

variant 1 ×

select * from Variant | Enter a SQL expression to filter results (use Ctrl+Space)

Grid	version_number	language_id	video_id
1	3,001	1,001	201
2	3,002	1,002	201
3	3,003	1,003	201
4	3,004	1,001	202
5	3,005	1,004	202
6	3,006	1,005	202
7	3,007	1,001	203
8	3,008	1,006	203
9	3,009	1,007	203
10	3,010	1,001	204
11	3,011	1,008	204
12	3,012	1,009	204
13	3,013	1,001	205
14	3,014	1,010	205
15	3,015	1,011	205
16	3,016	1,001	206
17	3,017	1,012	206
18	3,018	1,013	206
19	3,019	1,001	207
20	3,020	1,014	207
21	3,021	1,015	207
22	3,022	1,001	208
23	3,023	1,016	208

Figure 11: Shorts

short 1 ×

select * from Short | Enter a SQL expression to filter results (use Ctrl+Space)

	shorts_id	view_count	like_count	duration	description	video_id
Grid	1	2,001	1	00:00:15	Beautiful landscape views	201
Text	2	2,002	2	00:00:20	A day in the life	202
Text	3	2,003	3	00:00:30	Amazing city lights	203
Text	4	2,004	4	00:00:10	Delicious food recipes	204
Text	5	2,005	5	00:00:45	Wildlife adventures	205
Text	6	2,006	6	00:00:25	Mountain hiking experience	206
Text	7	2,007	7	00:00:15	Soothing ocean waves	207
Text	8	2,008	8	00:00:40	Stunning sunset views	208
Text	9	2,009	9	00:00:12	Cute animal moments	209
Text	10	2,010	10	00:00:50	Desert exploration	210
Text	11	2,011	11	00:00:18	Snowy winter scenes	211
Text	12	2,012	12	00:00:22	Tropical paradise adventures	212
Text	13	2,013	13	00:00:30	Captivating forest scenes	213
Text	14	2,014	14	00:00:24	Astounding waterfall moments	214
Text	15	2,015	15	00:00:35	Star gazing in the desert	215
Text	16	2,016	16	00:00:15	A thrilling roller-coaster ride	216
Text	17	2,017	17	00:00:45	Birds flying in formation	217
Text	18	2,018	18	00:00:20	Underwater marine life	218
Text	19	2,019	19	00:00:25	Cloud formations timelapse	219
Text	20	2,020	20	00:00:12	Dancing in the rain	220
Text	21	2,021	21	00:00:38	Stunning architecture tour	221
Text	22	2,022	22	00:00:15	A walk through flower fields	222
Text	23	2,023	23	00:00:40	Skydiving adrenaline rush	223
Text	24	2,024	24	00:00:30	Galaxy of colorful balloons	224
Record						
	Refresh	Save	Cancel	< >	Export data	200
						30
						30 row(s) f

Figure 12: Video_Music

grid video_music 1

select * from video_music Enter a SQL expression to filter results (use Ctrl+Space)

Grid	music_id	video_id	artist	audio_track	duration
1	4,001	201	Taylor Swift	Love Story	00:03:56
2	4,002	202	The Beatles	Hey Jude	00:07:04
3	4,003	203	Adele	Someone Like You	00:04:45
4	4,004	204	Ed Sheeran	Shape of You	00:03:53
5	4,005	205	Elton John	Rocket Man	00:04:40
6	4,006	206	Bruno Mars	Uptown Funk	00:04:30
7	4,007	207	Billy Joel	Piano Man	00:05:37
8	4,008	208	Madonna	Like a Prayer	00:05:40
9	4,009	209	Beyonce	Halo	00:04:21
10	4,010	210	Coldplay	Yellow	00:04:29
11	4,011	211	Lady Gaga	Bad Romance	00:04:54
12	4,012	212	Michael Jackson	Billie Jean	00:04:54
13	4,013	213	Queen	Bohemian Rhapsody	00:05:55
14	4,014	214	Rihanna	Diamonds	00:03:45
15	4,015	215	U2	With Or Without You	00:04:56
16	4,016	216	Whitney Houston	I Will Always Love You	00:04:31
17	4,017	217	Prince	Purple Rain	00:08:41
18	4,018	218	Katy Perry	Firework	00:03:48
19	4,019	219	Ariana Grande	Thank U, Next	00:03:27
20	4,020	220	David Bowie	Heroes	00:06:07
21	4,021	221	Maroon 5	Sugar	00:03:55
22	4,022	222	Nirvana	Smells Like Teen Spirit	00:05:01
23	4,023	223	Dua Lipa	Dont Start Now	00:03:03

grid video_genre 1

select * from Video_Genre Enter a SQL expression to filter results (use Ctrl+Space)

Grid	genre_id	video_id
1	401	201
2	402	202
3	403	203
4	404	204
5	405	205
6	406	206
7	407	207
8	408	208
9	409	209
10	410	210
11	411	211
12	412	212
13	413	213
14	414	214
15	415	215
16	416	216
17	417	217
18	418	218
19	419	219
20	420	220
21	421	221
22	422	222
23	423	223

Figure 13: Video_Music

grid video_music 1

select * from video_music Enter a SQL expression to filter results (use Ctrl+Space)

Grid	music_id	video_id
1	4,001	201
2	4,002	202
3	4,003	203
4	4,004	204
5	4,005	205
6	4,006	206
7	4,007	207
8	4,008	208
9	4,009	209
10	4,010	210
11	4,011	211
12	4,012	212
13	4,013	213
14	4,014	214
15	4,015	215
16	4,016	216
17	4,017	217
18	4,018	218
19	4,019	219
20	4,020	220
21	4,021	221
22	4,022	222
23	4,023	223

grid video_genre 1

select * from Video_Genre Enter a SQL expression to filter results (use Ctrl+Space)

Grid	genre_id	video_id
1	401	201
2	402	202
3	403	203
4	404	204
5	405	205
6	406	206
7	407	207
8	408	208
9	409	209
10	410	210
11	411	211
12	412	212
13	413	213
14	414	214
15	415	215
16	416	216
17	417	217
18	418	218
19	419	219
20	420	220
21	421	221
22	422	222
23	423	223