



# CS 321: Object Oriented Programming 2 Report

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## Audio Vibe



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Academic year 1445 – 2023/2024



## Introduction:

Introducing Audio Vibe, a comprehensive Java-based solution poised to transform podcast management and enjoyment. This innovative system utilizes a robust database to meticulously track every aspect of podcasts, including titles, hosts, publication dates, and episode counts, ensuring a seamless browsing experience. Leveraging Java's capabilities, the system integrates interest-based surveys to enable users to effortlessly discover the most popular podcasts tailored to their preferences. Whether you're a dedicated listener or an administrator, the Audio Vibe offers a suite of unique features, including playlist organization, category modification, and user creation, all designed to enhance your podcasting journey.

## Goals:

- 1. User-Friendly interface:** Create an intuitive and easy-to-use interface that ensures a seamless browsing experience for users of all levels.
- 2. Scalability and Performance:** Ensure that the system is scalable and performs efficiently even with a large number of users and podcasts.
- 3. User Satisfaction:** Strive to achieve high levels of user satisfaction by delivering a reliable, user-friendly, and feature-rich podcast management solution.
- 4. Simplify Management for Users and Administrators:** Ensure that both users and administrators can easily navigate and manage the system, with intuitive interfaces and streamlined processes.

## Tools:

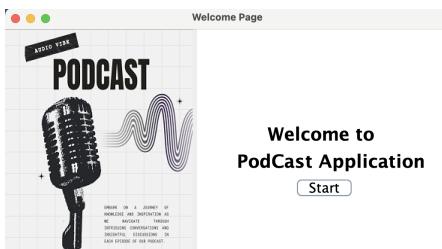
- NetBeans
- MySQL
- Wondershare EdrawMax

## Systems Users (Actors):

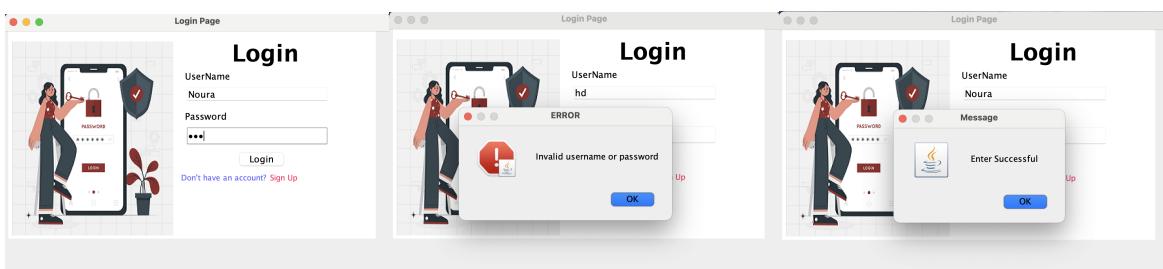


	User	Privileges
1	Admin	<ul style="list-style-type: none"> <li>Manage user accounts and permissions.</li> <li>Add, edit, or remove audio content and categories.</li> <li>Monitor and moderate user-created playlists.</li> <li>Participate in program administration and oversight.</li> </ul>
2	User	<ul style="list-style-type: none"> <li>View and update their own profile details.</li> <li>Listen to audio content and explore categories.</li> <li>Use program features and create playlists.</li> <li>Create and manage personal playlists.</li> <li>Interact with program features and content.</li> </ul>

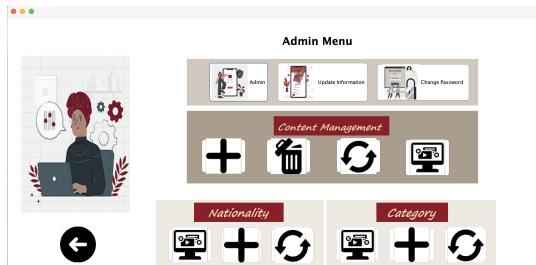
## Interfaces:



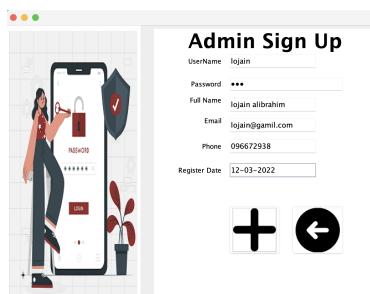
1. Welcome Interface: The initial interface featuring the file open option as the greeting message.



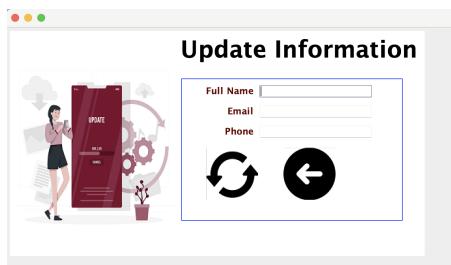
2. Login Interface: This secondary interface enables both administrators and end users to access and utilize their respective privileges. If the user is not registered in the database, an error message will be displayed. Otherwise, a success message will confirm their login.



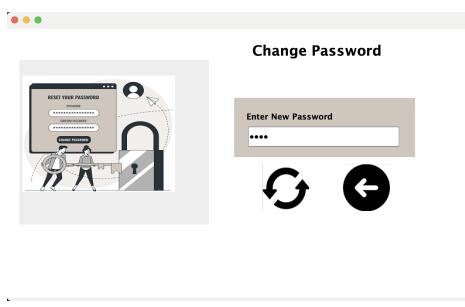
**3. Admin Interface:** This interface facilitates various administrative tasks such as registering new administrators, updating existing admin information or passwords, as well as managing content, nationalities, and categories through options to add, delete, update, or display.



**4. Admin Sign Up Interface:** This interface is specifically designed for registering new administrators into the database.



**5. Update Information Interface:** This interface is dedicated to modifying the personal information of administrators.



**6. Change Password Interface:** This interface is accessible both in the admin menu and for end users, allowing them to change their password and update the database with the new one.



**7. Add Podcast Interface:** This interface enables administrators to add new podcasts to the database for end users.

Sound ID	URL	Podcast	episode%	albumName	users	Hoster	Podcast	podcast_id	rate
3	Http://.../5	Market	1105	Soul	123	SA 19	21-06-...		54 19
3	Http://.../4	Market	1105	Soul	123	SA 18	21-06-...		54 18
3	Http://.../3	FoodCast	1107	Amer S...	20	FoodC...	07-01-...		54 07
3	Http://.../4	Jreya	1109	Moham...	10	Moham...	10-04-...		54 10
3	Http://.../4	Market	1111	Soul	123	SA 11	26-07-...		54 11
3	Http://.../4	Market	1111	Soul	123	SA 10	26-07-...		54 10
7	Http://.../5	Smartless	1113	joseph...	20	JAM G...	21-03-...		54 21
7	Http://.../5	Smartless	1113	joseph...	20	JAM G...	21-03-...		54 21
7	Http://.../4	Market	1115	Moham...	10	Moham...	21-05-...		54 21
7	Http://.../4	FoodCast	1115	Amer S...	20	FoodC...	11-02-...		54 11
7	Http://.../5	Smartless	1123	joseph...	20	JAM G...	09-03-...		54 09
7	Http://.../5	Smartless	1123	joseph...	20	JAM G...	09-03-...		54 09
7	Http://.../5	Smartless	1125	Abdul...	10	Abdul...	14-02-...		54 14
7	Http://.../5	Smartless	1125	Abdul...	10	Abdul...	14-02-...		54 14
8	Http://.../5	How to -	1127	The Akl...	2	How to -	05-10-...		54 05
8	Http://.../5	How to -	1128	The Akl...	7	How to -	05-10-...		54 05
8	Http://.../5	How to -	1129	The Akl...	7	How to -	05-10-...		54 05
8	Http://.../5	How to -	1129	The Akl...	7	How to -	05-10-...		54 05

**8. Display Sounds Interface:** This interface allows administrators to view the current sounds that have been added to the database for end users.

Sound ID	URL	Podcast	episode%	albumName	users	Hoster	Podcast	podcast_id	rate
1	Http://.../5	Market	1105	Soul	123	SA 19	21-06-...		54 19
5	Http://.../5	FoodCast	1102	Amer Sh...	20	FoodC...	14-01-...		54 14
5	Http://.../3	FoodCast	1104	Amer Sh...	20	FoodC...	04-02-...		54 04
5	Http://.../4	Jreya	1108	Moham...	10	Moham...	21-03-...		54 21
5	Http://.../4	Jreya	1110	Moham...	10	Moham...	21-03-...		54 21
5	Http://.../4	Market	1112	Soul	123	SA 10	26-07-...		54 26
5	Http://.../4	FoodCast	1114	Amer Sh...	20	FoodC...	11-02-...		54 11
5	Http://.../5	Smartless	1112	joseph...	20	JAM G...	01-04-...		54 01
7	Http://.../5	Smartless	1114	joseph...	20	JAM G...	01-04-...		54 01
7	Http://.../5	Smartless	1116	Soul	123	SA 19	21-03-...		54 21
7	Http://.../4	Market	1118	Soul	123	SA 18	21-03-...		54 21
7	Http://.../4	FoodCast	1119	Amer Sh...	20	FoodC...	11-02-...		54 11

**9. Delete Podcast Interface:** This interface facilitates the removal of podcasts from the database.

Category ID	Category Name
1	song
2	movie
3	play
4	Educational
5	Food
6	Family
7	Self improvement

Nationality ID	Nationality Name
1	Saudi Arabia
2	United Arab Emirates
3	Qatar
4	Pakistan
5	UAE
6	Afghanistan
7	Angola
8	Albania
9	Andorra
10	Armenia
11	Argentina
12	Bahrain
13	Bangladesh
14	Bosnia and Herzegovina
15	Bulgaria
16	Cambodia
17	Chile
18	China
19	Croatia
20	Kuwait

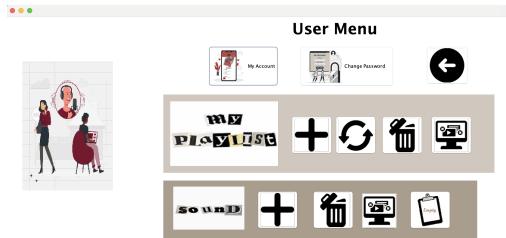
Category ID	Category Name
1	song
2	movie
3	play
4	Educational
5	Food
6	Family
7	Self improvement

Nationality ID	Nationality Name
1	Saudi Arabia
2	United Arab Emirates
3	Qatar
4	Pakistan
5	UAE
6	Afghanistan
7	Angola
8	Albania
9	Andorra
10	Argentina
11	Armenia
12	Bahrain
13	Bangladesh
14	Bosnia and Herzegovina
15	Bulgaria
16	Cambodia
17	Chile
18	China
19	Croatia
20	Kuwait

**10. Nationality and Category Interfaces:** These interfaces provide functionality to display, add, or update nationality and category values within the database.

**11. Sign Up and QA Interfaces:** The Sign-Up interface allows new end users to register. After submitting their information, the QA (Questions and Answers) interface is displayed to gather preferences from the user.



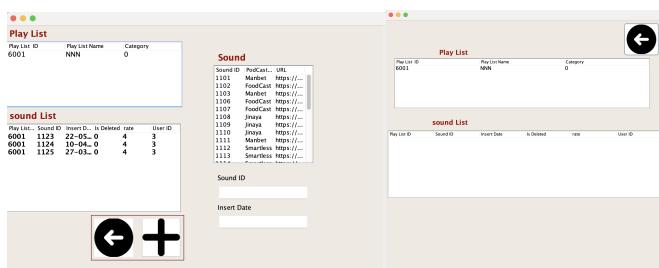
**12. User Menu Interface:** This interface is dedicated to end users and includes options such as 'My Account', 'Change Password', as well as functionalities for adding, updating, deleting, and displaying their own playlists and sounds.



**13. My Account Interface:** This interface is designed to retrieve the current user's personal information from the database.



**14. Playlist Interfaces:** These interfaces enable users to add, update, delete, and display playlists they've created from the available sounds.



**15. Sound Interfaces:** These interfaces facilitate actions such as adding, deleting, displaying, or emptying the list of sounds.



## The Databases of the application

### Mapping for tables:



### tables:

#### 1- Users:

User_id	Username	Password	regdate	phone	Email	loginstatus	user_type
1	shatha	123	1/1/2024	0096765	shataa@gmail.com	0	1
2	lojain	876	6/1/2022	0096530	Loj2@gmail.com	0	1
3	Noura	789	18/3/2022	0096653	noura112@gmail.com	0	2
4	shahad	479	28/5/2022	0096007	Shahad21@gmail.com	0	2
5	Amal	983	10/7/2023	0096987	Amal.5@gmail.com	0	2
6	Reema	783	8/3/2024	0096955	Reema45@gmail.com	0	2
7	Rahaf	003	2/1/2022	0096667	Rahaff22@gmail.com	0	2
8	Reem	1111	23/4/2023	0096674	reem@gmail.com	0	2
9	Shikah	1260	2/8/2023	009694	Shikah@gmail.com	0	2
10	jumanah	1911	2/4/2021	0096008	jojo984@gmail.com	0	2
11	sondos	9484	5/3/2023	0096986	soso998@gmail.com	0	2
12	rfeef	23500	20/11/20...	0096238	fofo34@gmail.com	0	2
13	jood	2311	24/12/20...	0096932	jood334@gmail.com	0	2
14	Laila	6841	11/1/2021	0096655	laila32@gmail.com	0	2
15	Reemas	5511	7/6/2022	009669...	Reemas@gmail.com	0	2

The "Users" table contains information about registered users in the system. This includes basic data, and the "Users" table is used to manage user accounts, perform operations such as login, update personal information, reset passwords, and other functions related to user management in application.



## 2- user\_type:

type_id	type_desc
1	admin
2	user

The "user\_type" table stores information related to the types of users within the system. This table includes fields user type ID, user type name. It serves to classify users into different categories based on their access levels within the system.

## 3- Admin:

Admin_id	Admin_name
1	shatha ahmed
2	lojain

The "Admin" table in contains information about administrators within the system. This table is used to manage administrator accounts, facilitate login, and execute operations related to system administration and control.

## 4- End\_user:

name	address	DOB	POB	Gender	Nat_id	user_id
Noura	Saudi Arabia	18/03/2003	Khobar	F	1	3
shahad	Kuwait	28/05/2003	Al Jahra	F	20	4
Amal	Saudi Arabia	10/07/2003	Dhahran	F	1	5
Reema	Qatar	01/04/1996	Doha	F	3	6
Rahaf	UAE	01/11/1998	Dubai	F	2	7
Reem	Saudi Arabia	02/08/1999	Riyad	F	1	8
Shikah	Jordan	22/11/1990	beirut	F	5	9
jumanah	Kuwait	01/04/1996	Ali sabah alsalem	F	20	10
sondos	Qatar	13/9/2004	alrayan	F	3	11
rfeef	UAE	24/10/1994	abu dhabi	F	2	12
jood	Armenia	14/01/2006	yerevan	F	13	13
Laila	Austria	24/8/1999	vienna	F	19	14
Reemas	Australia	14/06/2000	canberra	F	18	15

The "End\_user" table stores information about end users who interact with the application. It includes fields such as username, password, email address, and more. This table is utilized for managing end user accounts, enabling user authentication, and handling various user-related operations within the system.



## 5- Nationality:

nat_id	nat_name
1	Saudi Arabia
2	United Arab Emirates
3	Qater
4	Palestine
5	Jordan
6	Afghanistan
7	Angola
8	Anguilla
9	Albania
10	Andorra
11	Netherlands Antilles
12	Argentina
13	Armenia
14	American Samoa
15	Antarctica
16	French Southern ter...
17	Antigua and Barbuda
18	Australia
19	Austria
20	Kuwait

The "Nationality" table contains information about different nationalities. It include fields nationality ID, nationality name. This table is useful for categorizing and managing information related to different nationalities.

## 6- Randomqas:

episodesno	podcastprogram...	chooseintre...	listenORwatch	nonArabic	User_id
3	8	food	watch	yes	3
4	4	comedy	listen	No	4
5	5	Comedy	listen	yes	5
2	3	Stories	listen	No	6
2	9	Stories	listen	yes	7
10	10	Food	watch	yes	8
1	5	History	listen	yes	9
7	20	song	listen	yes	10
3	9	Comedy	listen	no	11
1	1	movie	watch	no	12
2	8	Stories	listen	yes	13
5	7	Self improv...	listen	yes	14
8	9	Educational	watch	yes	15

The "Randomqas" table is a table of random questions and answers. It is used when a new user registers to find out their podcast preferences.



## 7- Playlist:

PL_id	PL_name	isdeleted	cat_id	creation_da...	user_id
1001	Sh-list	0	2	2023-07-02	4
1009	JoodList	0	3	2022-04-24	13
1011	ShStories	0	3	2023-07-01	4
2001	Amallist	0	1	2023-02-12	5
2004	S-List	0	4	2023-03-02	11
3001	ReemList	0	4	2023-07-02	8
3002	RafeefList	0	3	2020-04-12	12
4001	Therapy	0	2	2023-10-09	7
4005	Laila-List	0	5	2022-03-18	14
5001	RList	0	3	2023-01-01	6
6001	NNN	0	3	2023-03-18	3
7001	improve...	0	8	2023-07-06	6
8001	ShikahL	0	6	2023-07-03	9
9001	ShList	0	1	2023-06-28	4
10001	JojoList	0	7	2023-07-04	10

The "Playlist" table in stores information related to playlists used in podcast application. It may include fields such as playlist ID, playlist name, creation date, and more. This table allows users to create, manage, and share playlists, and it facilitates operations such as adding or removing podcast from playlists, organizing playlists into categories, and controlling access to playlists.

## 8- playlist\_sound:

PL_id	sound_id	insert_date	isdeleted	Rate	user_id
1001	1116	21-03-2024	0	4	4
1001	1117	15-02-2024	0	5	4
1001	1119	02-09-2023	0	4	4
1001	1120	11-10-2023	0	4	4
2001	1103	01-07-2023	0	5	5
2001	1106	13-02-2024	0	4	5
2001	1107	30-01-2024	0	4	5
2001	1108	15-01-2024	0	5	5
2001	1109	05-02-2024	0	3	5
2001	1110	10-01-2024	0	4	5
4001	1111	02-04-2024	0	5	7
4001	1112	26-03-2024	0	5	7
4001	1113	19-03-2024	0	5	7
4001	1114	12-03-2024	0	5	7
4001	1115	05-03-2024	0	5	7
5001	1101	10-04-2024	0	4	6
5001	1102	05-04-2024	0	4	6
6001	1123	22-05-2023	0	4	3
6001	1124	10-04-2023	0	4	3
6001	1125	27-03-2023	0	4	3



**The playlist\_sound table connects sound episodes with playlists. It records the association between sound episodes ('sound\_id') and playlists ('PL\_id'), along with additional details such as the insertion date, user rating, and user ID who added the episode to the playlist. This table ensures data integrity by using foreign key constraints to link PL\_id to the playlist table, sound\_id to the sound table, and user\_id to the users table.**

## 9- sound:

PodcastType	Url_id	rate	albumName	singer	PodcastName	sound_id	Hoster	PodcastEpisod...	episodeTitle	publishdate
3	https://podcasts.apple.com/sa/podcast/%D9%8...	5		NULL	Manbet	1101	Sowt	123	S4 E9	21-06-2022
5	https://podcasts.apple.com/sa/podcast/foodcast/...	5		NULL	FoodCast	1102	Amer Sherif	20	FoodCast9	14-01-2024
3	https://podcasts.apple.com/sa/podcast/%D9%8... 4			NULL	Manbet	1103	Sowt	123	S6 E8	07-03-2024
5	https://podcasts.apple.com/sa/podcast/foodcast/... 3			NULL	FoodCast	1106	Amer Sherif	20	FoodCast12	04-02-2024
5	https://podcasts.apple.com/sa/podcast/foodcast/... 4			NULL	FoodCast	1107	Amer Sherif	20	FoodCast8	07-01-2024
3	https://podcasts.apple.com/sa/podcast/%D8%A... 4			NULL	Jinaya	1108	MohamedAlbeez	30	Manzi mubark	27-03-2023
3	https://podcasts.apple.com/sa/podcast/%D8%A... 4			NULL	Jinaya	1109	MohamedAlbeez	30	Haqibah al ahlam	10-04-2023
3	https://podcasts.apple.com/sa/podcast/%D8%A... 4			NULL	Jinaya	1110	MohamedAlbeez	30	Khatem sulaiman	22-05-2023
3	https://podcasts.apple.com/sa/podcast/%D9%8... 4			NULL	Manbet	1111	Sowt	123	S4 E11	26-07-2022
7	https://podcasts.apple.com/us/podcast/kristen-st...	5		NULL	Smartless	1112	JasonBateman&SeanHayes&WillArnett	20	Kirsten Stewart	01-04-2024
7	https://podcasts.apple.com/us/podcast/jake-gyll... 5			NULL	Smartless	1113	JasonBateman&SeanHayes&WillArnett	20	Jake Gyllenhaal	25-03-2024
7	https://podcasts.apple.com/us/podcast/smartles... 5			NULL	Smartless	1114	JasonBateman&SeanHayes&WillArnett	20	John Oliver	18-03-2024
7	https://podcasts.apple.com/us/podcast/smartles... 5			NULL	Smartless	1115	JasonBateman&SeanHayes&WillArnett	20	Amy Schumer	11-03-2024
3	https://podcasts.apple.com/sa/podcast/%D9%8... 4			NULL	Manbet	1116	Sowt	123	S6 E10	21-03-2024
3	https://podcasts.apple.com/sa/podcast/%D9%8... 4			NULL	Manbet	1117	Sowt	123	S5 E8	10-07-2024
5	https://podcasts.apple.com/sa/podcast/foodcast/... 4			NULL	FoodCast	1119	Amer Sherif	20	FoodCast13	11-02-2024
5	https://podcasts.apple.com/sa/podcast/foodcast/... 4			NULL	FoodCast	1120	Amer Sherif	20	FoodCast11	28-01-2024
7	https://podcasts.apple.com/sa/podcast/smartles... 5			NULL	Smartless	1123	JasonBateman&SeanHayes&WillArnett	20	Josh Brolin	04-03-2024
7	https://podcasts.apple.com/sa/podcast/27-%D8%... 4			NULL	YsierKheir	1124	AbdullahAlhussain	10	#27	20-03-2024
7	https://podcasts.apple.com/sa/podcast/23-%D9%... 5			NULL	YsierKheir	1125	AbdullahAlhussain	10	#23	14-02-2024
3	https://podcasts.apple.com/sa/podcast/%D8%A... 5			NULL	Jinaya	1126	MohamedAlbeez	30	Wahsh al daherh	29-05-2023
8	https://podcasts.apple.com/us/podcast/how-to-b... 5			NULL	How to keep...	1127	The Atlantic	7	How to be self-a...	05-10-2021
8	https://podcasts.apple.com/us/podcast/how-to-k... 4			NULL	How to keep...	1128	The Atlantic	7	How to know yo...	12-10-2021
8	https://podcasts.apple.com/us/podcast/how-not-... 5			NULL	How to keep...	1129	The Atlantic	7	How not to be y...	19-10-2021
8	https://podcasts.apple.com/us/podcast/how-to-... 5			NULL	How to keep...	1130	The Atlantic	7	How to know th...	26-10-2021
8	https://podcasts.apple.com/us/podcast/how-to-... 5			NULL	How to keep...	1131	The Atlantic	7	How to find the...	02-11-2021
8	https://podcasts.apple.com/us/podcast/how-to-li... 5			NULL	How to keep...	1132	The Atlantic	7	How too live w...	09-11-2021
8	https://podcasts.apple.com/us/podcast/how-to-i... 5			NULL	How to keep...	1133	The Atlantic	7	How to identify...	23-11-2021
1	https://podcasts.apple.com/sa/podcast/lana-del-... 4		SONGS	Lana	UNRELEAS...	1134	NULL	4	NULL	19-08-2022
1	https://podcasts.apple.com/sa/podcast/taylor-sw... 4		Taylor	corboo	Taylor Swift...	1135	NULL	10	NULL	01-01-2022
4	https://podcasts.apple.com/sa/podcast/elts-pod... 5		IELTS	IELTS	IELTS Podcast	1136	Ben Worthington	20	NULL	20-02-2020
4	https://podcasts.apple.com/sa/podcast/voa-lear... 4		Learning E...	VOA Learnin...	VOA Learnin...	1137	Loie	20	NULL	20-02-2021
6	https://podcasts.apple.com/sa/podcast/islamic-h... 5		History	NULL	Islamic History	1138	Mohammed	93	NULL	01-03-2020
6	https://podcasts.apple.com/sa/podcast/the-rest-i... 3		HistoryR	NULL	The Rest Is...	1139	Tom,Dominic	611	NULL	12-02-2020
7	https://podcasts.apple.com/sa/podcast/gold-min... 5		ComedyP...	NULL	Gold Minds	1140	Kevin	140	NULL	20-06-2021
7	https://podcasts.apple.com/sa/podcast/the-daily-... 4		DailyPodcast	NULL	The Daily Sh...	1141	Jon	2000	NULL	16-04-2021
4	https://podcasts.apple.com/sa/podcast/english-l... 4		English Pr...	Con...	Listening Time	1142	Connor	154	What I Learned...	07-05-2024

**The 'sound' table is stores information about podcast episodes, including podcast link, rating, album name, artist, podcast name, podcast host, episode title, publication date, podcast type, and episode ID. Each episode is identified by a unique sound\_id. The PodcastType column refers to cat\_id in the categories table, categorizing each podcast episode. This table allows efficient storage and retrieval of podcast episodes, facilitating content management and user engagement.**

## 10- categories:

cat_id	cat_name
1	song
2	movie
3	Story
4	Educational
5	Food
6	History
7	Comedy
8	Self improvement

This table defines different categories of podcasts, such as "Music" or "History". Each category is assigned a unique identifier cat\_id along with a description cat\_name. It efficiently organizes podcasts by type or topic, making content discovery and user experience better.



### **Conclusion:**

In essence, Audio Vibe empowers users to not only explore the vast world of podcasts with unparalleled ease but also actively shapes their listening experience. With its commitment to user-friendliness and comprehensive functionality, Audio Vibe promises to be the ultimate companion for podcast enthusiasts and administrators alike.

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