

CERTIFICATE OF APPROVAL

This is to certify that the project work entitled "**ONLINE MUSIC WEBSITE**" is carried out by **Abunur Anchari** bearing Examination Roll No:**31620002**, of Dept. of Computer Science, NERIM, Guwahati under guidance of internal guide **Mrs. S. Lalitha**, Asst. Professor, Dept. of Computer Science, NERIM, Guwahati has been found satisfactory and is hereby approved as a project work carried out and presented in a manner required for its acceptance in partial fulfilment of course work of 5th semester of 3 years full time BCA under Dibrugarh University, Dibrugarh, Assam.

Internal Examiner

Date:

Place: NERIM, Guwahati

External Examiner

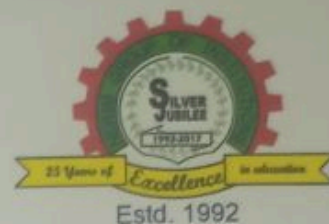
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CERTIFICATE FROM HOD

This is to certify that the project work entitled **Online Music Website** is carried out by Abunur Anchari bearing **University Registration No: 21861098 and Roll No: 31620002**, of NERIM under the Internal guidance of **Mrs. S. Lalitha**, in partial fulfilment of minor project work of 5th semester of 3 years full time BCA course under Dibrugarh University, Dibrugarh, Assam is accepted by the Department of Computer Science, NERIM, Guwahati.

Dr. Tarali Kalita
HOD, Dept. of Computer Science
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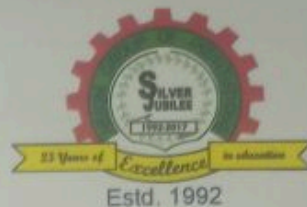
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CERTIFICATE FROM INTERNAL GUIDE

This is to certify that the project work entitled **Online Music Website** is a bonafide work carried out by **Abunur Anchari** of BCA 5th semester of 3 years full time BCA course under Dibrugarh University at NERIM, Guwahati, bearing Examination Roll No: 31620002, under my personal supervision and guidance. The report is found worthy of acceptance for the partial fulfilment of minor project work of BCA 5th semester under 3-year fulltime BCA program under Dibrugarh University, Dibrugarh, Assam.

All help received has been duly acknowledged and no part of this report has been reproduced for any other degree or diploma.

Shalitha
9.1.24

Mrs. S. Lalitha

Date:

Asst. Professor, Dept. of Computer Science

NERIM Group of Institutions

Guwahati, Assam

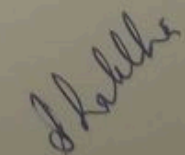
PROFORMA FOR SUBMISSION OF STUDENT PROJECT

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Student Signature:

Date:



Internal Guide Signature

Date: 9.11.24

ACKNOWLEDGEMENT

I would like to thank **Dr. Tarali Kalita**, HOD, Computer Science Department, NERIM Group of Institutions for her valuable suggestion.

With immense pleasure I acknowledge my inertness to all persons whose support and guidance have helped me in carrying out this project.

I acknowledge most sincerely my heartiest thanks and gratitude to my internal guide **Mrs. S. Lalitha** who has guided me throughout the period of this project work.

To those mentioned above and to those who inspired and encouraged me, I would like to express my gratitude once again.

Yours Sincerely,

Abunur Anchari

Examination Roll No: 31620002

BCA 5th semester

DECLARATION

I hereby declare that the project work called "**Online Music Website**" submitted to the Computer Science Department of NERIM, Guwahati under Dibrugarh University is a record of an original work done by me under the guidance of Mrs. S. Lalitha, Asst. Professor and this project is submitted for the partial fulfilment of the degree of Bachelor of Computer Application under Dibrugarh University, Dibrugarh, Assam. The results embodied in this, have not been submitted to any other University or Institute.

Yours Sincerely,

Abunur Anchari

Examination Roll No: 31620002

BCA 5th semester

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CHAPTER 1: INTRODUCTION

1.1 TITLE OF THE PROJECT

The title of the project is "ONLINE MUSIC WEBSITE" which is a web-based platform that provides users with access to a wide range of music content over the internet.

1.2 PROJECT DEFINITION

In olden times there were less devices to listen to music, they mainly relied on a device called a radio. Whether it is their favourite song or not they have to listen to those songs. These websites allow us to typically search our favourite songs, and playlists as per our favourite artists, we can also play songs, pause, stop, make forward and backward. In this we can also download many of songs in our devices. In these ways we can listen to non-stop music.

1.3 OBJECTIVES

The Main objectives of the project on Online Music Website are-

- To design a music website that will allow users to search, listen and download music files.
- To provide users with playlists as per their favourite artists, which can be browsed for easy song recommendations.
- To provide users to access their favourite music from any internet-connected device, such as Smartphone's, tablets, and computers.

1.4 EXISTING SYSTEM

The present systems are platform dependent and these plug-in services are not suitable for all types of applications and devices. Often, these systems have difficulties in managing the files and playlists.

1.5 PROPOSED SYSTEM

The proposed systems are:

- Providing the program with simple and user-friendly interface.
- Music download function is available.
- Audio volume Controller (Increase & Decrease volume) function is available.
- Audio shuffle, next, previous Controller function is available.
- Free of Cost system.

1.6 HARDWARE AND SOFTWARE USED IN THE PROJECT

HARDWARE SPECIFICATION

Processor: Intel core i3 7th Gen

Ram: 8 GB

Solid State Drive: 500 GB SSD

Keyboard: standard

Mouse: optical

SOFTWARE SPECIFICATION

Operating system: Windows 10

Server: Xampp Server

Front end: HTML, CSS, JS, PHP

Back end: MySQL

CHAPTER 2: SYSTEM ANALYSIS

2.1 INTRODUCTION

System analysis is conducted for studying a system or its parts to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose. It is a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. Analysis specifies what the system should do.

2.2 FEASIBILITY STUDY:

2.2.1 INTRODUCTION

The feasibility study is performed to determine whether the proposed system is viable considering the Technical, Behavioural and Economic factors. After going through feasibility study, we can have a clear-cut view of the system's benefits and drawbacks.

2.2.2 TECHNICAL FEASIBILITY:

The proposed system is developed using Xampp Server, HTML, CSS, Js and PHP as front-end tool and MySQL as the back end. The proposed system needs a Personal Web Server to serve the requests submitted by the users. All the required hardware and software are readily available in the market. Hence the system is technically feasible.

2.2.3 BEHAVIORAL FEASIBILITY:

Behavioural feasibility deals with the human aspect of the organization, proposed projects are beneficial only if they can be turned into information systems that will meet the organization's operating requirements. This feasibility test asks whether the system will work when developed and installed, the users need to be convinced about the advantages of the new system.

2.2.4 ECONOMIC FEASIBILITY:

As the necessary hardware and software are available in the market at a low cost, the initial investment is the only cost incurred and does not need any further enhancements. Hence it is economically feasible. The system is feasible in all respects and hence it encourages taking up the system design.

2.3 SOFTWARE REQUIREMENT GATHERING AND SPECIFICATION

Software Requirement Specification (SRS) is complete specification and description of requirements of software that needs to be fulfilled for successful development of software system. These requirements can be functional as well as non-functional depending upon type of requirement.

Depending upon information gathered after interaction, SRS is developed which describes requirements of software that may include changes and modifications that is needed to be done to increase quality of product and to satisfy users demand.

FUNCTIONAL REQUIREMENTS

For Admin

1. Admin can login using username and password.
2. Admin can upload music files.
3. Admin can view, edit and delete uploaded music.
4. Admin can add popular artists
5. Admin can edit and delete popular artists
6. Admin can add playlists
7. Admin can edit and delete playlists
8. Admin can control audio functions like play, pause etc.
9. Admin can view users details like userid, username, email etc.

For User

1. User can register using name, email, password etc.
2. User can login using registered credentials.
3. User can search and view music files.
4. User can view popular artists
4. User can view playlist.
6. User can control audio functions like play, pause etc.

NON-FUNCTIONAL REQUIREMENTS

The Characteristics of a quality SRS is that in addition to describing the functional requirements of a system, it will also provide detailed coverage of the non-functional requirements. In practice, this would entail detailed analysis of issues such as availability, security, usability and maintainability.

SRS for ADMIN

Sl. No	Requirement name	Requirement Description	Priority
SRS001	Log in	This function will enable the admin to login into the system by providing a valid username and password	Mandatory requirement
SRS001.1*	Log in	If found valid then the system will direct the admin to the home page.	Mandatory requirement
SRS001.2*	Log in	If found invalid the system will redirect to a page where it will say invalid username or password	Mandatory requirement
SRS002	View Music List	A list of all uploaded music files will be shown	Mandatory requirement
SRS003	Add New Music	Admin can upload new music files	Optional Requirement
SRS004	Edit/Delete Music	Admin can edit/delete existing music files	Optional Requirement

SRS005	View Popular Artists	List of all popular artists will be shown	Mandatory requirement
SRS006	Create Popular Artists	Admin can create Popular Artists	Optional Requirement
SRS007	Edit/Delete Popular Artists	Admin can edit/delete Popular Artists	Optional Requirement
SRS008	View Playlists	List of all playlists will be shown	Mandatory requirement
SRS009	Create Playlists	Admin can create playlists	Optional Requirement
SRS010	Edit/Delete Playlists	Admin can edit/delete playlists	Optional Requirement
SRS011	View Users	List of all users details will be shown	Optional Requirement

SRS for USER

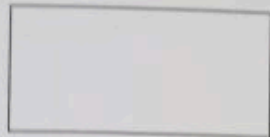
Sl. No	Requirement name	Requirement Description	Priority
SRS001	Registration	This will allow users to register themselves in the system by providing given details	Mandatory requirement
SRS002	Log in	This function will enable the users to login into the system by providing registered username and password	Mandatory requirement
SRS002.2*	Log in	If found valid then the system will direct the users to the request page.	Mandatory requirement
SRS002.3*	Log in	If found invalid the system will pop up a message which will say invalid username or password	Mandatory requirement
SRS003	View Music List	A list of all uploaded music files will be shown	Mandatory requirement
SRS004	View Popular artists	List of all popular artists will be shown	Mandatory requirement
SRS005	View Playlists	List of all playlists will be shown	Mandatory requirement

2.4 STRUCTURED ANALYSIS AND DESIGN

2.4.1 DATA FLOW DIAGRAM

A data flow diagram (or DFD) is a graphical representation of the flow of data through an information system. It shows how information is input to and output from the system, the sources and destinations of that information, and where that information is stored.

The following diagram diagrams illustrate notation and symbol used to construct DFD:



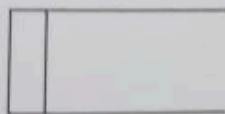
External Entity



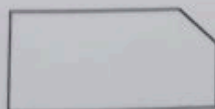
A Process



Data Flow

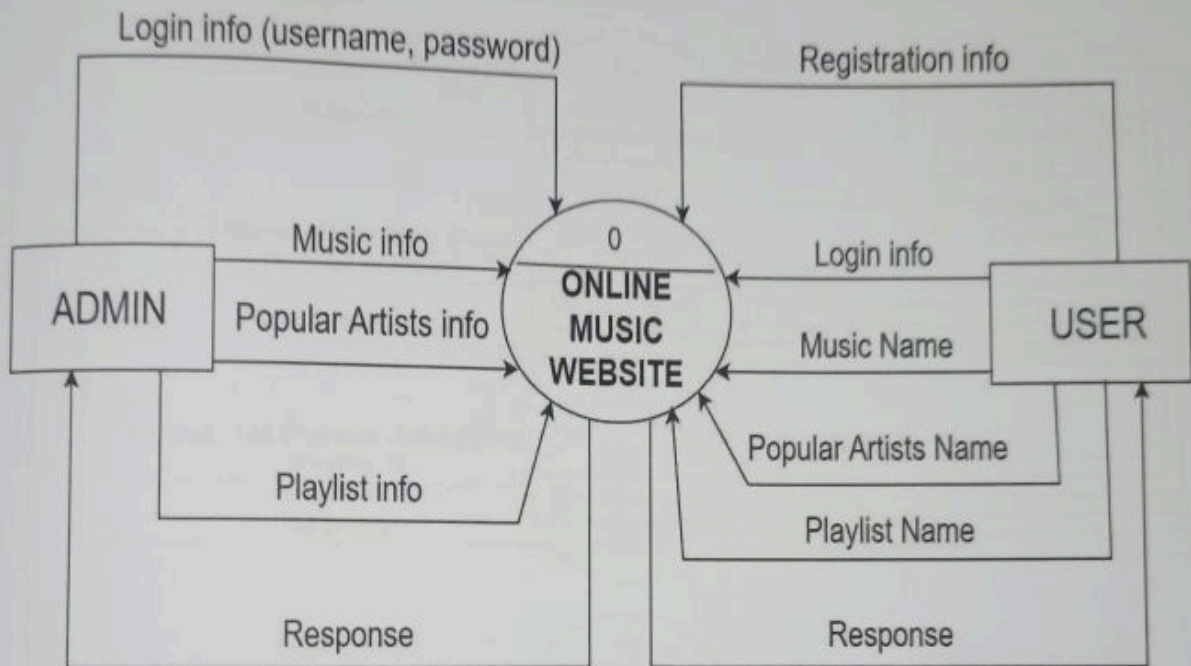


Data Storage

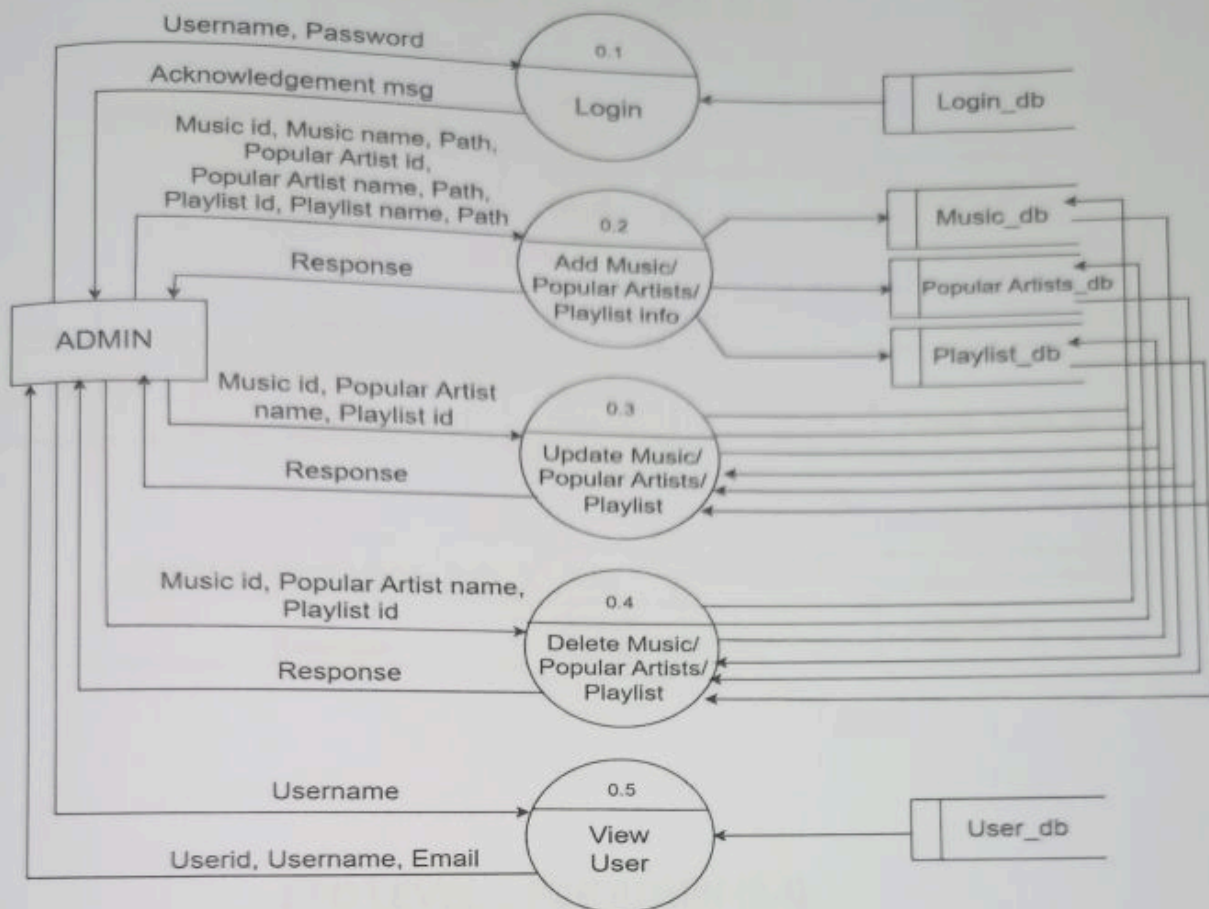


Report or Output from the System

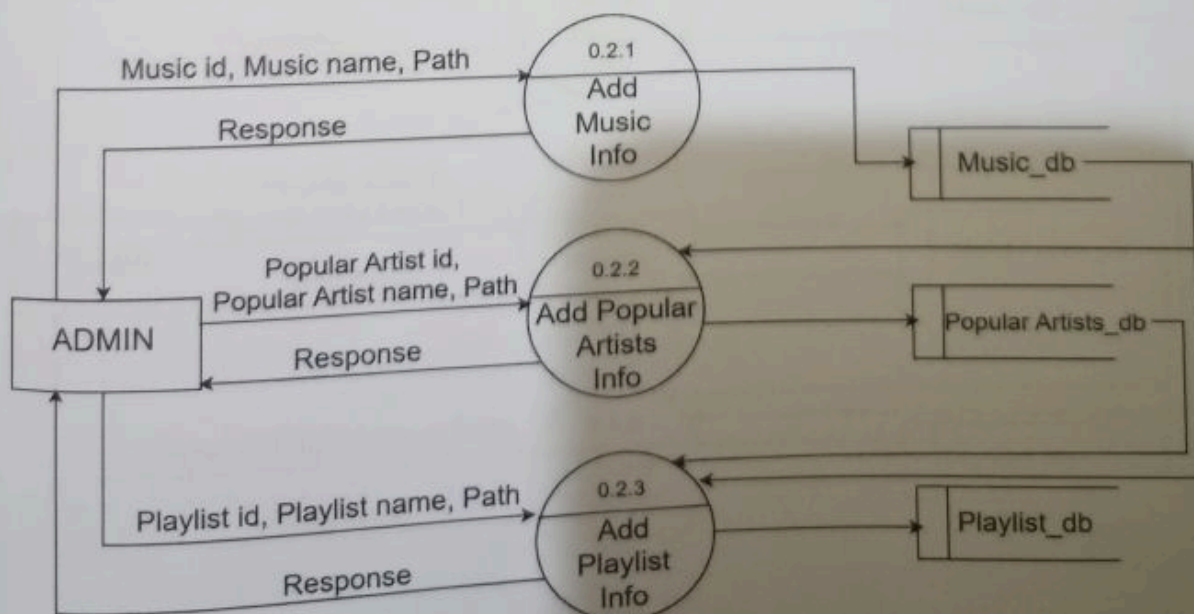
CONTEXT DIAGRAM



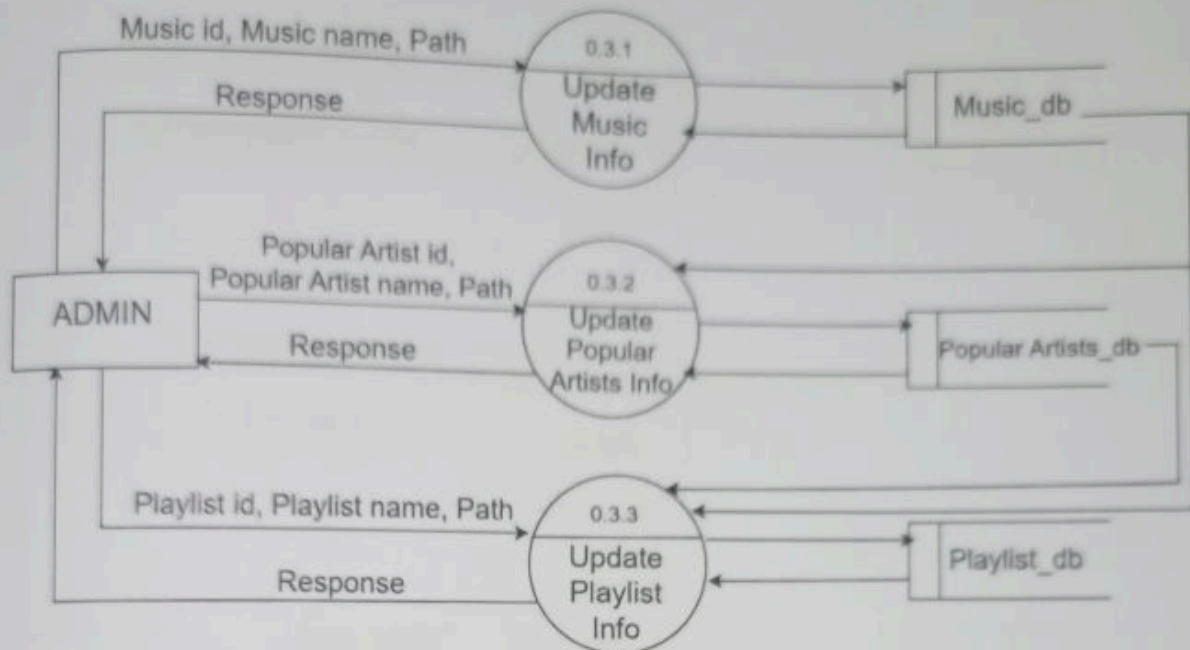
DFD LEVEL 1 FOR ADMIN



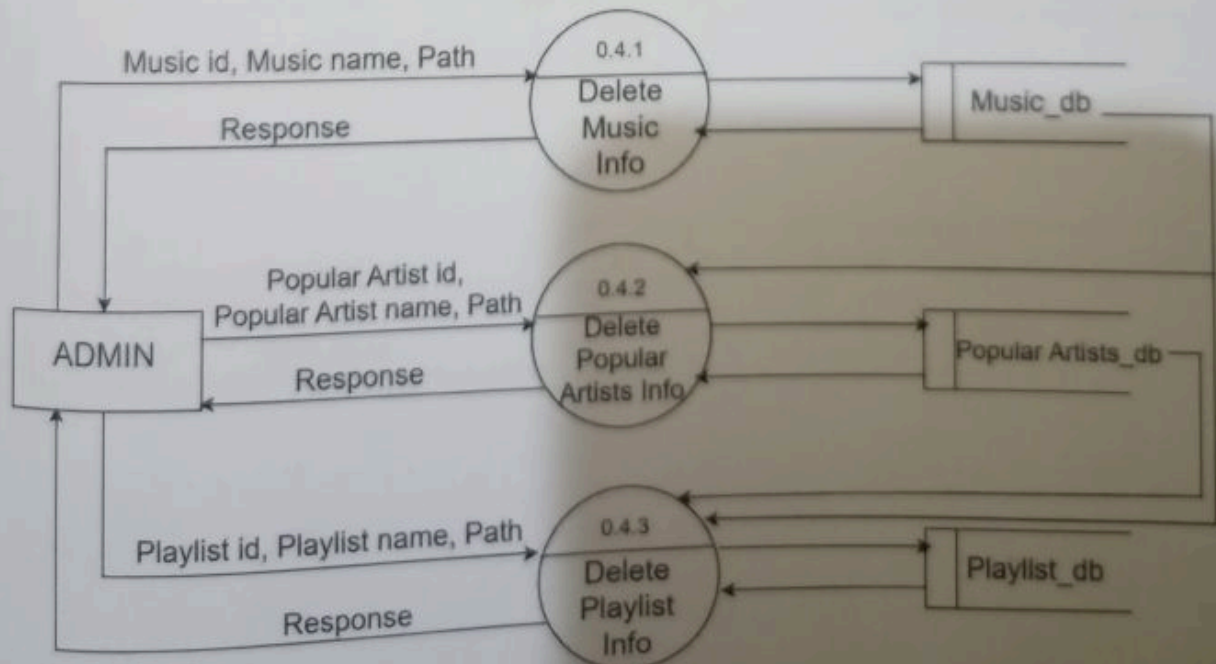
DFD LEVEL 2 FOR ADMIN (0.2)



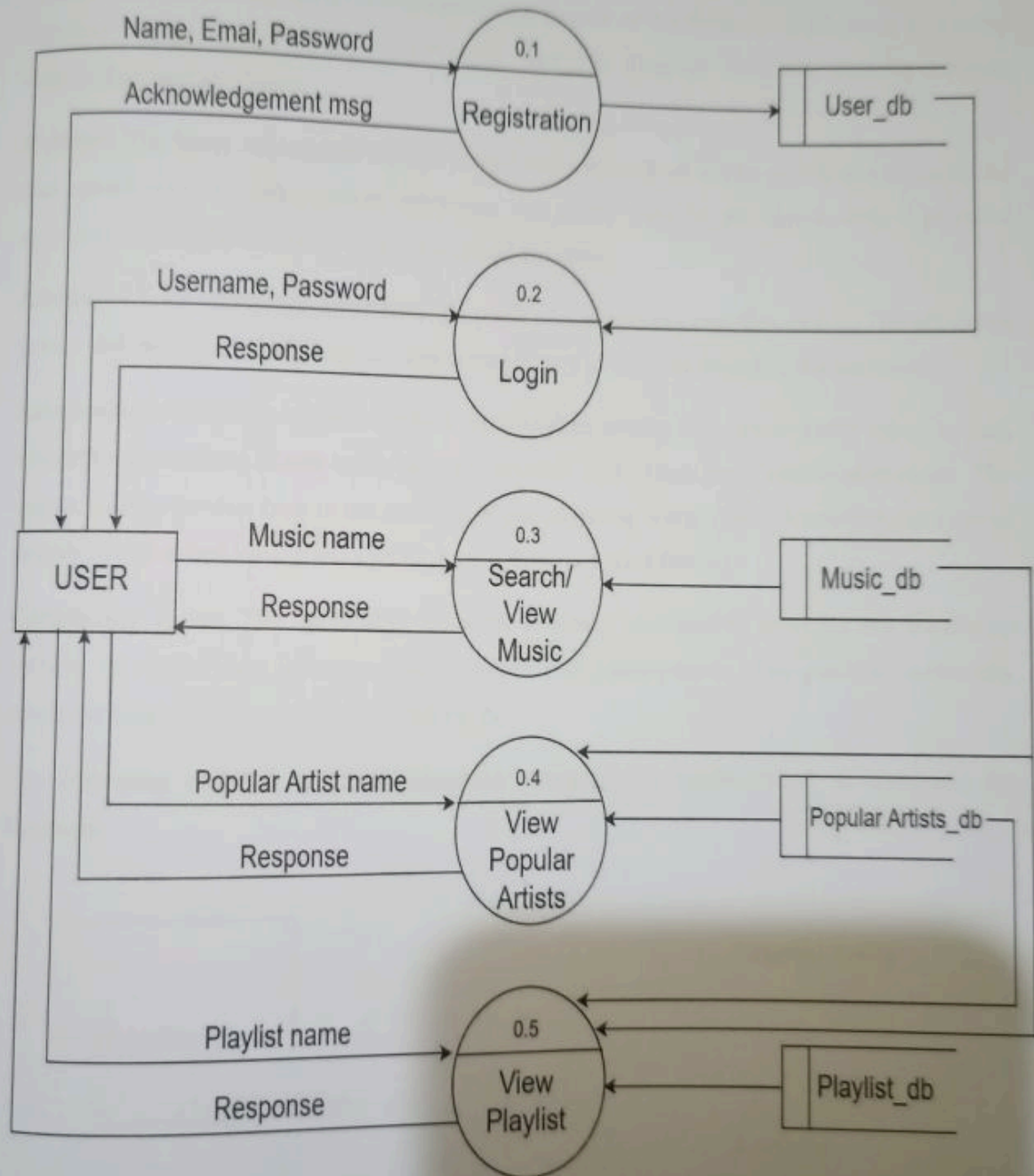
DFD LEVEL 2 FOR ADMIN (0.3)



DFD LEVEL 2 FOR ADMIN (0.4)



DFD LEVEL 1 FOR USER



2.4.2 ENTITY RELATIONSHIP DIAGRAM

Entity relationship diagram is a popular high level conceptual data model. This model and its variation are frequently used for the conceptual design of the database application and many database design tool employ its concepts. The ER diagram describes data as entities, relationship and attributes:

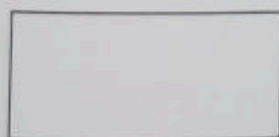
Entities: The basic object that the ER model represents is an entity which is a thing in the real world with an independent existence. An entity may be an object with a physical existence; it may be an object with conceptual existence.

Attribute: Each entity has attributes, the particular properties that describe it. The attributes values that describe each entity become a major part of the data stored in the database.

Relationship: There are several implicit relationships among the various entity types. In fact, whenever an attribute of one entity refers to another entity type, some relationship exists. The degree of relationship type is the number of participating entity types. A relationship type of degree two is called binary and one of degree three is called ternary.

Cardinality Ratio: The cardinality ratio for a binary relationship specifies the maximum number of relationship instances that an entity can participate in. The possible cardinality ratios for binary types are 1:1, 1: N and M: N.

The following diagram diagrams illustrate notation and symbol used to construct ER Diagram:



External Entity

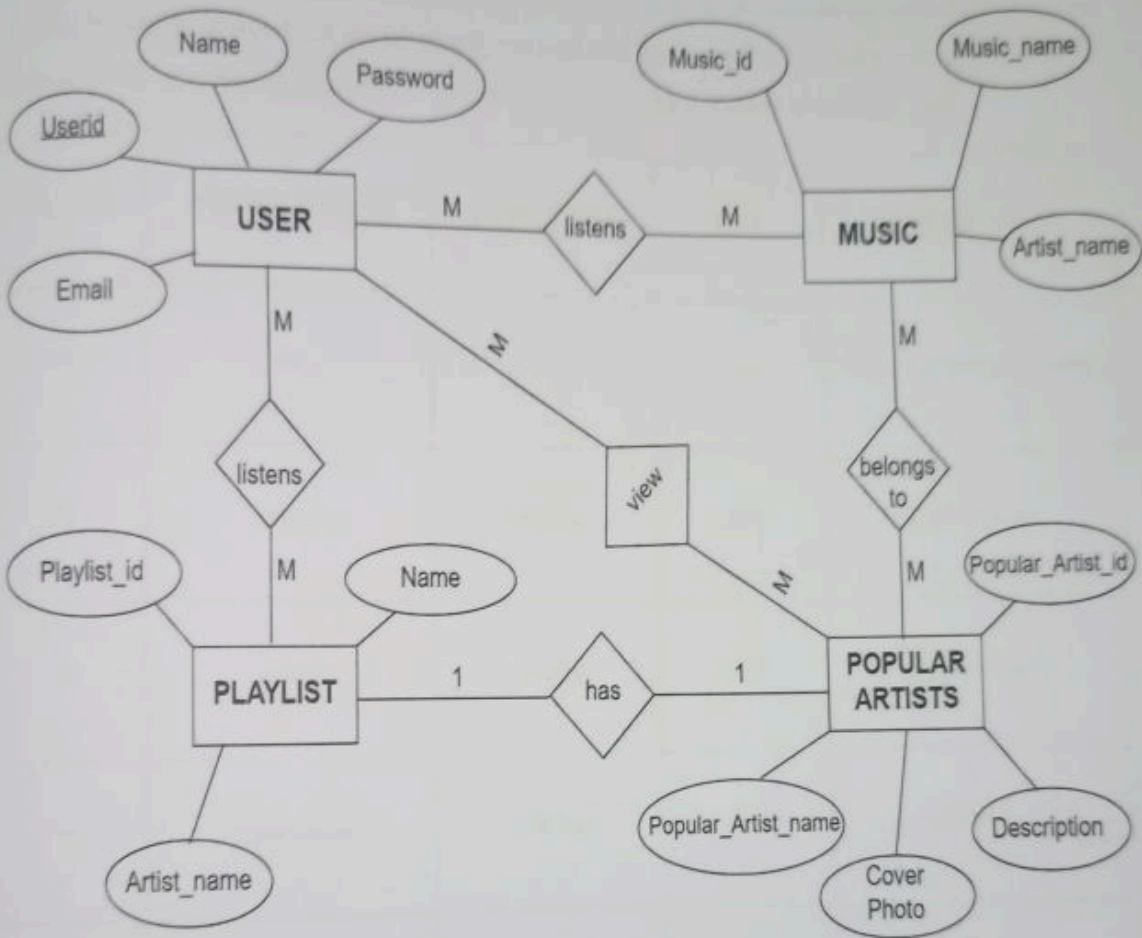


Attribute



Relationship

ER Diagram for Online Music Website



2.4.4 DATABASE DESIGN

Database design is the organization of data according to a database model. The designer determines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model.

USER TABLE

FIELD	DATA TYPES	SIZE	CONSTRAINTS
id	int	11	primary key
name	varchar	255	
Email	varchar	255	
password	varchar	255	
Date of time	timestamp	–	

CHAPTER 3: FRONT END DESIGN

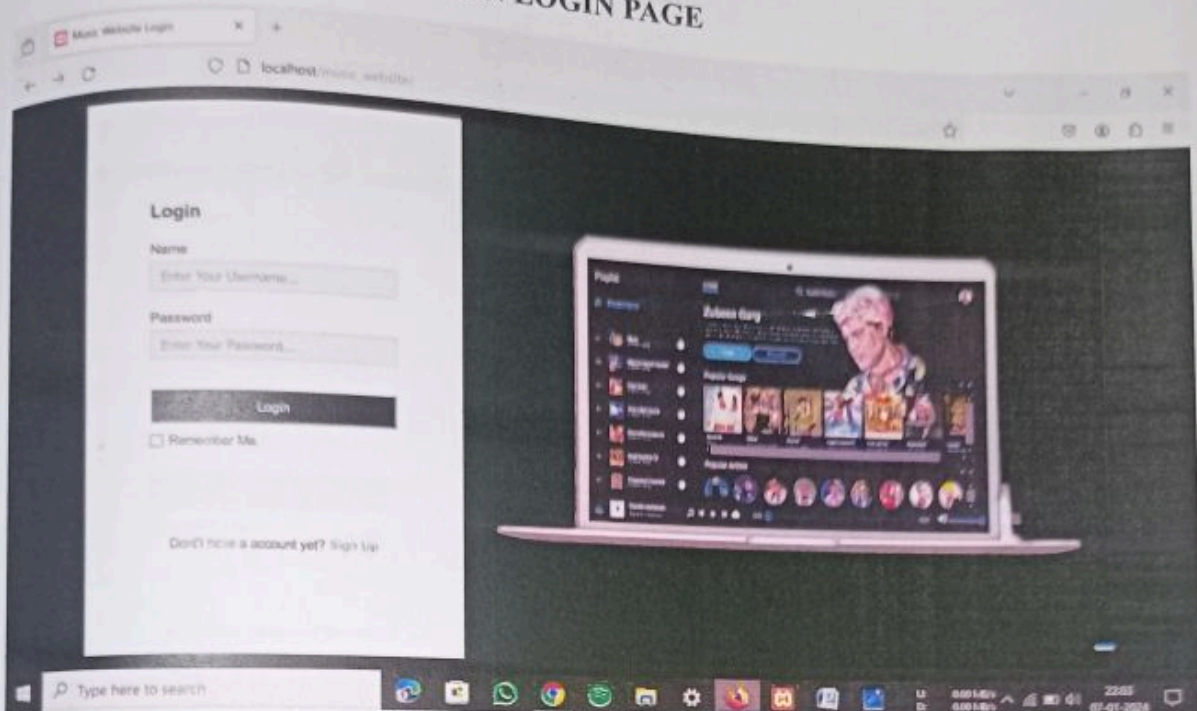
3.1 INPUT DESIGN

Input design is the process of converting user-oriented inputs to a computer-based format. The goal is to make the data entry as easy, logical and free from errors as possible. Once the analysis and design of the system has been done, it would be necessary on the part of the programmer to determine and identify the data that are required to be processed to produce the desired results or outputs. Input is one of the most expensive phases of the operations of a computerized system and sometimes creates a major problem. Different types of problems with a system can usually be tracked back to faulty input design method. The input design can also determine whether the user can interact efficiently with the system.

3.2 OUTPUT DESIGN

Computer output is the most important and direct source of information to the user. Efficient intelligent output design helps the user in decision-making. Outputs of a system can take different forms. The most common are reports, display on screen, printed forms, etc. The outputs also vary in terms of their users such as Administrators, Authorized users and General Users etc. Besides, due consideration also needs to be given to as to who will use the output and for what purpose. All these points are kept in mind while designing outputs so that the objectives of the system are met in the best possible way.

ADMIN LOGIN PAGE



A screenshot of a web browser displaying the 'ADMIN LOGIN PAGE'. The browser's address bar shows 'localhost/music_website/'. The page has a dark background with a white login form on the left and a laptop image on the right. The laptop screen shows a music player interface with the artist 'Zubeen Garg' and a list of songs.

Login

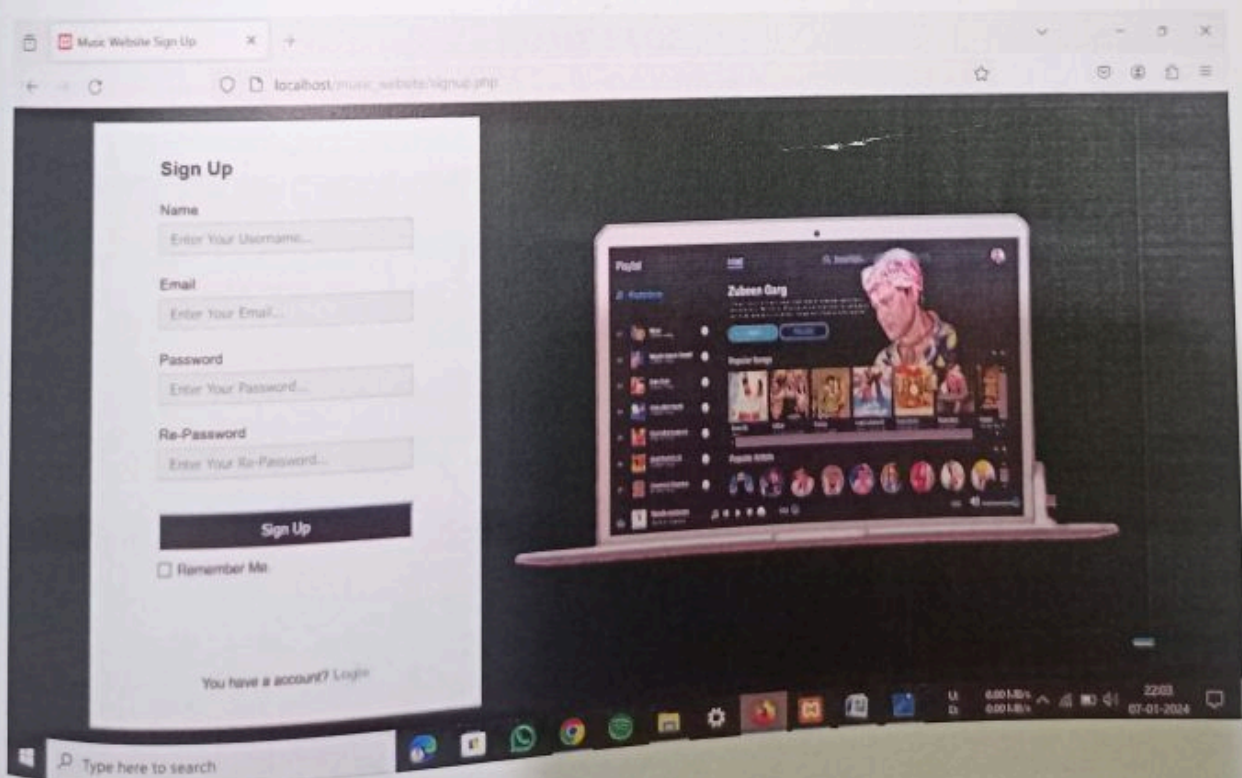
Name

Password

☐ Remember Me

[Don't have an account yet? Sign Up](#)

USER REGISTRATION PAGE



A screenshot of a web browser displaying the 'USER REGISTRATION PAGE'. The browser's address bar shows 'localhost/music_website/signup.php'. The page has a dark background with a white sign-up form on the left and a laptop image on the right. The laptop screen shows a music player interface with the artist 'Zubeen Garg' and a list of songs.

Sign Up

Name

Email

Password

Re-Password

☐ Remember Me

[You have an account? Login](#)

CHAPTER 4: SYSTEM TESTING

The system should be tested thoroughly before implementation of it as regard to the individuals programs. System testing is a type of software testing that evaluates the functionality and performance of a fully integrated software solution. The goal of integration testing is to detect any irregularity between the units that are integrated together.

4.1 UNIT TESTING

Unit testing is performed to test the individual units of software. Since the software comprises various units/modules, detecting errors in these units is simple and consumes less time, as they are small. However, it is possible that the outputs produced by one unit become input for another unit. Hence, if incorrect output produced by one unit is provided as input to the second unit then it also produces wrong output. If this process is not corrected, the entire software may produce unexpected outputs. To avoid this, all units in the software are tested independently using unit testing.

The CREATE NEW ACCOUNT (user) will enable the user to register in the system by providing required info.

SL. NO.	TEST CASE	ACTION
1	Click on "Don't have a account yet"	The list for adding registration details will pop up.
2	Any field empty	The registration info will not be saved.
3	All the fields empty	The registration info will not be saved.
4	All the field are full	The registration info will be saved.
5	Click on "Sign Up"	The account is created and user is logged in.

The LOGIN will enable the admin/user to log in to the system by proving a valid username and password.

SL. NO.	TEST CASE	ACTION
1	Empty username Empty password	There will be a message "Username or Password Incorrect"
2	Empty username Entered password	There will be a message "Username or Password Incorrect"
3	Entered username Empty password	There will be a message "Username or Password Incorrect"
4	Valid username Invalid password	There will be a message "Username or Password Incorrect"

4.1.1 VERIFICATION TESTING

Verification is the process of evaluating work- products of a determine whether they meet the specified requirements. It includes reviews and meeting, walk-through, inspection, etc to evaluate documents, plans, code, requirements and specifications.

4.1.2 VALIDATION TESTING

While validation refers to the process of checking that the developed software meets the Requirements specified by the user. Validation is the process of checking whether the software Product is up to the mark in other words product has high level requirements. It is the process of checking the validation of product that is it checks what we are developing is the right product. It is validation of actual and expected products.

4.2 INTEGRATION TESTING

Once unit testing is complete, integration testing begins. In integration testing, the units validated during unit testing are combined to form a subsystem. The integration testing is aimed at ensuring that all the modules work properly as per the user requirements when they are put together that is integrated.

ADMIN

SL. NO.	MODULE 1	MODULE 2
1	If not logged in to the system	Cannot go to Music List
2	If not logged in to the system	Cannot View Popular Artist
3	If not logged in to the system	Cannot View Playlist
4	If not logged in to the system	Cannot control audio functions like play, pause etc.

USER

SL. NO.	MODULE 1	MODULE 2
1	If not logged in to the system	Cannot go to Music List
2	If not logged in to the system	Cannot View Popular Artist
3	If not logged in to the system	Cannot View Playlist

4.3 USER ACCEPTANCE TESTING

Acceptance testing is performed to ensure that the functional, behavioral, and performance requirements of the software are met. IEEE defines acceptance testing as a formal testing with respect to user needs, requirements, and business processes conducted to determine whether or not a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system.

CHAPTER 5: FUTURE SCOPE OF THE PROJECT

The future scope of the project includes that what all future enhancements can be done in this system to make it more feasible to use. While developing the software, though we have tried our best to fulfil all necessities of "Online Music Website", there is every possibility of some drawbacks in the software. Those drawbacks can be overcome by further modifying the system by allowing patience to log in to the system and collecting the reports, by this they no longer to visit again to the Centre for collecting the reports. Or the admin can just send the reports to their mail and if a backup system is developed. Again rest of the need is to change its appearance so that it becomes more user friendly.

Some of the extensions which can be made later are:

- i. Users will be allowed to create their personal playlists.
- ii. Users will be able to create a playlist comprising of favorite music by just clicking a like button.
- iii. This streaming system would be available in app format for android or ios.

CONCLUSION

While developing the system a conscious effort have been made to create and develop a software package, making use of available tools, techniques and resources generate a proper system. While making the system, an eye has been kept that would user-friendly, and as flexible as possible. As such one may hope that the on making it as system will be acceptable to any user and will adequately meet his/her requirements.

Working on this project was a good experience. It taught how important every step is in developing software, from collecting user requirements to planning and giving proper coding to every design.