

# **LAB REPORT**

*Submitted by*

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*Under the Guidance of*

**Dr. P. Gouthaman**

**Assistant Professor**

**Department of Networking and Communication**

*In partial satisfaction of the requirements for the degree of*

**BACHELOR OF TECHNOLOGY**

**in**

**COMPUTER SCIENCE ENGINEERING**

**with specialization in Cloud Computing**



**SCHOOL OF COMPUTING**

**COLLEGE OF ENGINEERING AND TECHNOLOGY**

**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

**KATTANKULATHUR - 603203**

**JUNE 2022**



**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY  
KATTANKULATHUR-603203**

**BONAFIDE CERTIFICATE**

Certified that this lab report titled “**ONLINE MUSIC WEBSITE**” is the bonafide work done by **NANDHIGAMA ABHINAV [RA2011028010125]** who carried out the lab exercises under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other work.

**SIGNATURE**

Dr. P. Gouthaman

**SEPM – Course Faculty**

Assistant Professor

Department of Networking &  
Communication

## ABSTRACT

The Project “ **ONLINE MUSIC WEBSITE**” provides a platform for the common people to enjoy the music and have some relief from their hectic life schedule. This Project is aimed at developing a Web Based Music Portal which can be used to manage a musical library and a picture gallery. It is aimed to replace the manual system of getting musical CDs considering the technology advancement. The study discusses the World Wide Web (www) as an Internet service that allows the distribution of pages. Familiarity with web based application; web programming and web development as an industry are also discussed. It also consists the system analysis and design which include the several download and upload mechanisms. The system design, file and database design is given based on the details of the proposed system. The implementation and maintenance of the system comprises the software development, software testing and debugging as well as software implementation. The implementation of the system is done using Apache as web server with extended support for PHP and MYSQL. Keywords Web based and Music portal.



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## **LIST OF ABBREVIATIONS**

**DAW: Digital audio workstation**

**DSP: Digital Service Provider**

**A&R: The Artist and Repertoire department or manager**

**CRM: Customer Relationship Management**

**EP: Extended Play records**

**LP: Long Play record**

**TM: Tour Manager**

**IP: Intellectual Property**

**MAPL: Music, artist, production, lyrics**

**PPD: Published Price to Dealer**

**A/D: Analogue to Digital Converter**

**AIFF: Audio Interchange File Format**

**WAV: Waveform Audio File Format**

**MP3: Another audio format**

**FLAC: Free Lossless Audio Codec BPM:  
Beats Per Minute**

**CBR: Short for 'Constant Bit Rate'**

**EQ: Equalization**

**ID: Identification/Identify OTB:  
Out of The Box**

**UPC: Universal Product Code**

**EAN: European Article Number**

**PRO: Performing Rights Organization**



**Department of Networking and Communications**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	1
<b>Title of Experiment</b>	To identify the Software Project, Create Business Case, Arrive at a Problem Statement ( online music)
<b>Name of the candidate</b>	KOTHOLLA JASWANTH REDDY
<b>Team Members</b>	1) ABHINAV 2) SHIVAM 3) NEEHAR
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	16/03/2022

**Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

## Staff Signature with date

### Aim

To Frame a project team, analyze and identify a Software project. To create a business case and Arrive at a Problem Statement for the <LISTEN UP> ( online music)

### Team Members:

	RA2011028010132	KOTHOLLA JASWANTH REDDY	
1	RA2011028010125	NANDHIGAMA ABHINAV	Lead/Rep
2	RA2011028010137		Member
3		SHIVAM	Member
4	RA2011028010137	Neehar S Ashok	Member

Register No

**Project Title: LISTEN UP ( online music)**

### Project Description

An online music platform, S record, is planning to implement a database to enhance its data management practice and ultimately advance its business operations. The initial planning analysis phases have revealed the following system requirements:

DATE	
SUBMITTED BY	Jaswanth (132), Abhinav ( 125), Shivam (137)
TITLE / ROLE	LISTEN UP ( online music)

**Each album has a unique Album ID as well as the following attributes: Album Title, Album Price, and Release Date. An album contains at least one song or more songs. Songs are identified by Song ID. Each song can be contained in more than one album or not contained in any of them at all and has a Song Title and Play Time. Each song belongs to at least one genre or multiple genres. Songs are written by at least an artist or multiple artists. Each artist has a unique Artist ID, and an artist writes at least one song or multiple songs, to be recorded in the database. Data held by each artist includes Artist Name and Debut Date.**

**Each customer must sign up as a member to make a purchase on the platform. The customer membership information includes Customer ID, Customer Name, Address (consisting of City, State, Postal Code), Phone Number, Birthday, Registration Date. Customers place orders to purchase at least one album or more albums. They can purchase multiple quantities of the same album, which should be recorded as Quantities Ordered. Each order is identified by an Order ID and has Order Date, Total Price, Payment Method, and Delivery Option.**

# ONE PAGE BUSINESS CASE TEMPLATE



## The History

### THE PROJECT

In bullet points, describe the problem this project aims to solve or the opportunity it aims to develop.

- In this project, we are aiming to develop a online music platform.
- The main idea is to create a website that makes others feel the essence of the music.  
It's a collection of MP3 songs of different languages in one place where users can get based on the year
- also play and listen the songs on our website at free of cost only is to provide user friendly tool for music web sites.  
We have a bright opportunity of making this website publicity.
- Music is an integral part of most people's lives. The "music gene" can be traced back to thousands of years ago with biological roots pointing towards cultural events such as tribal dances across the world that led to the inception of singing, chanting or drumming.
- As we begin 2020, the music industry's days of doom and gloom are officially over. Happy days are here again, as the overall global recorded music ecosystem continues to win big. Although final 2019 numbers aren't in yet, 2019 is expected to represent five straight years of double-digit (or near double-digit) growth after decades of eviscerating losses.
- We have many websites but we can't find all languages songs at only one website it's a time taking the process to find our required languages songs to find by using different websites and so many unwanted pop-ups coming in present websites with are misleading the users from the requirement of songs.

## LIMITATIONS

- Custom-coding to get features(lack in experience).
- Poor Planning.
- Lack of Cohesion Between Your Team Members.
- front-end programming
- back-end coding

#### APPROACH

- Choose a music website template.
- Create the color palette.
- Choose your fonts.
- Create the pages for your music website.
- Sell your music on your website.
- Choose a domain name.
- Experience with HTML, Javascript, and CSS

#### BENEFITS

- Easy Accessibility.
- Variety and Choice.
- Fewer Commercials and Ads
- Quality Of Sound
- Create Own Playlists

#### RESULT:

- Thus, the project team formed, the project is described, the business case was prepared and the problem statement was arrived.



## Department of Networking and Communications

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	2
<b>Title of Experiment</b>	Identification of Process Methodology and Stakeholder Description
<b>Name of the candidate</b>	Jashwant Reddy
<b>Team Members</b>	Shivam kr singh Abhinav.N Neehar S Ashok
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	18/04/22

### Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	TOTAL	10	

**Aim**

To identify the appropriate Process Model for the project and prepare Stakeholder and User Description.

**Team Members:**

Sl No	Register No	Name	Role
1	RA2011028010132	K.Jaswanth Reddy	Rep/Member
2	RA2011028010137	Shivam Kumar Singh	Member
3	RA2011028010125	N.Abhinav	Member
4	RA2011028010118	Neehar s Ashok	Member

**Project Title:****LISTEN UP****Selection of Methodology****waterfall model**

The **waterfall model** is a breakdown of project activities into linear sequential phases, where each phase depends on the deliverables of the previous one and corresponds to a specialization of tasks. Waterfall is best for projects with concrete timelines and well- defined deliverables. If your major project constraints are well understood and documented, Waterfall is likely the best approach. The Agile methodology was created for projects where the significant constraints are not well understood. The fivestage waterfall model, which is based on the requirements of Winston W. Royce, divides development processes into the following project phases: analysis, design, implementation, testing, and operation.

Stakeholder Name	Activity/ Area /Phase	Interest	Influence	Priority (High/ Medium/ Low)
LISTEN UP Corporation	Music/Online streaming	High	High	High
Boat electronic brand Sony Noise	Expand market & Branding	High	High	High
Shivam kr Singh	Co-Founder	Medium	High	High
Abhinav Reddy	Co-Founder	Medium	High	High
Neehar s Ashoak	Co_Founder	Medium	High	High
Jashwanth Reddy	Co-Founder/project manager	High	High	High
T-Series Zee Studios	Financial funding for the corporation	High	High	High
Abhinav Reddy	Planning & ensurers budget	Medium	High	Medium
App Store Google Play Store Youtube Ads OTT Platforms	Advertising & Promoting	Medium	High	High
Public	Consumers	High	High	High

**Result :**

Thus the Project Methodology was identified and the stakeholders were described.



## Department Of Networking and Communications

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	3
<b>Title of Experiment</b>	System, Functional and Non-Functional Requirements of the Project
<b>Name of the candidate</b>	KOTHOLLA JASWANTH REDDY RA2011028010132
<b>Team Members</b>	ABHINAV, SHIVAM SINGH, NEHAR ASHOK
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	02/04/2022

### Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	

<b>Total</b>	<b>10</b>	
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**Staff Signature with date**

**Aim**

To identify the system, functional and non-functional requirements for the project.

**Team Members:**

<b>S No</b>	<b>Register No</b>	<b>Name</b>	<b>Role</b>
<b>1</b>	<b>RA2011028010137</b>	<b>SHIVAM SINGH</b>	<b>Rep/Member</b>
<b>2</b>	<b>RA2011028010125</b>	<b>ABHINAV</b>	<b>Member</b>
<b>3</b>	<b>RA2011028010118</b>	<b>NEHAR S ASHOK</b>	<b>Member</b>

**Project Title: LISTEN UP**

**System Requirements :**

- 4 GB RAM (Minimum)
- 80 GB HDD
- Dual Core processor
- CDROM (installation only). VGA resolution monitor
- Microsoft Windows 98/2000/NT with service pack 6 / XP with service pack 2/  
Windows 7 with service pack 2
- SQL Server 2008 R2

**Functional Requirements :**

**CLIENT :**

The client-side of the system will be an application with a user interface that is integrated into music listening website or application.

1. Requesting recommendations
2. Evaluation songs
3. Investigating user & Display the recommendations

#### SERVER :

The server-side system will hold the entire data in a graph database, and must include all functionality to perform operations on this database, receive requests from the clients, evaluate, create and send recommendations etc.

1. Handle recommendation requests
2. Store evaluation
3. Data storing
4. Recommend using content based filtering
5. Recommend using contextual collaborative filtering
6. Recommend using collaborative filtering

#### **Non-Functional Requirements :**

The non-functional requirements of the system are explained below as performance requirements and design constraints.

#### PERFORMANCE REQUIREMENTS :

1. Accuracy
2. Failure handling
3. Openness
4. Security

#### DESIGN CONSTRAINTS:

1. Language
2. Hardware Constraints
3. Software System Attributes

Result

Thus the requirements were identified and accordingly described.



## **Department of Networking and Communications**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	4
<b>Title of Experiment</b>	Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities
<b>Name of the candidate</b>	K.Jashwanth
<b>Team Members</b>	Abhinav,Shivam,Neehar
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	10/05/22

## **Aim**

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

**Team Members:**

Sl No	Register No	Name	Role
1	RA2011028010132	K.Jaswanth	Lead
2	RA2011028010125	N.Abhinav	Member
3	RA2011028010118	Neehar S Ashok	Member
4	RA2011028010137	Shivam Singh	Member

## 1. Project Management Plan

Focus Area	Details
Scope Management	<ul style="list-style-type: none"><li>• A project scope statement provides a detailed description of the work that must be done to deliver the output of a project on time and within the allotted budget.</li><li>• requirements are- music files, responsive website, internet connections.</li><li>• responsive website to enjoy uninterrupted music at very low cost.</li><li>• requirement change -easy accessible,people can give review and ratings to identify issues, have help sessions for modifications.</li><li>• Activity-to make responsive website.</li><li>• Tasks-designing ui/ux,writing codes for frontend and backend, database managment,cloud deployment.</li></ul>
Risk Management	<ol style="list-style-type: none"><li>1)Potential issues might harm cost .</li><li>2)Technical Issues of the project and quality of our software device.</li><li>3)Slowing premium subscriber growth rate.</li></ol>

Stakeholder	<p>Our stakeolders are LISTEN UP Corporation(Brands) Boat electronic brand, Sony, Noise (Co-founders) App Store Google Play Store Youtube Ads OTT Platforms (Ad) Step 1: Identify your stake.</p> <p>Step 2: Prioritize your stakeholders. Next, prioritize your stakeholders by assessing their level of influence and level of interest. ...</p> <p>Step 3: Understand your key stakeholders.</p> <p>Stakeholder engagement is the systematic identification, analysis, planning and implementation of actions designed to influence stakeholders. A stakeholder engagement strategy identifies the needs of key groups and the sponsor plays a vital role in ensuring those business needs are met.</p>
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## 2. Estimation

### 2.1. Effort and Cost Estimation

Activity Description	Sub-Task	Sub-Task Description	Effort (in hours)	Cost in INR
Design the user screen	designing ui/ux	UI/UXinteract with a product, such as buttons, icons, menu bars, typography, colors, and more.	20-25 HRS	RS-2000
	codes for frontend and backend	Frontend-HTML,CSS,Javascript Backend-Python, node JS.	50-60 HRS	RS-5000
	database management, cloud deployment.	will manage data required like music files and deploying the website on cloud for easy access	30-35 HRS	RS-10,000
Identify Data Source for displaying units of Energy Consumption				

### 2.2. Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

Infrastructure Requirement	Qty	Cost per qty	Cost per item
Mobile			
Cloud for deployment	1	3,00,000	3,00,000
Data centers	1	10,00,000	10,00,000

## 2.3 Maintenance and Support Cost [OpEx]

Category	Details	Qty	Cost per qty per annum	Cost per item
People	Network, System, Middleware and DB admin  Developer , Support Consultant	3	2,000,000	6,000,000
License	Operating System Database Middleware IDE	10	10000	100,000
Infrastructures	Server, Storage and Network	20	20000	400,000

## 3. Project Team Formation

### 3.1. Identification Team members

Name	Role	Responsibilities
LISTEN UP CORP.	Key Business User (Product Owner)	Provide clear business and user requirements
K.Jaswanth	Project Manager	Manage the project
Neehar	Business Analyst	Discuss and Document Requirements
Abhinav	Technical Lead	Design the end-to-end architecture
Neehar	UX Designer	Design the user experience
Shivam	Frontend Developer	Develop user interface
Abhinav,Neehar	Backend Developer	Design, Develop and Unit Test Services/API/DB
Shivam	Cloud Architect	Design the cost effective, highly available and scalable architecture
Abhinav	Cloud Operations	Provision required Services
Jaswanth	Tester	Define Test Cases and Perform Testing

### 3.2. Responsibility Assignment Matrix

RACI Matrix	Team Members			
	Name (BA)	Name (Developer)	Name (Project Manager)	Key Business User
User Requirement Documentation	A	C/I	I	R
User Interface	Shivam	Shivam	Jaswanth	Neehar
Playing music	Abhinav	Shivam	Jaswanth	Neehar
Easy accesibility	Shivam	Abhinav	Jaswanth	Neehar

#### Result:

Thus, the Project Plan was documented successfully.



**Department of Networking and Communications**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	5
<b>Title of Experiment</b>	Prepare Work breakdown structure, Timeline chart, Risk identification table
<b>Name of the candidate</b>	k.Jaswanth reddy
<b>Team Members</b>	Shivam kumar Neehar shok N.Abhinav
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	15/04/22

**Mark Split Up**

<b>Sl.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

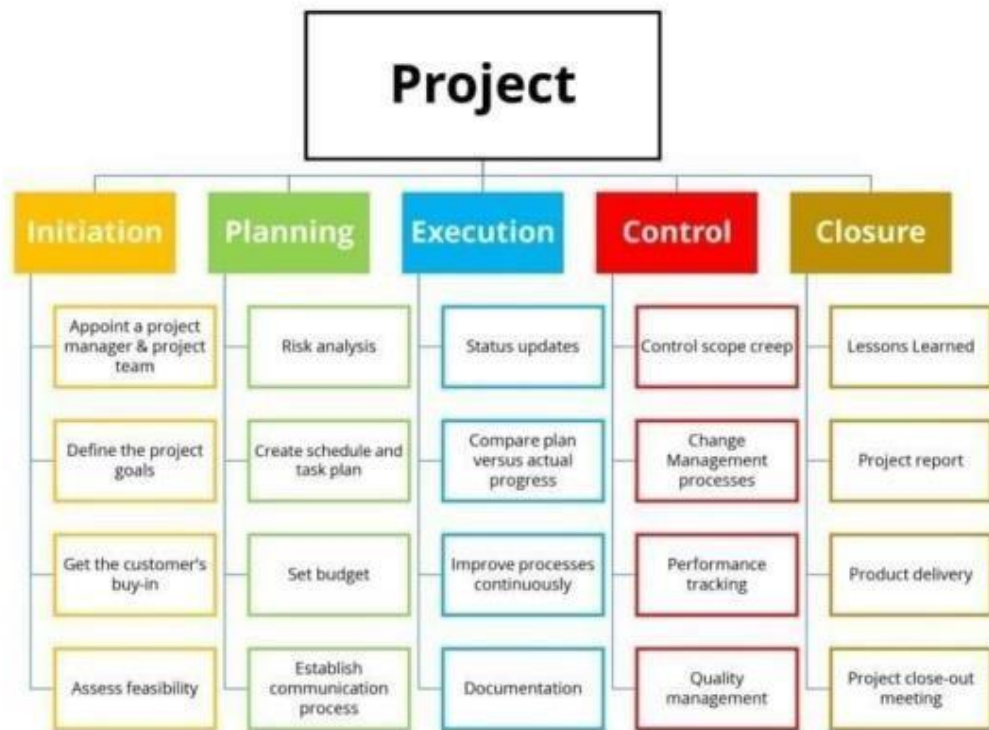
**Aim**

To Prepare Work breakdown structure, Timeline chart and Risk identification table

**Team Members:**

Sl. No	Register No	Name	Role
1	RA2011028010125	N. ABHINAV	Member
2	RA2011028010118	NEEHAR S ASHOK	Member
3	RA2011028010137	SHIVAM KUMAR SINGH	Member

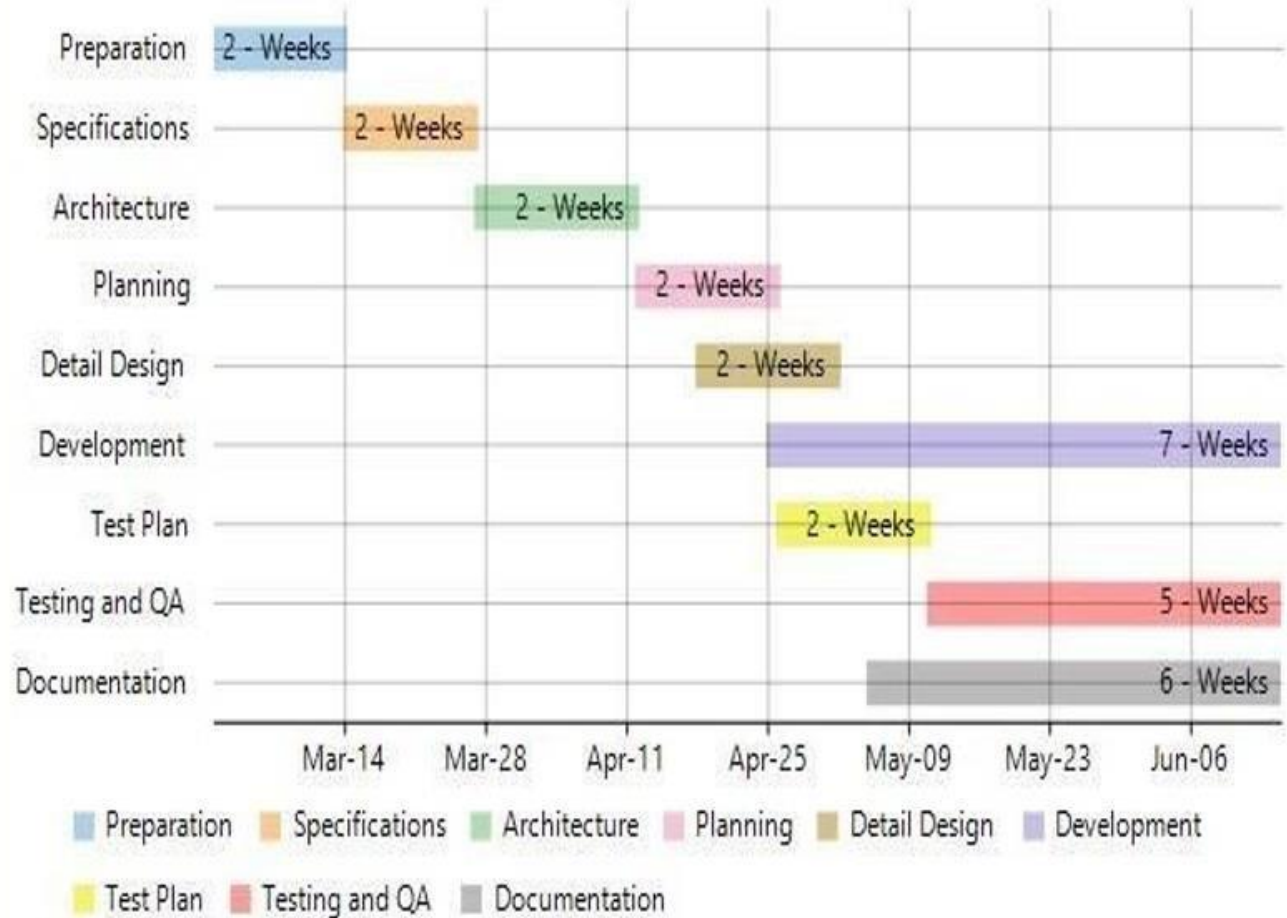
**Work breakdown structure**



## TIMELINE – GANTT CHART



## Project Schedule



### RISK ANALYSIS – SWOT & RMMM

#### STRENGTHS :

1. Daily using
2. Relevant and Unique
3. Easily accessible
4. Affordable
5. High contents

#### WEAKNESSES :

1. Medium service provider
2. Challenge to socialize the app to all generations of people
3. Medium Server Maintenance
4. Low capital income

#### OPPURTUNITIES :

1. Partnerships with Music studios

2. New Mode of payment transections
3. Innovating Advertising Strategies
4. It provides opportunities for content creators

### THREATS :

1. Major Threats are similar music websites and apps
2. Obtaining copy right
3. Low Protection from piracy
4. Privacy protection

Risk Source	Description
Risk repository	<p>The risk repository is the history data containing the list of risks identified for completed projects. The risk repository can be used to arrive at a list of potential risks for the project.</p> <p>This risk repository can also be filtered based on risk sources, categories, and projects.</p>
Checklist analysis	The risk identification checklist is a questionnaire that helps identify gaps and potential risks. It is developed based on experience and project type.
Expert judgement	Risk identification is also done by brainstorming with or interviewing experienced project participants, stakeholders, and subject matter experts.
Project status	The project status includes project status meeting reports, status reports, progress reports, and quality reports. These reports provide the current project progress, issues faced, and threshold violations. These provide insight into the status of the project and potential new risks.

### Result:

Thus, the work breakdown structure with timeline chart and risk table were formulated successfully.



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**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	6
<b>Title of Experiment</b>	Design a System Architecture, Use Case and Class Diagram
<b>Name of the candidate</b>	JASWANTH REDDY
<b>Team Members</b>	ABHINAV REDDY SHIVAM SINGH NEHAR S ASHOK
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	22/04/22

### Mark Split Up

Sl.no	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

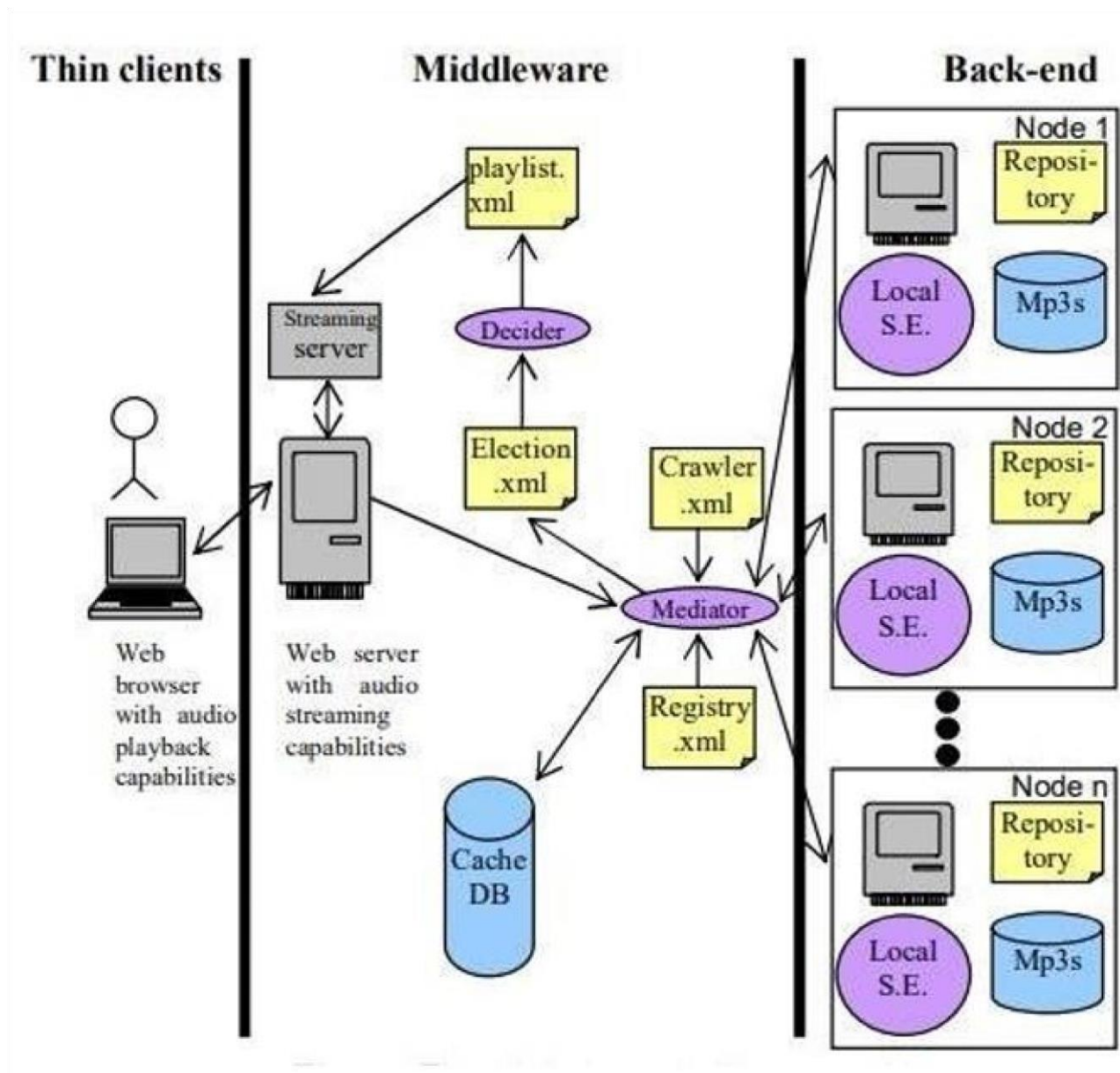
**Aim**

To design a system Architecture ,Use case and Class Diagram

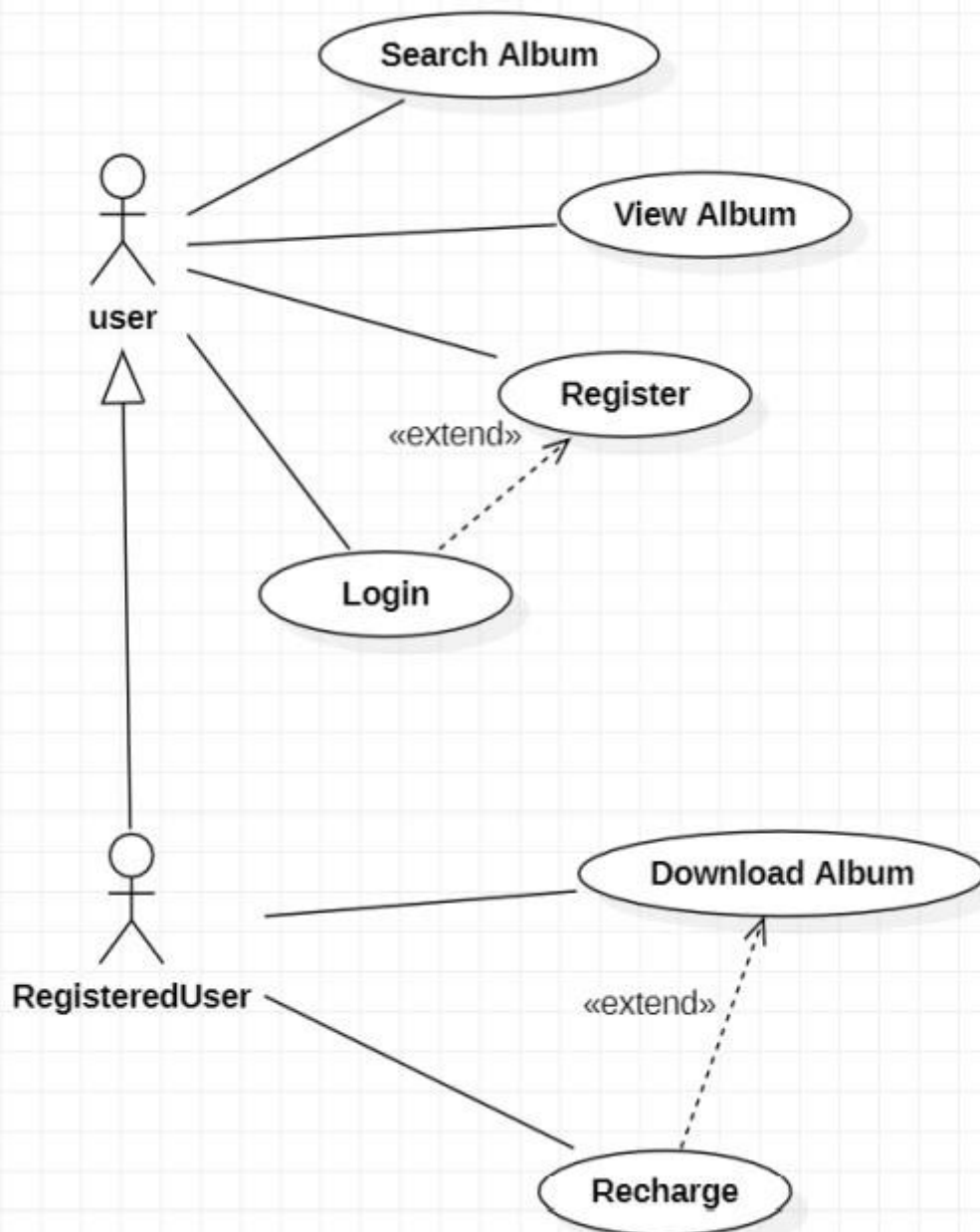
### Team Members:

Sl. No	Register No	Name	Role
1	RA2011028010125	N. ABHINAV	Member
2	RA2011028010118	NEEHAR S ASHOK	Member
3	RA2011028010137	SHIVAM KUMAR SINGH	Member

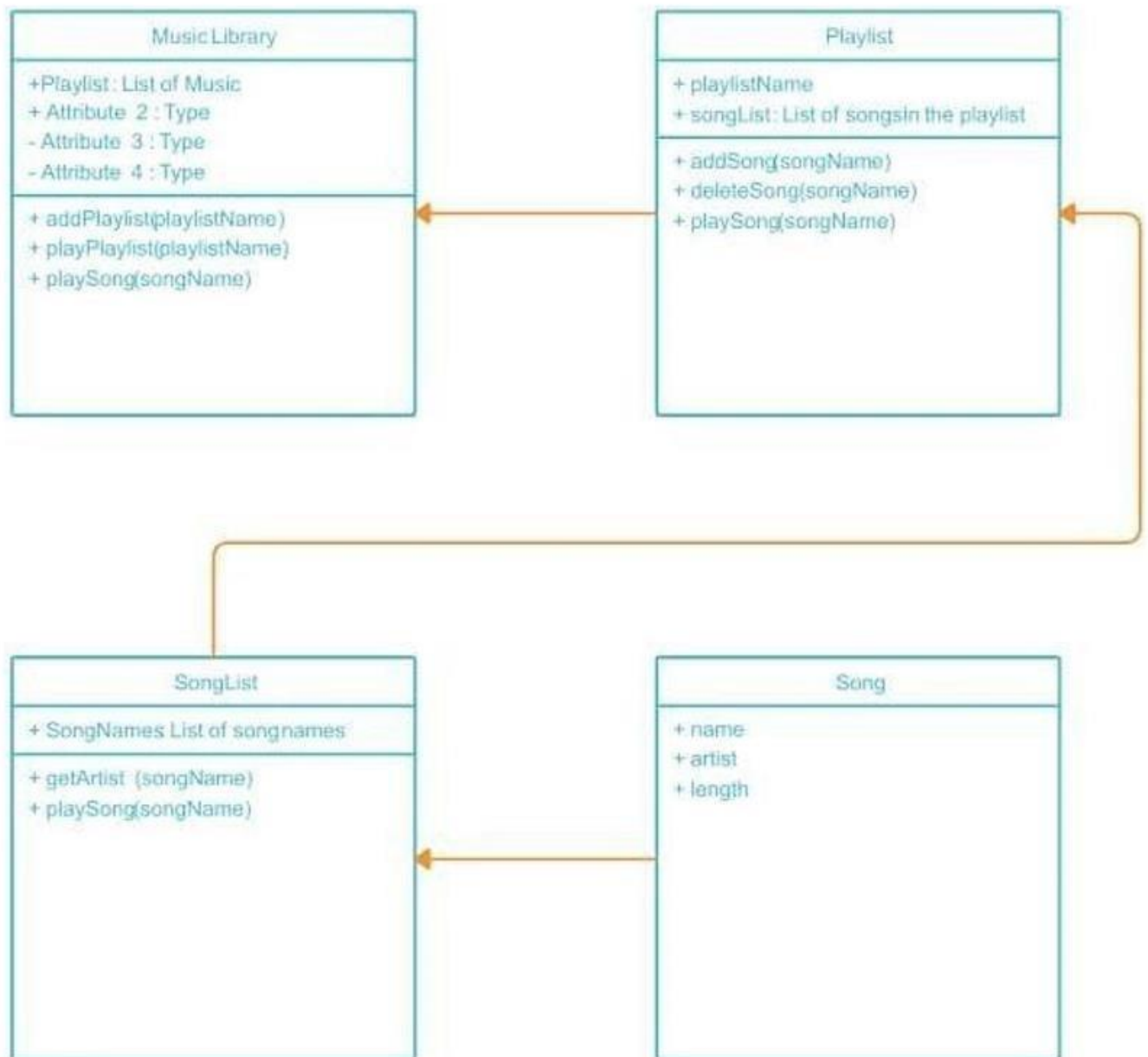
### SYSTEM ARCHITECTURE –



## USE CASE DIAGRAM –



## CLASS DIAGRAM –



Result:

Thus, the system architecture, use case and class diagram created successfully.



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**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	7
<b>Title of Experiment</b>	Design a Entity relationship diagram
<b>Name of the candidate</b>	K.JASWANTH
<b>Team Members</b>	N.ABHINAV NEEHAR S ASHOK SHIVAM KUMAR SINGH
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	28/04/22

## Mark Split Up

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

## Staff Signature with date

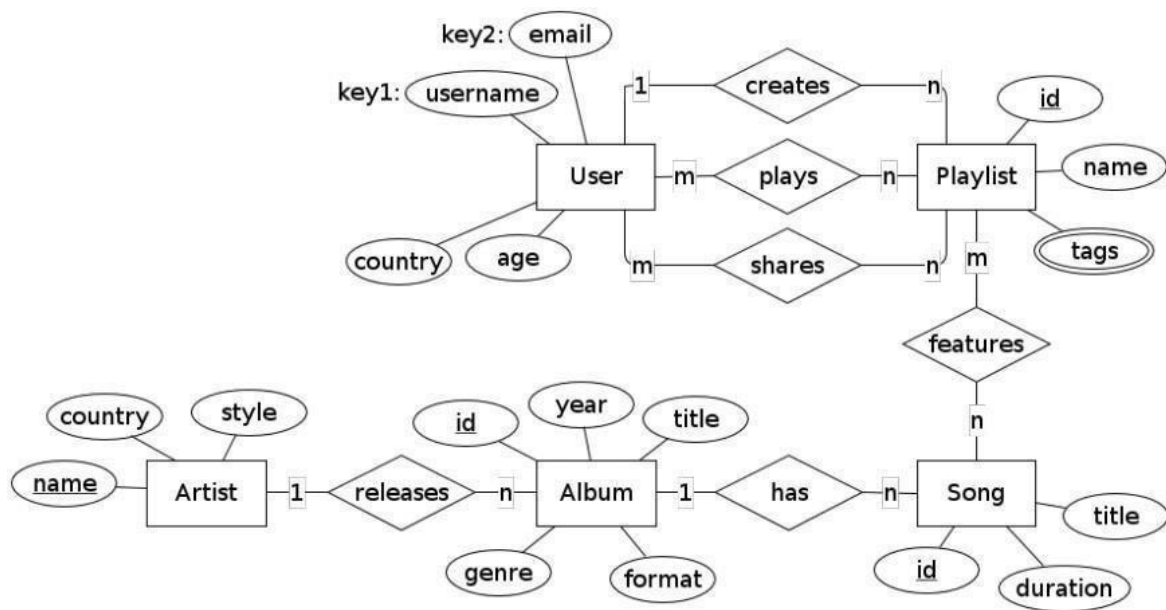
### Aim

To create the Entity Relationship Diagram

### Team Members:

S No	Register No	Name	Role
1	Neehar S Ashok	RA2011028010118	Member
2	N.ABHINAV	RA2011028010125	Member
3	SHIVAM KUMAR	RA2011028010137	Member

### ER Diagram of LISTENUP CORP.



Result:

Thus, the entity relationship diagram was created successfully.



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**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	8
<b>Title of Experiment</b>	Develop a Data Flow Diagram (Process-Up to Level 1)
<b>Name of the candidate</b>	Jaswanth reddy—RA2011028010132
<b>Team Members</b>	Shivam Singh, Abhinav Reddy, Neehar
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	12/05/2022

### **Mark Split Up**

<b>S. No</b>	<b>Description</b>	<b>Maximum Marks</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

Staff Signature With date

**Aim**

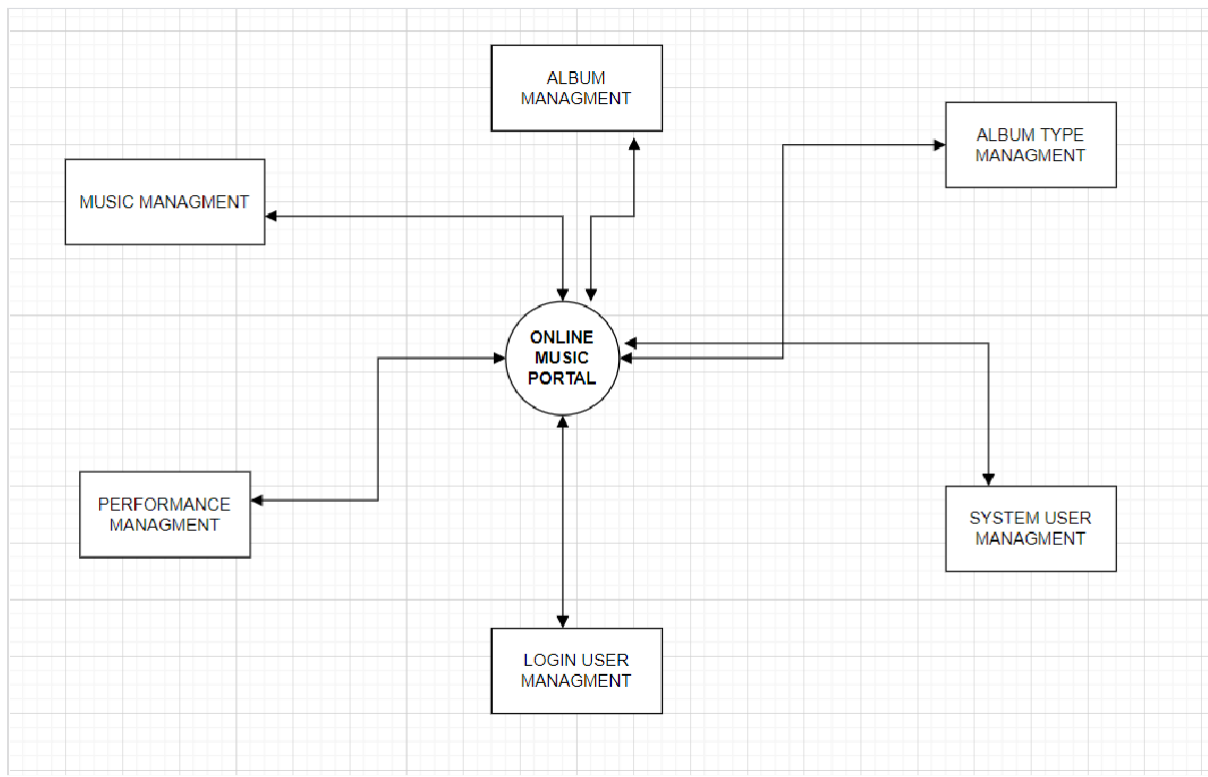
To develop the data flow diagram up to level 1 for the Online Music Website

### Team Members:

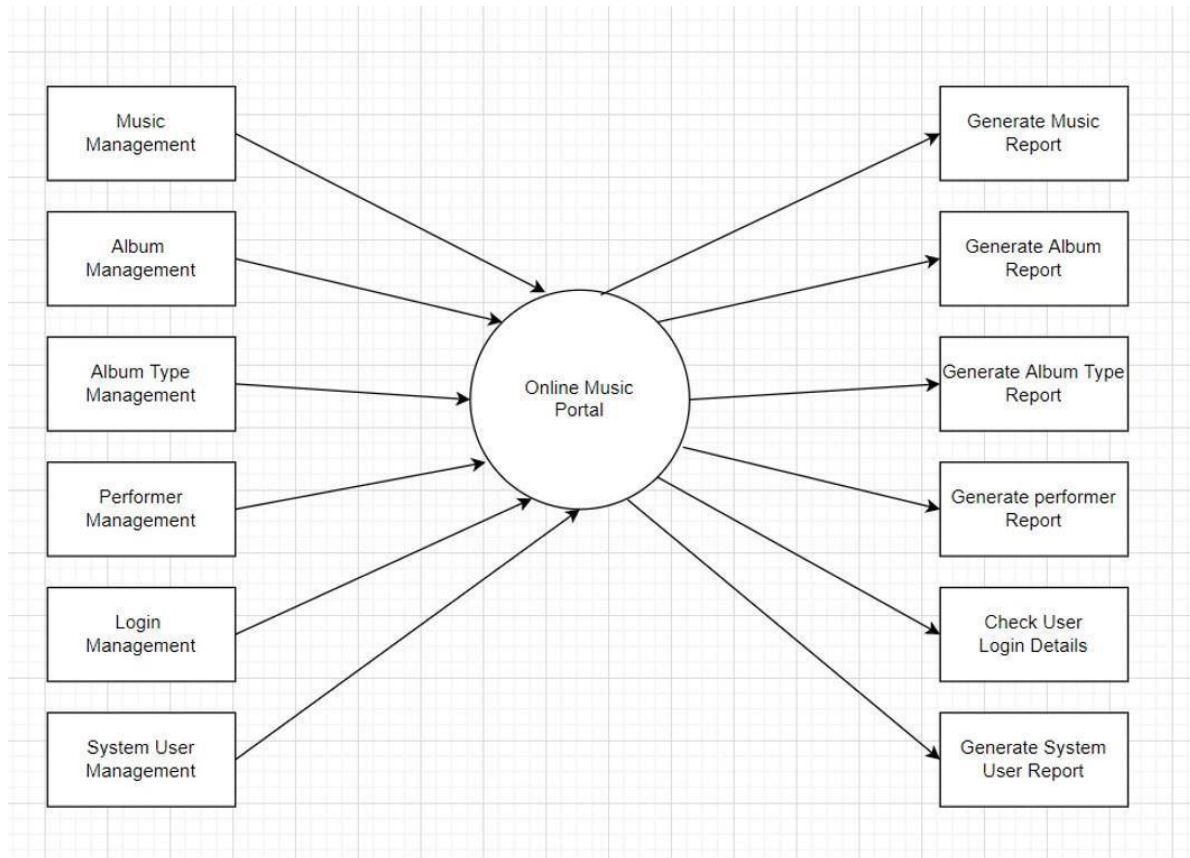
S No	Register No	Name	Role
1	Shivam Kr Singh	RA2011028010137	Member
2	Abhinav Reddy	RA2011028010125	Member
3	Neehar S Ashok	RA2011028010118	Member

### Data Flow Diagram

#### DFD Level 0



## DFD Level 1



Result:

Thus, the data flow diagrams have been created for the Online music website.



**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

Experiment No	9
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<b>Title of Experiment</b>	Design a Sequence and Collaboration Diagram
<b>Name of the candidate</b>	RA2011028010132 KOTHOLLA JASWANTH REDDY
<b>Team Members</b>	Shivam,Abhinav,Neehar
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	01/06/2022

### Mark Split Up

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

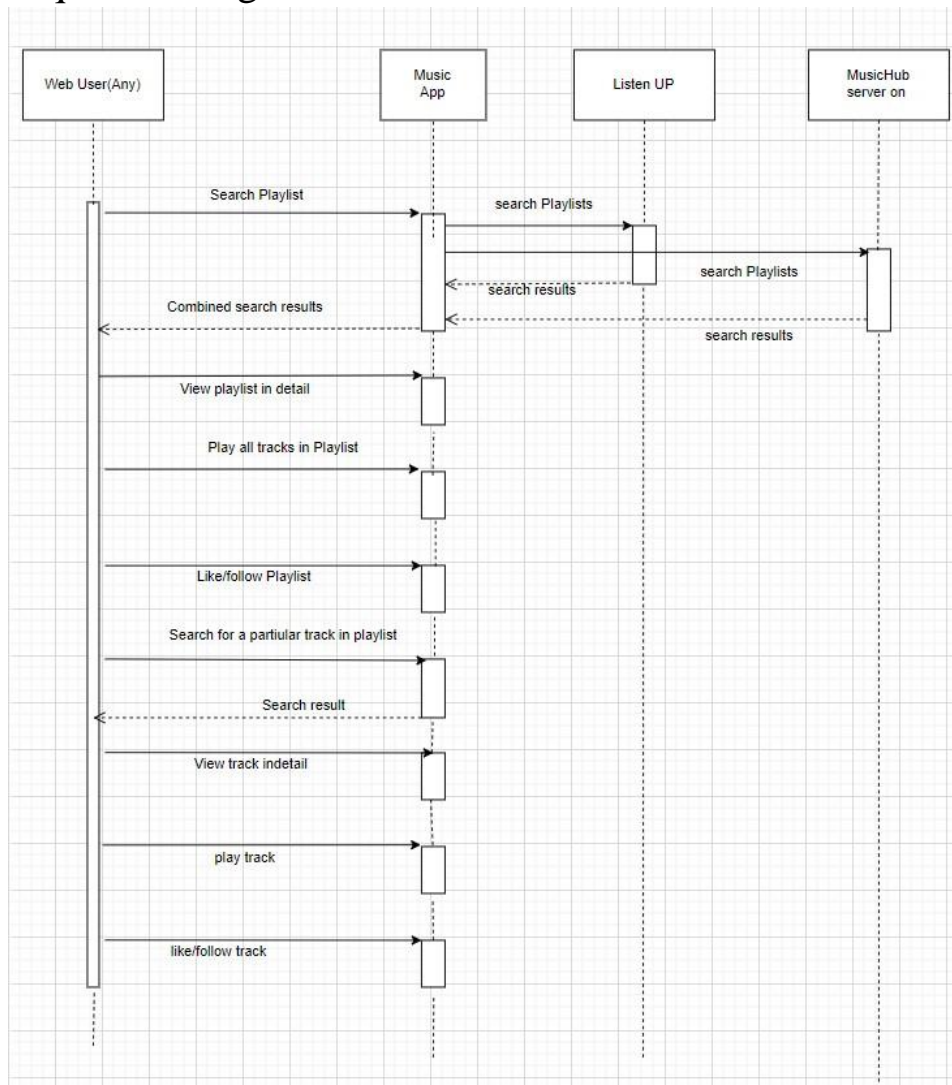
### Aim

To create the sequence and collaboration diagram for the Online Music Website

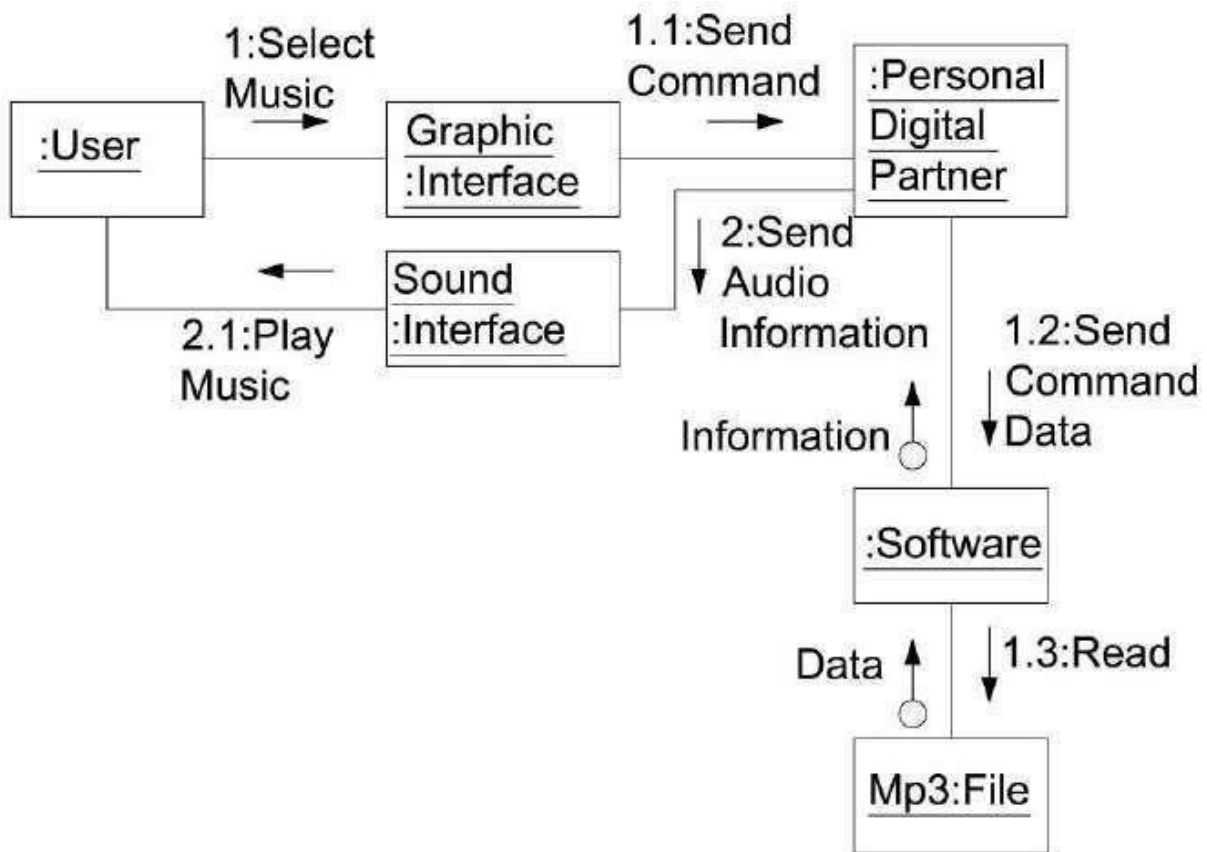
## Team Members:

S No	Register No	Name	Role
1	Shivam Kr Singh	RA2011028010137	Member
2	Neehar S Ashok	RA2011028010118	Member
3	Abhinav Reddy	RA2011028010125	Member

## Sequence Diagram



## Collaboration Diagram



Result:

Thus, the sequence and collaboration diagrams were created for the Online Music Website.



**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	10
<b>Title of Experiment</b>	Develop a Testing Framework/User Interface
<b>Name of the candidate</b>	Jaswanth Reddy
<b>Team Members</b>	Abhinav,Shivam,Neehar
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	01-05-2022

### Mark Split Up

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

#### **Aim**

To develop the testing framework and/or user interface framework for online music project.

**Team Members:**

Sl. No	Register No	Name	Role
1	RA2011028010125	N. ABHINAV	Member
2	RA2011028010118	NEEHAR S ASHOK	Member
3	RA2011028010137	SHIVAM KUMAR SINGH	Member

**SCOPE:**

To operates with a broad differentiation generic strategy by offering a wide range of music that appeals to a large market of listeners and differentiates itself by providing personalized playlists and music recommendations to users. Will let our users to be ahead from our competitor by giving early access to new released albums and podcasts.

**OBJECTIVES:**

Our mission is to unlock the potential of human creativity – by giving a million creative artists the opportunity to live off their art and billions of fans the opportunity to enjoy and be inspired by it.

**Approach to test the software application:**

It is very important to test the software application, before its launch. Testing is very important to give user good experience which leads in gaining more loyal customers for the software or application.

Testing plays an important role in making the product successful. We will be testing the software on mainly two approaches:-

1. functional testing approach
2. Non - functional testing approach

**TEST PLAN****Scope of Testing**

- Technically, Software Testing is an investigation conducted to provide stakeholders with information about the quality of a particular product or service under test. In other words, software testing is a process of verification and validation.

## FUNCTIONAL REQUIREMENTS:

**CLIENT** : The client-side of the system will be an application with a user interface that is integrated into a music listening website or application.

1. **Requesting recommendations**- giving recommendations to users according to the past history of choice.
2. **Evaluation songs**- evaluation of songs helps developer in giving recommendations.
3. **Investigating user** – checking the user information for security purpose
4. **Display the recommendations** –using graph data structure we can give accurate recommendations to our users.

**SERVER** : The server-side system will hold the entire data in a graph database, and must include all functionality to perform operations on this database, receive requests from the clients, evaluate, create and send recommendations etc.

1. **Handle recommendation requests** – handling of requests is important to provide fast and good experience to the user.
2. **Store evaluation** – provide storage evaluation through cloud according to users requirement.
3. **Data storing** – storage of data in cloud
4. **Recommend using content based filtering** – using searching technique to provide filtering

:

## THE NON-FUNCTIONAL REQUIREMENTS

### ss PERFORMANCE REQUIREMENTS

1. **Accuracy** –accuracy of data according to the filter applied by user

2. **Failure handling**- handling the memory and data very precisely
3. **Openness** –how much information should only be accessible to user
4. **Security** – use password to access any individual account

## DESIGN CONSTRAINTS:

1. **Language** – local language should be provided for the users in which he is comfortable.
2. **Hardware Constraints** – hardware specifications required to handle this much of complex software

## Types of Testing, Methodology, Tools

Category	Methodology	Tools Required
Functional Requirements Testing	Manual	Word Template ,UFT
Non functional requirements Testing	Server based	Loadstar, JMeter

Result:

Thus, the testing framework/user interface framework has been created for the online music website.



**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	11
<b>Title of Experiment</b>	Test Cases
<b>Name of the candidate</b>	Jaswanth Reddy
<b>Team Members</b>	Shivam,Abhinav,Neehar
<b>Register Number</b>	RA2011028010132
<b>Date of Experiment</b>	04-05-2022

**Mark Split Up**

<b>S.No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

**Aim**

To develop the test cases manual for the online music website project.

**Team Members:**

Sl. No	Register No	Name	Role
1	RA2011028010125	N. ABHINAV	Member
2	RA2011028010118	NEEHAR S ASHOK	Member
3	RA2011028010137	SHIVAM KUMAR SINGH	Member

## Test Case

## Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
-------------	---------------	-----------	-----------------	------------------	----------------	--------	---------

1	Verify User Registration from India	Accept Valid India Mobile Number on the Page#1	1. User clicks on User Registration link 2. Enter the mobile Number on the text box 3. Click Register	User should be taken to the next page for entering more user details	As expected	Pass	Success
	Verify User Registration from India	Don't Accept Non-Indian Mobile Number on the Page#1	It will show error as app has not been launched internationally yet.	error	error	failure	failure
2	Verify age	If age >= 18	1. user need to fill the age in registration form	give access to every song and podcast	As expected	pass	Success
	Verify age	If age < 18	2. enter the age before submitting the form.  1. default age is less than 18	Give access to limited songs and podcast	As expected	pass	success
3	Popping notification	Wants future notifications	1. click on yes for future updates	Pops up notification about update or new song, or new podcast	As expected	Pass	Success
	Popping notification	Don't want future notifications	1. click on No option	Don't show any notification	Updates will be listed in setting option	pass	success

4	Genre	Genre of songs	1.go to genre options 2.select genre according to choice 3.click ok	Show only those genre of songs	As expected	Pass	Success
	genre	Not any particular choice	Simply click on skip option	Will show all songs	As expected	pass	Success

## Non-Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
1.	Security	Accept only registered id's	1.fill your net id and password 2.click on login option	It will open your account	As expected	Pass	Success
	Security	If wrong id or password	1.enter the credentials again 2.click on login	It will show an error for wrong credentials	As expected	Pass	Success

2.	Recovery Of credentials	Gives forgot password option	1.click on forgot password 2.check your email for o.t.p. 3.enter email 4.click login	A new window will appear for setting new password	As expected	Pass	Success
3	scalability	Full storage	1.request for extra storage might cost some money 2.pay the money 3.click on submit	extra cloud storage will be provided according to requirement asked	As expected	Pass	Success

## To prepare the manual test case report for the Online Music

### Test Case

### Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
-------------	---------------	-----------	-----------------	------------------	----------------	--------	---------

1	User Registration	Check for database for new user record	<ol style="list-style-type: none"> <li>1. User clicks on User Registration link</li> <li>2. Enters his/her credentials in the text box</li> <li>3. Click Sign Up button</li> </ol>	User should be taken to the next page for entering more user details	User taken to the next page	Pass	Success
2	Issues in connection speed	Checking for how the website hold in different data speed	1.App will check the minimum data required for playing the song according to the file size of song.	If enough speed it will play the song otherwise error will come(Network Error).	Song will start to play	Pass	Success
3	Adding playlist	Check for newly added playlist items	<ol style="list-style-type: none"> <li>1. New playlists are getting updated after release of new albums</li> <li>2. updation process done every day.</li> </ol>	User should be notified and playlist comes on front page	User is notified and playlist is shown on top.	Pass	Success
4	Bugs and crashing	Check if every button and playlist is working perfectly or not	1. check by clicking buttons and playlist.	Song should start and stop after clicking on the button.	Song will start playing.	Pass	Success

5	Errors when screen sizes vary	Responsive nature of website.	1.Check the responsiveness of website.	It should work in every screen	Website will work in every screen size	Pass	Success
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## Non-Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
1	Authentication	Check if registered users can login/logout	In this test case, the queries are matched with the database and action is taken accordingly	User is redirected to their dashboard if authentication is successful or receives a notification if it is not	User is redirected to dashboard or receives a notification	Pass	Success
2	Performance Testing	Check if the database is being updated accordingly	In this test case we check if the database is being updated with each new songs being added into the respective playlists.	Database is updated	Database is updated	Pass	Success
3	Mail Connectivity	Check if the OTP is received while logging in or not.	1.OTP will be sent to users email for authentication process.	OTP is supposed to be received by the user who is trying to login.	OTP is received	Pass	Success

The following test cases are under progress, as the old ones are rectified, new ones could pop up, this is called maintenance of the developed product. Involves continuous testing, upgrading and making the product safe.

Category	Progress Against Plan	Status
Functional Testing	Green	Completed

Non-Functional Testing	Amber	In-Progress
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Functional	Test Case Coverage (%)	Status
User Registration	100%	Completed
Issue in connection speed	100%	Completed
Adding playlist	100%	Completed
Bugs and crashing	100%	Completed
Errors when screen sizes vary	100%	Completed
Non-Functional	Test Case Coverage (%)	Status
Authentication	50% (Working Prototype)	In-Progress
Performance Testing Mail	50% (Working Prototype)	In Progress
E-Mail Connectivity	50% (Working Prototype)	In progress

Result:

Thus, the test case report has been created for the **Online Music Website**.



**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

<b>Experiment No</b>	12
<b>Title of Experiment</b>	Provide the details of Architecture Design/Framework/Implementation
<b>Name of the candidate</b>	Jashwanth Reddy

<b>Team Members</b>	Shivam,Neehar,Abhinav
<b>Register Numbers</b>	RA2011028010132
<b>Date of Experiment</b>	12/06/22

### Mark Split Up

<b>S. No</b>	<b>Description</b>	<b>Maximum Mark</b>	<b>Mark Obtained</b>
1	Exercise	5	
2	Viva	5	
<b>Total</b>		<b>10</b>	

**Staff Signature with date**

## Aim

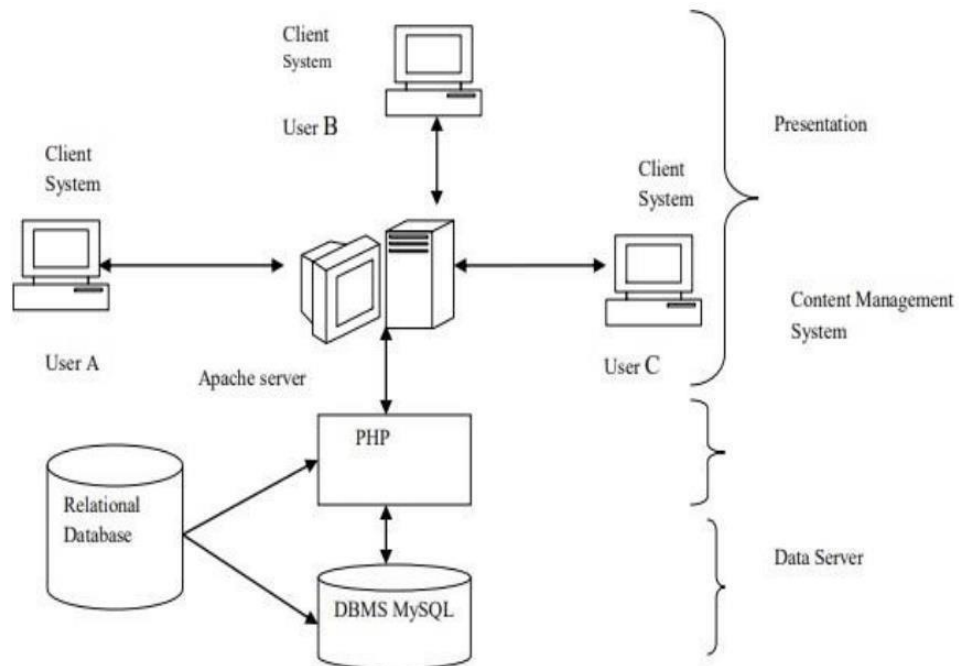
To provide the details of architectural design/framework/implementations.

**Team Members:**

Sl. No	Register No	Name	Role
1	RA2011028010125	N. ABHINAV	Member
2	RA2011028010118	NEEHAR S ASHOK	Member
3	RA2011028010137	SHIVAM KUMAR SINGH	Member

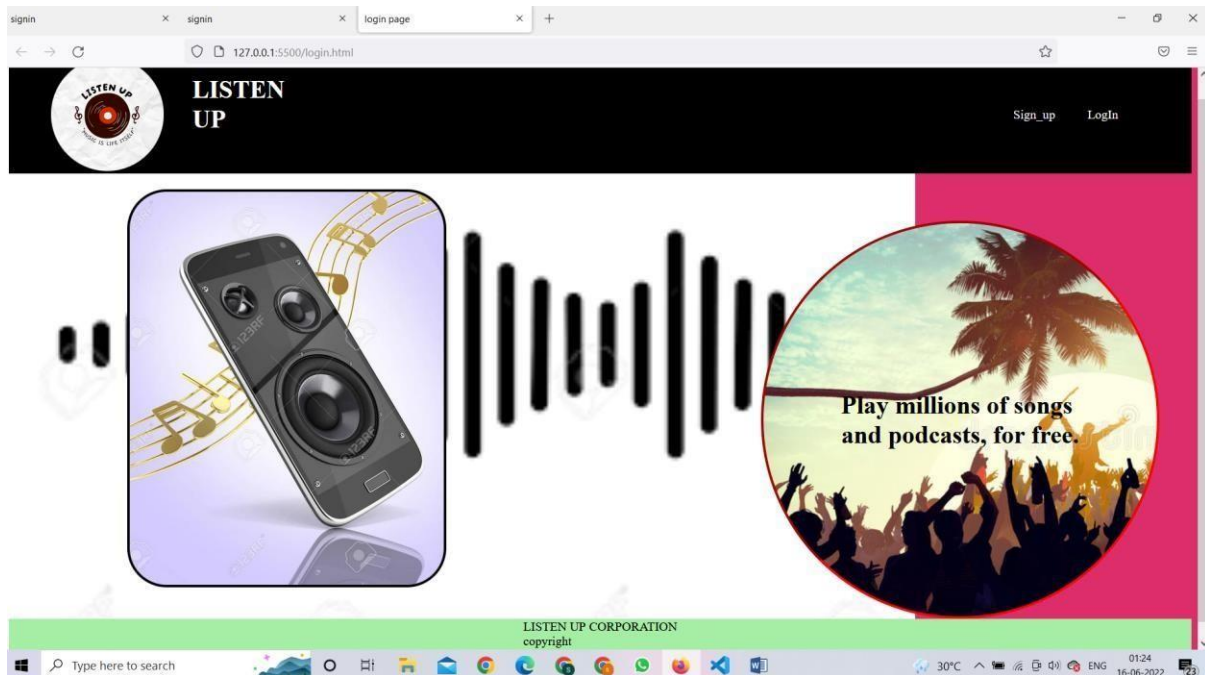
## System Architecture

The elements taken into consideration in designing the net song portal system are Interoperability and accessibility with minimum requirements on the user's aspect.



## Framework and implementation

Whenever someone land on our website, they will land on our welcome page which describes the main theme of the website that is online music which look like this

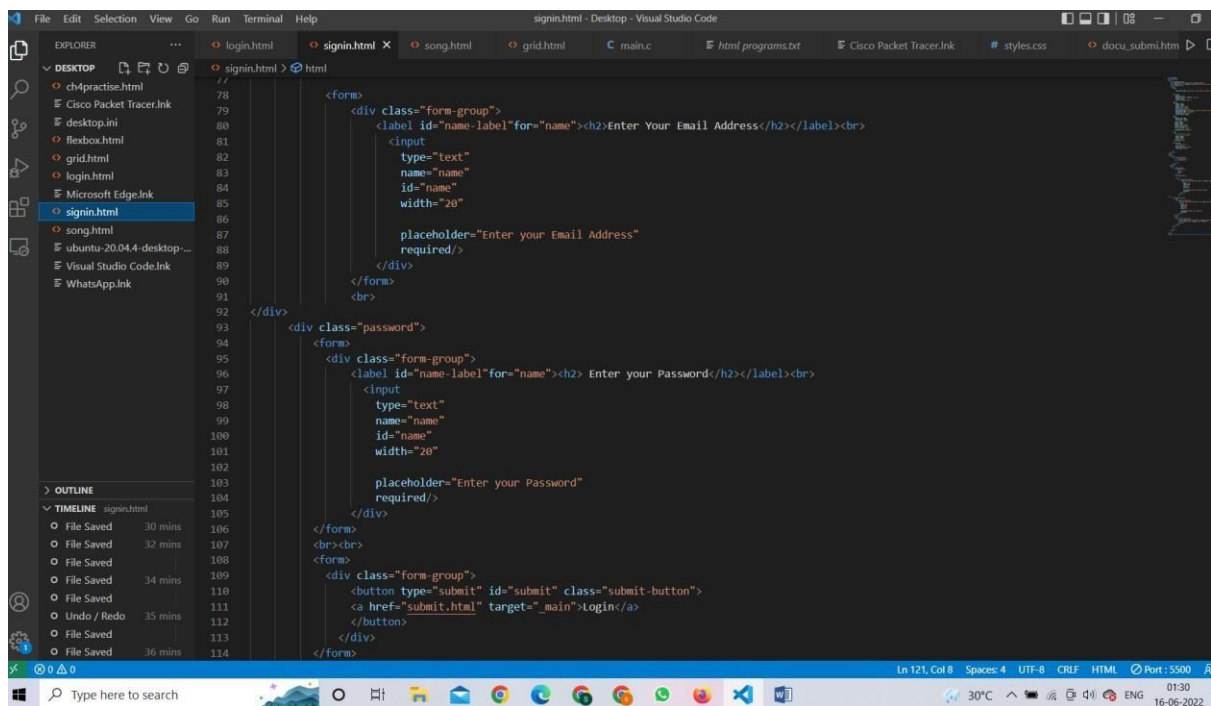
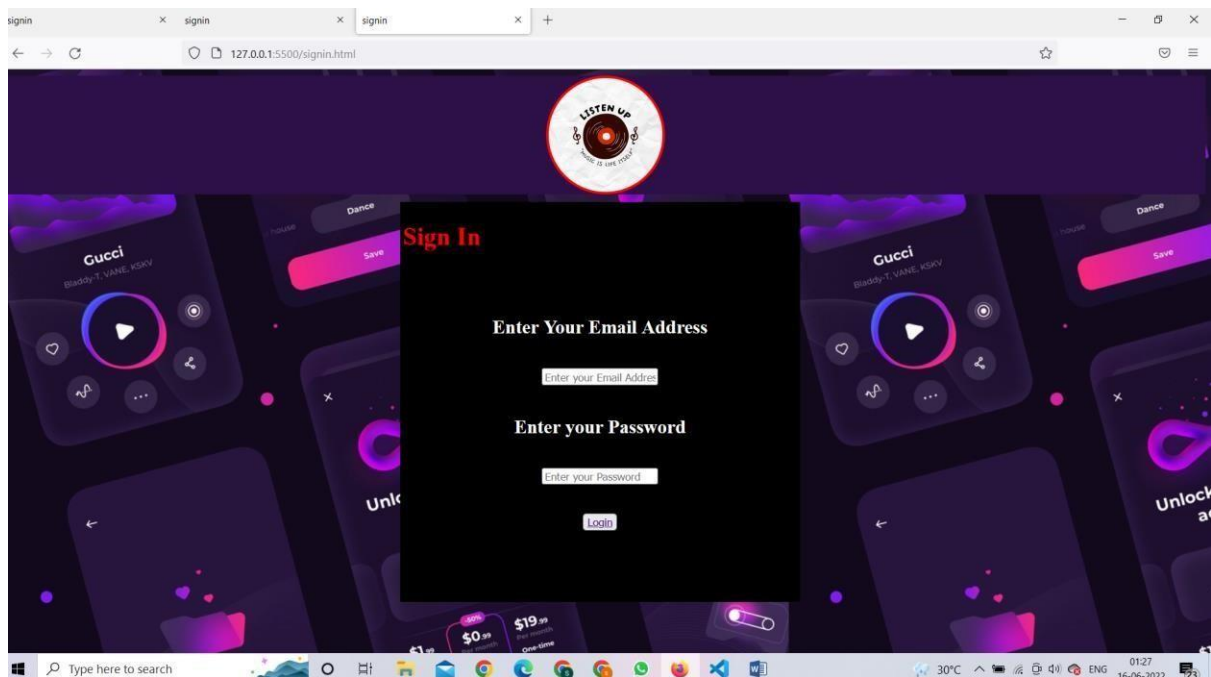


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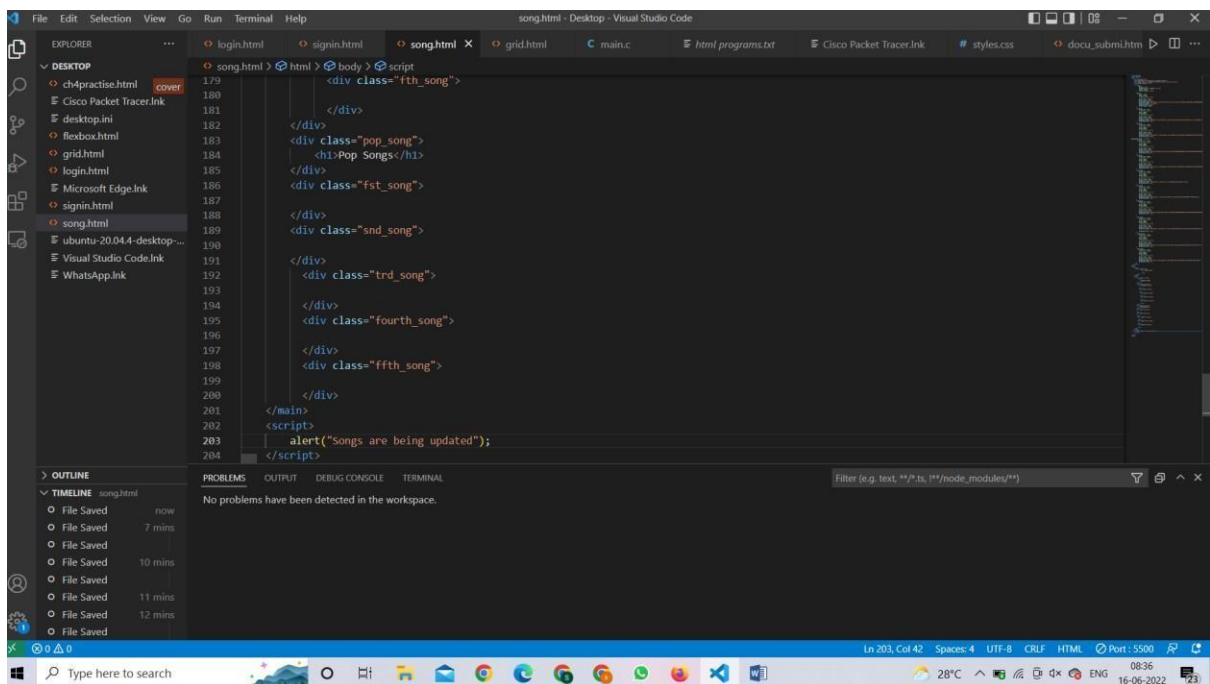
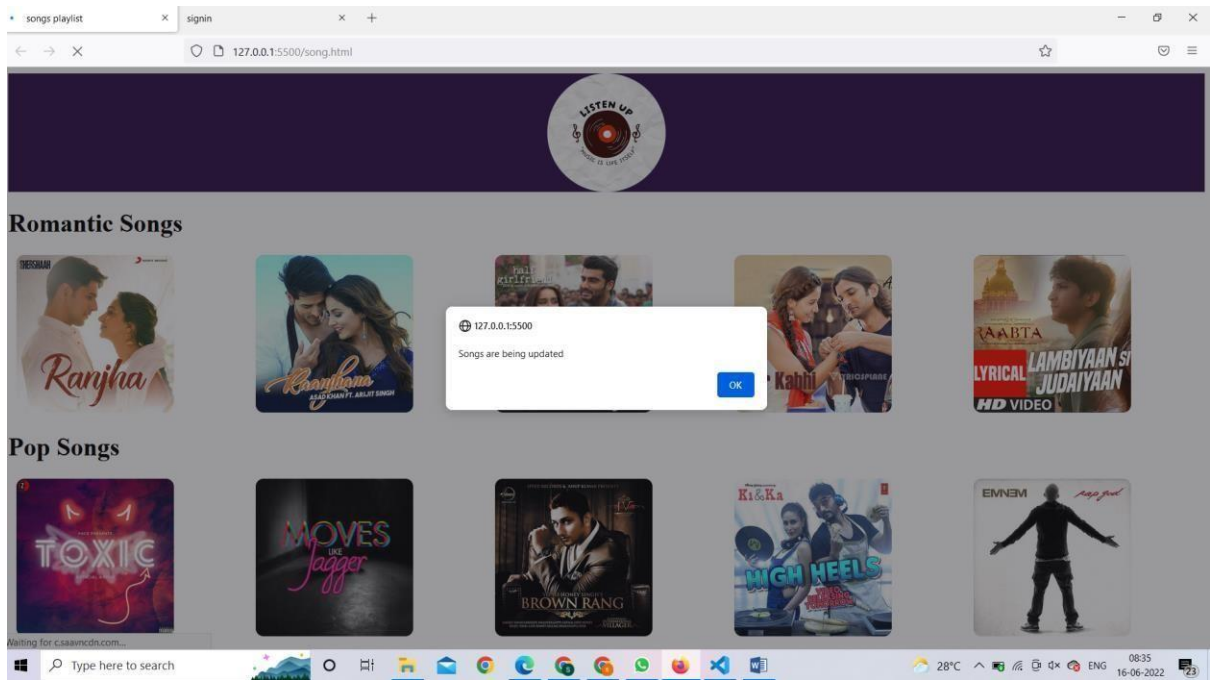
login.html - Desktop - Visual Studio Code
login.html x  login.html  song.html  grid.html  main.c  html programs.bt  Cisco Packet TracerLink  # styles.css  docu_submi.htm
login.html > html > body > header
149
150     <h1>
151         LISTEN UP
152     </h1>
153 </div>
154
155 </div>
156
157 <div class="text">
158     <a href="http://127.0.0.1:5500/signin.html">Sign_up</a>
159 </div>
160
161 <div class="lin"><a href="http://127.0.0.1:5500/signin.html">LogIn</a></div>
162
163 </div>
164
165 </header>
166
167 <main>
168     <div class="container">
169         <div class="photo">
170             <!-- <div class="write"> -->
171             <!-- </div> -->
172         </div>
173         <div class="cont">
174             <h1>
175                 Play millions of songs <br>
176                 and podcasts, for free.
177             </h1>
178         </div>
179     </div>
180 </main>
181
182 <footer>
183     <div class="copy">
184         LISTEN UP CORPORATION
185         <br>
186         copyright
187     </div>
188 </footer>
189
190 </html>

```

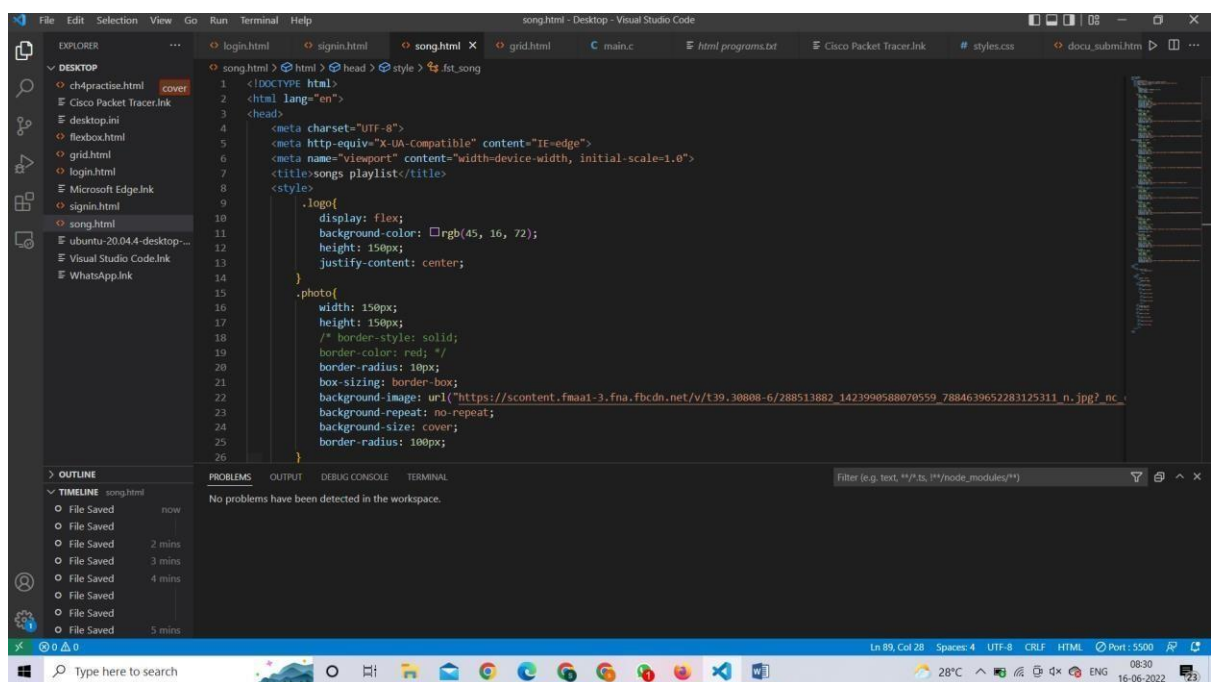
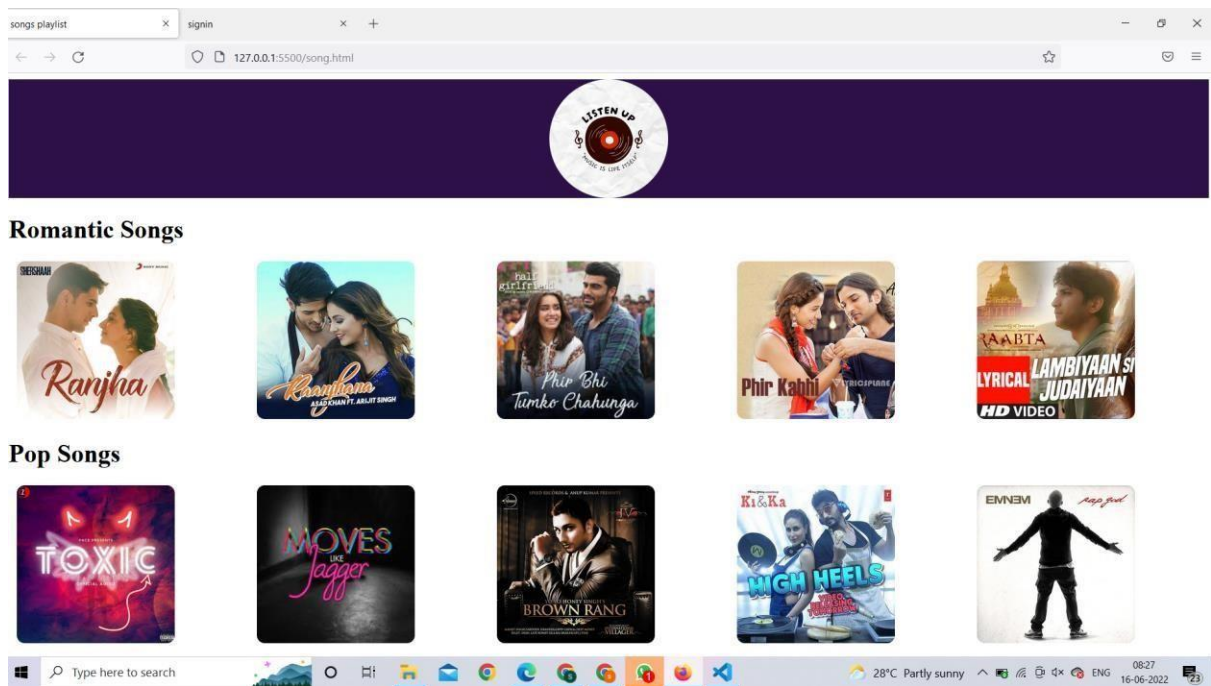
It has two options to login and sign in which is chosen by customers accordingly which will land them to our login page where they need to fill the required details.



Testing Phase- we need to see if all the songs which are present in the database are working properly or not.



**Training Phase-** we need to add all the songs in the database and store the songs in any data centre.



Result:

Thus, the details of architectural design/framework/implementation along with the screenshots were provided.

# CONCLUSION

our project is only a humble venture to satisfy the needs of common peoples by making it more user friendly and easy to use compared to other same kind of website. same kind of website are already there in market but they are not affordable for middle and lower class people and also they are not very much user friendly that's where our project or website come into play as it provides everything for negligible price and also very much user friendly. There will be many future updates will come for this website like enjoying music together only by joining a meet etc. which will make this more useful and convenient for the users.

THANK YOU

NEEHAR S ASHOK

RA2011028010118

## **REFERENCES**

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- [2] Jim Smith Agile Project Management: Creating Innovative Products, Pearson 2008
- [3] Walker Royce, Software Project Management, Pearson Education, 1999
- [4] Ian Sommerville, Software Engineering, 8th ed., Pearson Education, 2010
- [5] Ashfaque Ahmed, Software Project Management: A Process-driven Approach, Boca Raton, Florida: CRC Press, 2012
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