

**MUSIC STREAMING PLATFORM- DSK**

**A COURSE PROJECT REPORT**

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Department of Networking and Communications



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## **BONAFIDE CERTIFICATE**

Certified that this project report “**MUSIC STREAMING PLATFORM-DSK**” is the Bonafide work of  
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## **ABSTRACT:**

A web-based music streaming platform- DSK Music, is designed to focus on community and genre-based music classification is a freemium app also, some basic features are with adverting and limited control

## **INTRODUCTION:**

### **PROBLEM STATEMENT:**

Some music players are only available in online .so Spotify clone provides an offline platform for users. Users will use the offline option to stream the album and listen without using the internet

This project designs a web application with a user interface that will enable the to browse, play, and rewind music of their choice.

### **SCOPE OF THE PROJECT:**

A Spotify clone app is a music streaming app which provides a free platform to listen to music without downloading it.

The project's main scope is to provide the right platform to music listeners out there in the social market.

The software is user-friendly from login to listening to music. With the various features, users can easily enjoy listening to their favorite songs.

This provides the user to listen to music offline without the means of the internet.

## **REQUIREMENT ANALYSIS:**

### **SYSTEM TOOLS:**

The following are various software and hardware requirements of the project.

- HTML
- CSS
- JAVASCRIPT
- JSP
- VISUAL STUDIO IDE
- WEB BROWSER
- OPERATING SYSTEM
- 512 MB RAM & Above
- 3.4 GHz and above

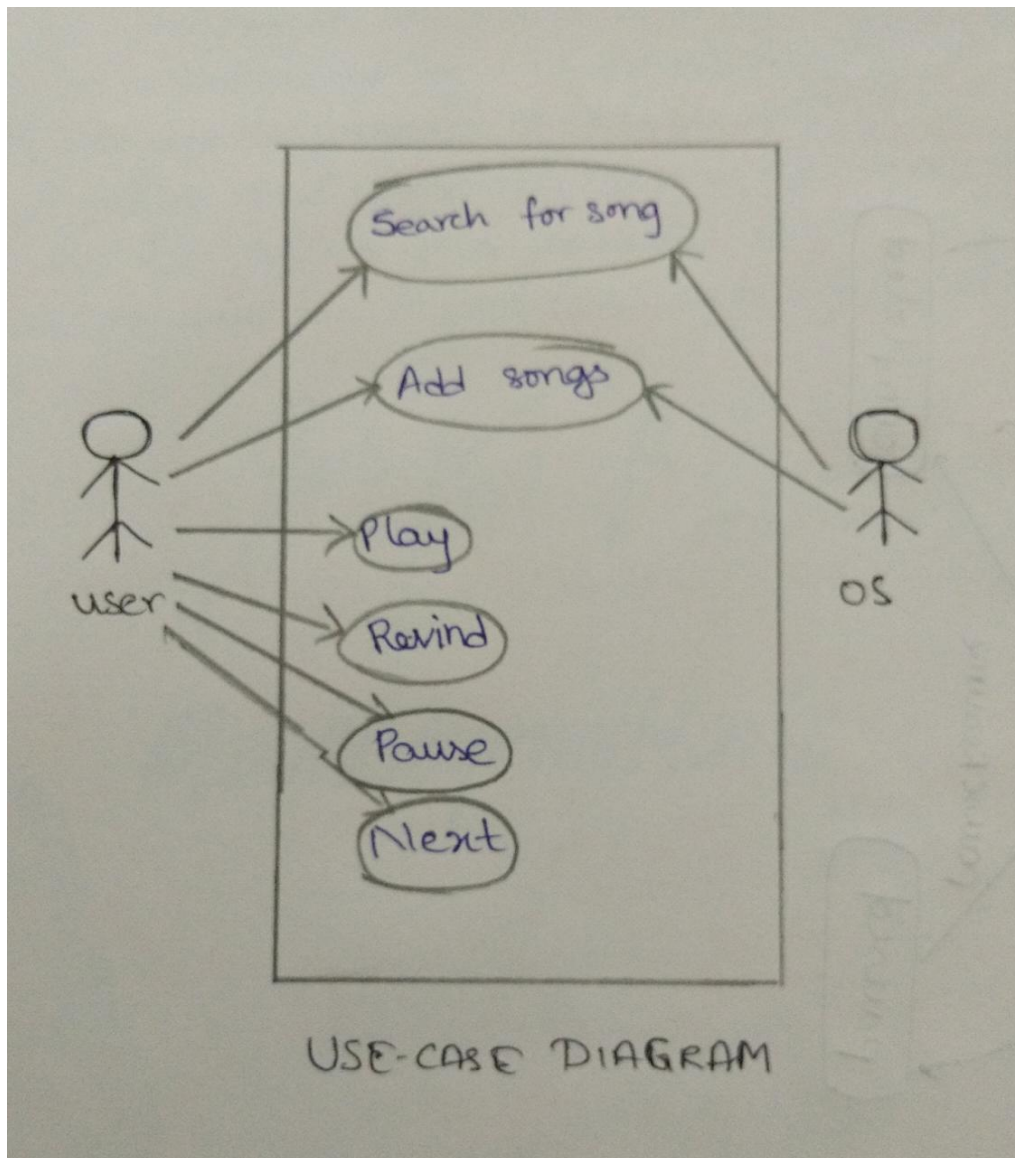
HTML(Hypertext Markup Language) is the syntax used to format a text document on the web.

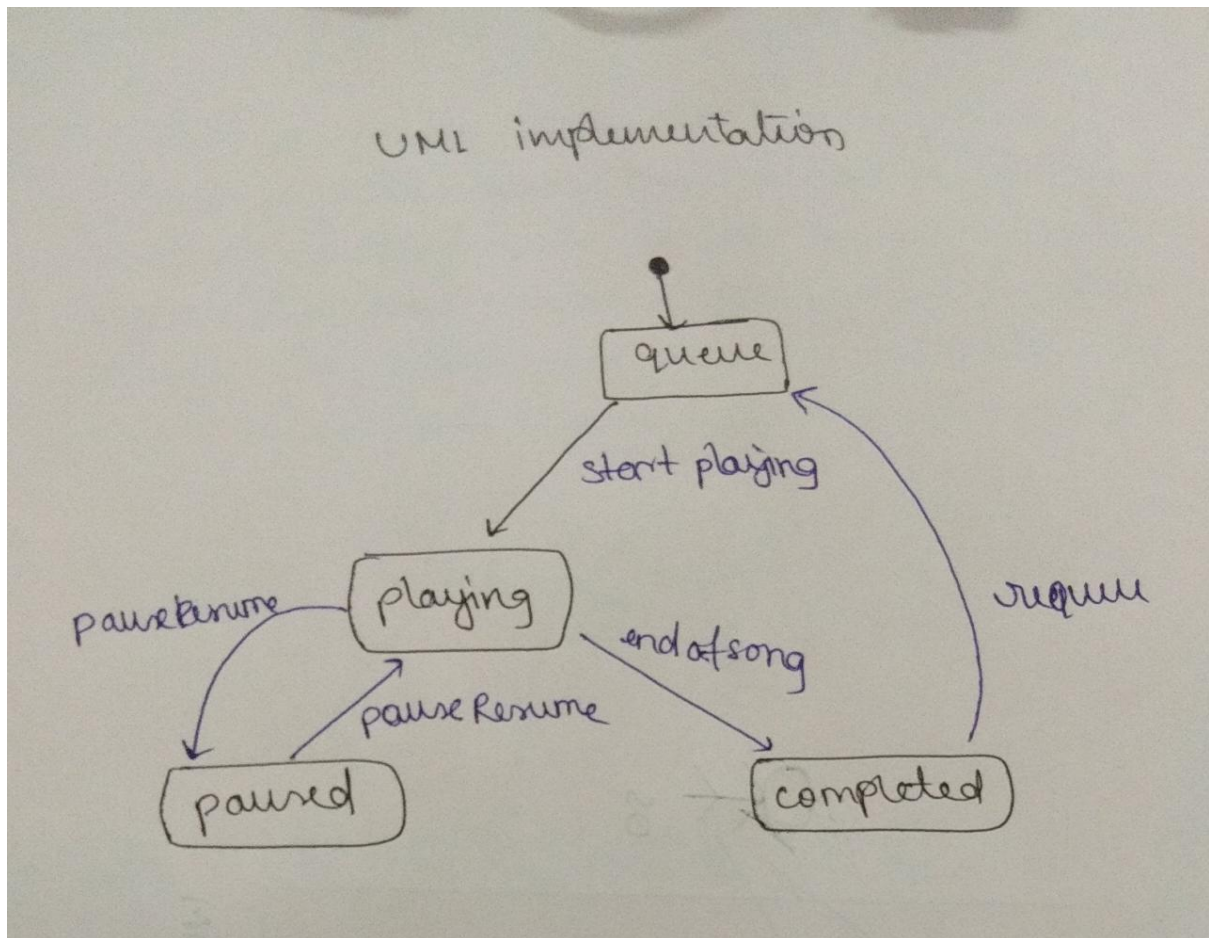
CSS(cascading style sheets) is a style sheet language used for describing the look and formatting of a document written in markup language.

JavaScript(JS) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side.

## ARCHITECTURE AND DESIGN:

### DATABASE DESIGN:





### SYSTEM DESIGN:

We have different modules and each module has its own functionalities.

- list of songs – It displays all the songs present in the playlist.
- Play button – It plays the currently selected song.
- Pause button – It is used to pause the song that is been playing on a loop.
- Previous button – It plays the previously played song or the song just before in the queue
- Next button – It plays the next song in the queue.

## **IMPLEMENTATION:**

### **METHODOLOGY(CODE)**

- HTML FILE

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
<meta name="viewport" content="width=device-width, initial-  
scale=1.0">
```

```
<title>Spotify - Your favourite music is here</title>
```

```
<link rel="stylesheet" href="style.css">
```

```
</head>
```

```
<body>
```

```
<nav>
```

```
<ul>
```

```
<li class="brand"> DSK  
MUSIC</li>
```

```
<li>Home</li>
```

```
<li>About</li>
```

```
</ul>
```

```
</nav>
```

```
<div class="container">
```

```
<div class="songList">
```

```
<h1>PLAY LIST</h1>
```



```

<div class="songItemContainer">
  <div class="songItem">
    <img alt="1">
    <span class="songName">Let me Love You</span>
    <span class="songlistplay"><span class="timestamp">05:34
< i id="0" class="far songItemPlay fa-play-circle"></i> </span></span>
  </div>
  <div class="songItem">
    <img alt="1">
    <span class="songName">Let me Love You</span>
    <span class="songlistplay"><span class="timestamp">05:34
< i id="1" class="far songItemPlay fa-play-circle"></i> </span></span>
  </div>
  <div class="songItem">
    <img alt="1">
    <span class="songName">Let me Love You</span>
    <span class="songlistplay"><span class="timestamp">05:34
< i id="2" class="far songItemPlay fa-play-circle"></i> </span></span>
  </div>
  <div class="songItem">
    <img alt="1">
    <span class="songName">Let me Love You</span>
    <span class="songlistplay"><span class="timestamp">05:34
< i id="3" class="far songItemPlay fa-play-circle"></i> </span></span>
  </div>
  <div class="songItem">

```

```

        <img alt="1">
        <span class="songName">Let me Love You</span>
        <span class="songlistplay"><span class="timestamp">05:34
< i id="4" class="far songItemPlay fa-play-circle"></i> </span></span>
    </div>
    <div class="songItem">
        <img alt="1">
        <span class="songName">Let me Love You</span>
        <span class="songlistplay"><span class="timestamp">05:34
< i id="5" class="far songItemPlay fa-play-circle"></i> </span></span>
    </div>
    <div class="songItem">
        <img alt="1">
        <span class="songName">Let me Love You</span>
        <span class="songlistplay"><span class="timestamp">05:34
< i id="6" class="far songItemPlay fa-play-circle"></i> </span></span>
    </div>
    <div class="songItem">
        <img alt="1">
        <span class="songName">Let me Love You</span>
        <span class="songlistplay"><span class="timestamp">05:34
< i id="7" class="far songItemPlay fa-play-circle"></i> </span></span>
    </div>
    <div class="songItem">
        <img alt="1">
        <span class="songName">Let me Love You</span>

```

```

        <span class="songlistplay"><span class="timestamp">05:34
<i id="8" class="far songItemPlay fa-play-circle"></i> </span></span>
    </div>
    <div class="songItem">
        <img alt="1">
        <span class="songName">Let me Love You</span>
        <span class="songlistplay"><span class="timestamp">05:34
<i id="9" class="far songItemPlay fa-play-circle"></i> </span></span>
    </div>
</div>
</div>
<div class="songBanner"></div>
</div>
<div class="bottom">
    <input type="range" name="range" id="myProgressBar" min="0"
value="0" max="100">
    <div class="icons">
        <!-- fontawesome icons -->
        <i class="fas fa-3x fa-step-backward" id="previous"></i>
        <i class="far fa-3x fa-play-circle" id="masterPlay"></i>
        <i class="fas fa-3x fa-step-forward" id="next"></i>
    </div>
    <div class="songInfo">
         <span
id="masterSongName">Warriyo - Mortals [NCS Release]</span>
    </div>

```

```
</div>

<script src="script.js"></script>

<script src="https://kit.fontawesome.com/26504e4a1f.js"
crossorigin="anonymous"></script>

</body></html>
```

- CSS FILE:

```
@import
url('https://fonts.googleapis.com/css2?family=Ubuntu&display=swap');

@import
url('https://fonts.googleapis.com/css2?family=Varela+Round&display=sw
ap');

body{
    background-color: antiquewhite;
}

*{
    margin: 0;
    padding: 0;
}

nav{
    font-family: 'Ubuntu', sans-serif;
}

nav ul{
    display: flex;
    align-items: center;
    list-style-type: none;
    height: 65px;
```

```
background-color: black;
color: white;
}
nav ul li{
padding: 0 12px;
}.brand img{
width: 44px;
padding: 0 8px;
}
.brand {
display: flex;
align-items: center;
font-weight: bolder;
font-size: 1.3rem;
}
.container{
min-height: 72vh;
background-color: black;
color: white;
font-family: 'Varela Round', sans-serif;
display: flex;
margin: 23px auto;
width: 70%;
border-radius: 12px;
padding: 34px;
```

```
    background-image: url('bg.jpg');
}
.bottom{
    position: sticky;
    bottom: 0;
    height: 130px;
    background-color: black;
    color: white;
    display: flex;
    justify-content: center;
    align-items: center;
    flex-direction: column;
}
.icons{
    margin-top: 14px;
}
.icons i{
    cursor: pointer;
}
#myProgressBar{
    width: 80vw;
    cursor: pointer;
}
.songItemContainer{
    margin-top: 74px;
}
```

```
.songItem{
    height: 50px;
    display: flex;
    background-color: white;
    color: black;
    margin: 12px 0;
    justify-content: space-between;
    align-items: center;
    border-radius: 34px;
}

.songItem img{
    width: 43px;
    margin: 0 23px;
    border-radius: 34px;
}

.timestamp{
    margin: 0 23px;
}

.timestamp i{
    cursor: pointer;
}

.songInfo{
    position: absolute;
    left: 10vw;
    font-family: 'Varela Round', sans-serif;
}
```

```
.songInfo img{
  opacity: 0;
  transition: opacity 0.4s ease-in;
}

@media only screen and (max-width: 1100px) {
  body {
    background-color: red; }}
```

- JAVASCRIPT FILE:

```
console.log("Welcome to Spotify");
// Initialize the Variables
let songIndex = 0;
let audioElement = new Audio('songs/1.mp3');
let masterPlay = document.getElementById('masterPlay');
let myProgressBar = document.getElementById('myProgressBar');
let gif = document.getElementById('gif');
let masterSongName = document.getElementById('masterSongName');
let songItems =
Array.from(document.getElementsByClassName('songItem'));
let songs = [
  {songName: "Warriyo - Mortals [NCS Release]", filePath:
"songs/1.mp3", coverPath: "covers/1.jpg"},
  {songName: "Cielo - Huma-Huma", filePath: "songs/2.mp3",
coverPath: "covers/2.jpg"},
  {songName: "DEAF KEV - Invincible [NCS Release]-320k", filePath:
"songs/3.mp3", coverPath: "covers/3.jpg"},
  {songName: "Different Heaven & EH!DE - My Heart [NCS Release]",
```



```

filePath: "songs/4.mp3", coverPath: "covers/4.jpg"},
    {songName: "Janji-Heroes-Tonight-feat-Johnning-NCS-Release",
filePath: "songs/5.mp3", coverPath: "covers/5.jpg"},
    {songName: "Rabba - Salam-e-Ishq", filePath: "songs/2.mp3",
coverPath: "covers/6.jpg"},
    {songName: "Sakhiyaan - Salam-e-Ishq", filePath: "songs/2.mp3",
coverPath: "covers/7.jpg"},
    {songName: "Bhula Dena - Salam-e-Ishq", filePath: "songs/2.mp3",
coverPath: "covers/8.jpg"},
    {songName: "Tumhari Kasam - Salam-e-Ishq", filePath: "songs/2.mp3",
coverPath: "covers/9.jpg"},
    {songName: "Na Jaana - Salam-e-Ishq", filePath: "songs/4.mp3",
coverPath: "covers/10.jpg"},
]
songItems.forEach((element, i)=>{
    element.getElementsByTagName("img")[0].src = songs[i].coverPath;
    element.getElementsByClassName("songName")[0].innerText =
songs[i].songName;
})
// Handle play/pause click
masterPlay.addEventListener('click', ()=>{
    if(audioElement.paused || audioElement.currentTime<=0){
        audioElement.play();
        masterPlay.classList.remove('fa-play-circle');
        masterPlay.classList.add('fa-pause-circle');
        gif.style.opacity = 1;
    }
    else{

```

```

        audioElement.pause();
        masterPlay.classList.remove('fa-pause-circle');
        masterPlay.classList.add('fa-play-circle');
        gif.style.opacity = 0;
    }
})
// Listen to Events
audioElement.addEventListener('timeupdate', ()=>{
    // Update Seekbar
    progress =
    parseInt((audioElement.currentTime/audioElement.duration)* 100);
    myProgressBar.value = progress;
})
myProgressBar.addEventListener('change', ()=>{
    audioElement.currentTime = myProgressBar.value *
    audioElement.duration/100;
})
const makeAllPlays = ()=>{
    Array.from(document.getElementsByClassName('songItemPlay')).forEach
    ((element)=>{
        element.classList.remove('fa-pause-circle');
        element.classList.add('fa-play-circle');
    })
}
Array.from(document.getElementsByClassName('songItemPlay')).forEach
((element)=>{

```

```

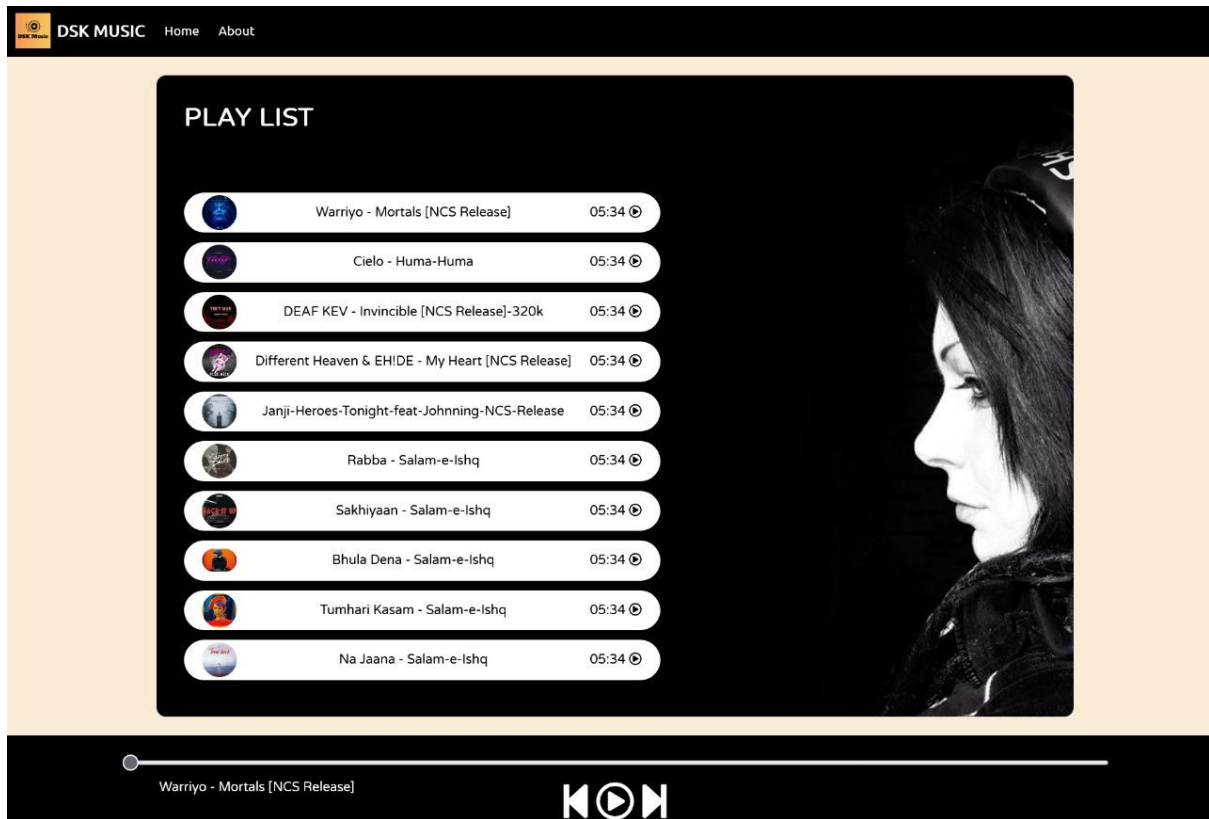
element.addEventListener('click', (e)=>{
    makeAllPlays();
    songIndex = parseInt(e.target.id);
    e.target.classList.remove('fa-play-circle');
    e.target.classList.add('fa-pause-circle');
    audioElement.src = `songs/${songIndex+1}.mp3`;
    masterSongName.innerText = songs[songIndex].songName;
    audioElement.currentTime = 0;
    audioElement.play();
    gif.style.opacity = 1;
    masterPlay.classList.remove('fa-play-circle');
    masterPlay.classList.add('fa-pause-circle');
})
})
document.getElementById('next').addEventListener('click', ()=>{
    if(songIndex>=9){
        songIndex = 0
    }
    else{
        songIndex += 1;
    }
    audioElement.src = `songs/${songIndex+1}.mp3`;
    masterSongName.innerText = songs[songIndex].songName;
    audioElement.currentTime = 0;
    audioElement.play();

```

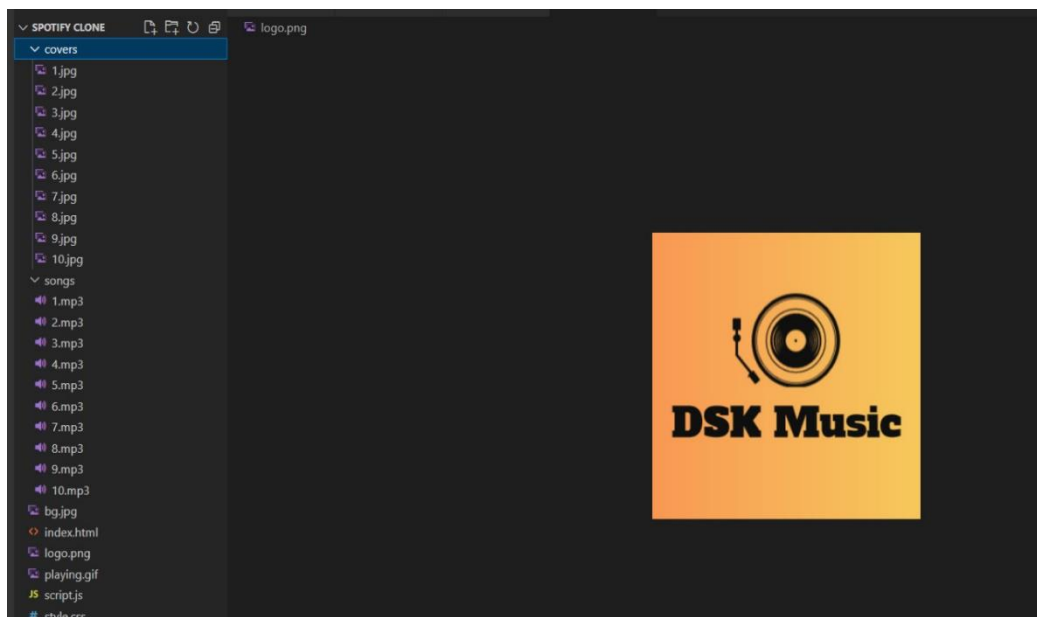
```
    masterPlay.classList.remove('fa-play-circle');
    masterPlay.classList.add('fa-pause-circle');
  })
  document.getElementById('previous').addEventListener('click', ()=>{
    if(songIndex<=0){
      songIndex = 0
    }
    else{
      songIndex -= 1;
    }
    audioElement.src = `songs/${songIndex+1}.mp3`;
    masterSongName.innerText = songs[songIndex].songName;
    audioElement.currentTime = 0;
    audioElement.play();
    masterPlay.classList.remove('fa-play-circle');
    masterPlay.classList.add('fa-pause-circle');
  })
}
```

## EXPERIMENT RESULT & ANALYSIS:

### Homepage :



### Logo – DSK Music:



```
# style.css >
1 @import url('https://fonts.googleapis.com/css2?family=Ubuntu&display=swap');
2 @import url('https://fonts.googleapis.com/css2?family=Varela+Round&display=swap');
3 body{
4     background-color: ■ antiquewhite;
5 }
6
7 *{
8     margin: 0;
9     padding: 0;
10 }
11
12 nav{
13     font-family: 'Ubuntu', sans-serif;
14 }
15
16 nav ul{
17     display: flex;
18     align-items: center;
19     list-style-type: none;
20     height: 65px;
21     background-color: □ black;
22     color: ■ white;
23 }
24
25 nav ul li{
26     padding: 0 12px;
27 }
28
29 .brand img{
30     width: 44px;
31     padding: 0 8px;
32 }
33
34 .brand {
35     display: flex;
36     align-items: center;
37     font-weight: bolder;
38     font-size: 1.3rem;
39 }
```

```
index.html > html > head > meta
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta http-equiv="X-UA-Compatible" content="IE=edge">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Spotify - Your favourite music is here</title>
8     <link rel="stylesheet" href="style.css">
9   </head>
10  <body>
11    <nav>
12      <ul>
13        <li class="brand"> DSK MUSIC</li>
14        <li>Home</li>
15        <li>About</li>
16      </ul>
17    </nav>
18
19    <div class="container">
20      <div class="songList">
21        <h1>PLAY LIST</h1>
22        <div class="songItemContainer">
23          <div class="songItem">
24            <img alt="1">
25            <span class="songName">Let me Love You</span>
26            <span class="songlistplay"><span class="timestamp">05:34 <i id="0" class="far songItemPlay fa-play-circle"></i> </span>
27          </div>
28          <div class="songItem">
29            <img alt="1">
30            <span class="songName">Let me Love You</span>
31            <span class="songlistplay"><span class="timestamp">05:34 <i id="1" class="far songItemPlay fa-play-circle"></i> </span>
32          </div>
33          <div class="songItem">
34            <img alt="1">
35            <span class="songName">Let me Love You</span>
36            <span class="songlistplay"><span class="timestamp">05:34 <i id="2" class="far songItemPlay fa-play-circle"></i> </span>
37          </div>
38        </div>
39      </div>
40    </div>
41  </body>
42 </html>
```

```

JS script.js > ...
1  console.log("Welcome to Spotify");
2
3  // Initialize the Variables
4  let songIndex = 0;
5  let audioElement = new Audio('songs/1.mp3');
6  let masterPlay = document.getElementById('masterPlay');
7  let myProgressBar = document.getElementById('myProgressBar');
8  let gif = document.getElementById('gif');
9  let masterSongName = document.getElementById('masterSongName');
10 let songItems = Array.from(document.getElementsByClassName('songItem'));
11
12 let songs = [
13   {songName: "Warriyo - Mortals [NCS Release]", filePath: "songs/1.mp3", coverPath: "covers/1.jpg"},
14   {songName: "Cielo - Huma-Huma", filePath: "songs/2.mp3", coverPath: "covers/2.jpg"},
15   {songName: "DEAF KEV - Invincible [NCS Release]-320k", filePath: "songs/3.mp3", coverPath: "covers/3.jpg"},
16   {songName: "Different Heaven & EH!DE - My Heart [NCS Release]", filePath: "songs/4.mp3", coverPath: "covers/4.jpg"},
17   {songName: "Janji Heroes-Tonight-feat-Johnning-NCS-Release", filePath: "songs/5.mp3", coverPath: "covers/5.jpg"},
18   {songName: "Rabba - Salam-e-Ishq", filePath: "songs/2.mp3", coverPath: "covers/6.jpg"},
19   {songName: "Sakhiyaan - Salam-e-Ishq", filePath: "songs/2.mp3", coverPath: "covers/7.jpg"},
20   {songName: "Bhula Dena - Salam-e-Ishq", filePath: "songs/2.mp3", coverPath: "covers/8.jpg"},
21   {songName: "Tumhari Kasam - Salam-e-Ishq", filePath: "songs/2.mp3", coverPath: "covers/9.jpg"},
22   {songName: "Na Jaana - Salam-e-Ishq", filePath: "songs/4.mp3", coverPath: "covers/10.jpg"},
23 ]
24
25 songItems.forEach((element, i)=>{
26   element.getElementsByTagName("img")[0].src = songs[i].coverPath;
27   element.getElementsByClassName("songName")[0].innerText = songs[i].songName;
28 })
29
30
31 // Handle play/pause click
32 masterPlay.addEventListener('click', ()=>{
33   if(audioElement.paused || audioElement.currentTime<=0){
34     audioElement.play();
35     masterPlay.classList.remove('fa-play-circle');
36     masterPlay.classList.add('fa-pause-circle');
37     gif.style.opacity = 1;

```

## **CONCLUSION AND FUTURE WORK:**

### Conclusion :

DSK- Music platform is one of the easy and user-friendly websites designed particularly for streaming soul music offline to users across the globe. Users can create or add songs of their choice to the playlist anytime.

### Future work:

This can further be developed into an android version that is compactable on mobile phones.

Can be developed such that it records user sounds/songs and stores them to play when needed.

Two-step verification and login page for security purposes.

Create podcasts and publish them.



## REFERENCES:

- <https://www.cleveroad.com/blog/how-to-create-a-music-streaming-app/>
- <https://www.behance.net/search/projects/?search=music+streaming>
- <https://github.com/topics/spotify-clone>
- <https://codepen.io/Chae12/pen/ZKbmLK>
- <https://moralis.io/how-to-build-a-web3-spotify-clone/>