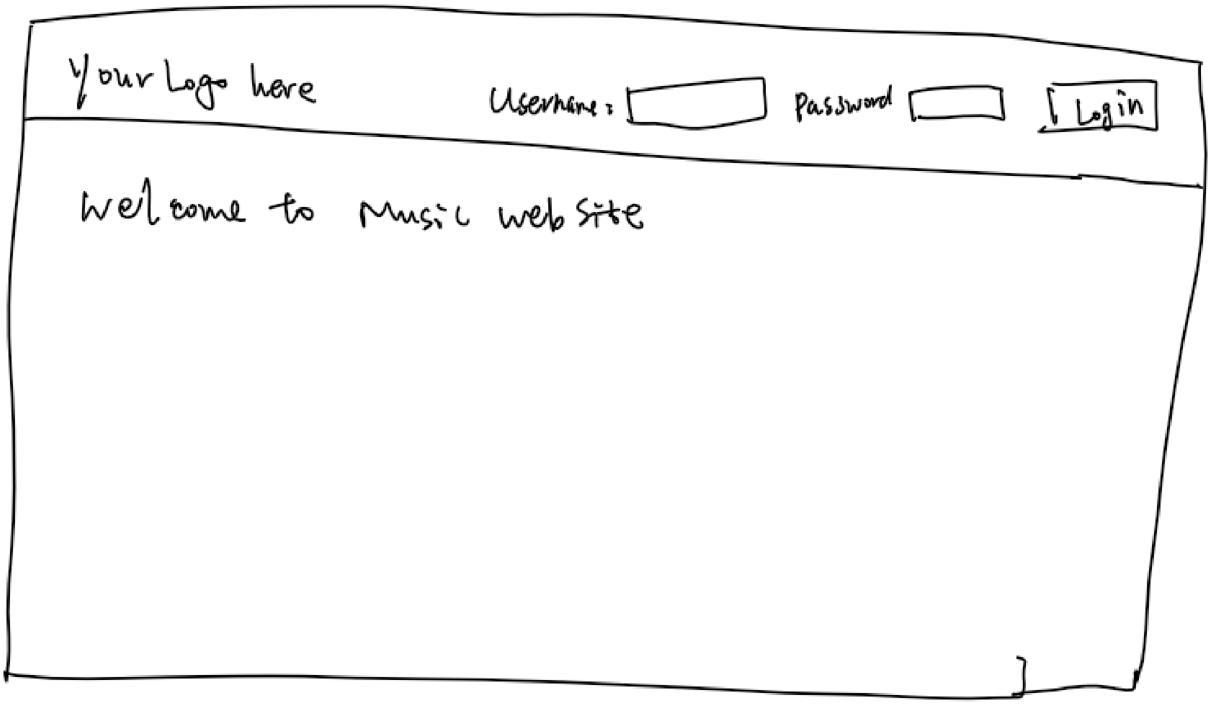
We’re going to build a music website using what we learnt in this course. It’s a single person project.

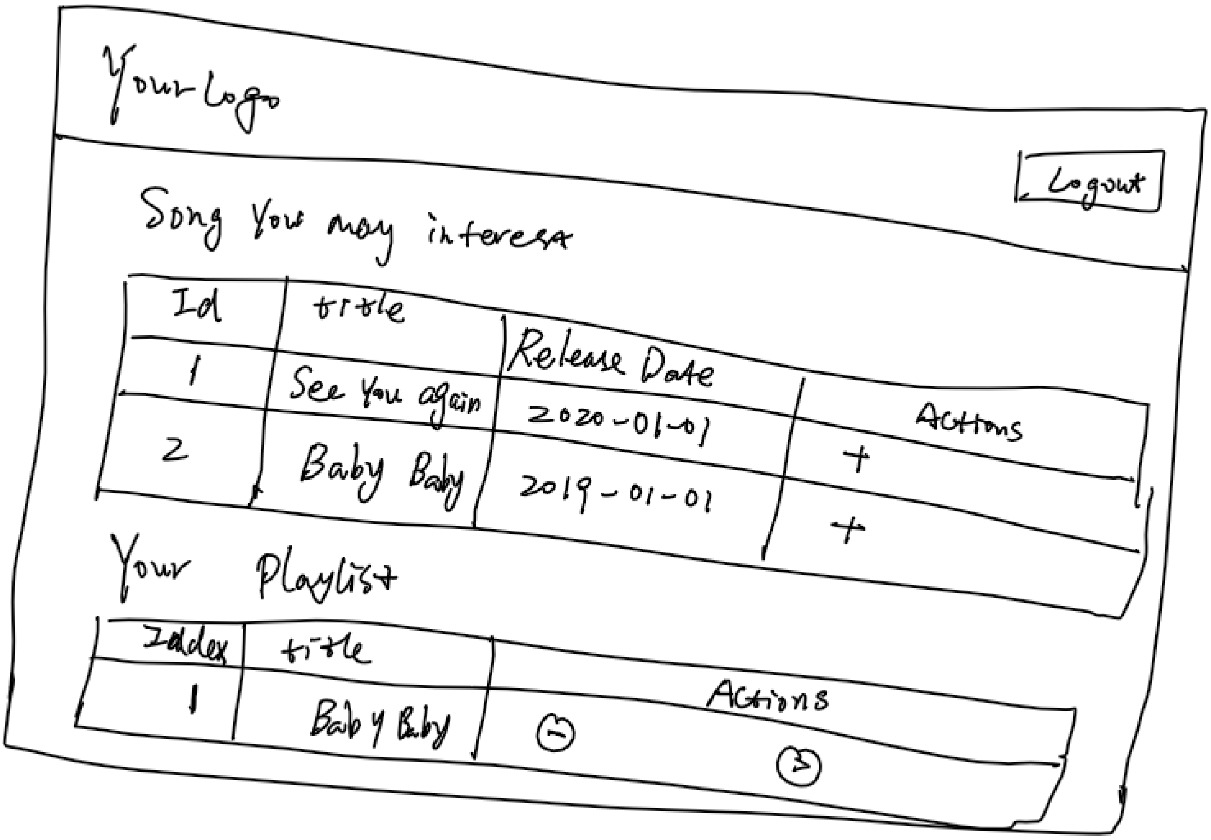
NOTE: if you share your code with other students and I found out later, you’ll get 0 for your project. If you copy code form other students, during presentation, if you couldn’t answer my questions, you’ll lose points for the question you couldn’t answer.

Here’s the project requirements:

1. The server side is already built, you just need to complete the front side with design like the screenshots.
2. There’s a login page, user can put username/password to login. All other requested need to be authenticated. If username and password doesn’t match, display “Error” message to user.
    a. Here is the idea on how you implement the login feature:
        i. When use clicks login button with username and password, make a request to server side. If the username and password isn’t correct, server returns error message. If correct, server returns you a JSON Token.
        ii. In the client side, get the generated string, store it in session storage.
        iii. For all the remaining requests, always pass the toekn located in session storage to server side.



3. Once user logs in, they can see a table of song list and their playlist if they created before.



Song You may interest

Id	title	Release Date	Actions
1	See You again	2020-01-01	+
2	Baby Baby	2019-01-01	+

Your Playlist

Index	title	Actions
1	Baby Baby	⊖ ⊳

4. User can search songs by song title.
5. User can add new songs to their playlist, can also remove songs from their playlist.
6. Different user should see different playlist.
7. There’s a logout button. Once user logs out, see the login page again.
    a. Here is the idea of implementing logout
        i. Remove the string from session storage.
8. More Features
    a. Can play & pause a song
    b. Can click prev/next button to switch song
    c. Can change play mode (repeat 1 song, repeat playlist one by one, shuffle playlist)
9. Don’t forget

```
'Content-Type': 'application/json'
```

REST Application APIs:

1. Login

   HTTP Request:

   POST http://localhost:3000/api/auth/login

   POST Body:

```
{
    "username": "pop",
    "password": "password"

}
```

   HTTP Response:

   Correct username&password:

```
{
    "id": "d932c6d6-c729-49db-992a-2cfc83f9e098",
    "username": "pop",
    "playType": "ORDER",
    "accessToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImQ5MzJjNmQ2LWM3MjktND
lkYi05OTJhLTJjZmM4M2Y5ZTA5OCIsImlhdCI6MTY1MjMyNDMyMiwiZXhwIjoxNjUyMzI3OTIyfQ.-
HjM29WN05iXy1oVoPZSkt52-Pw9H0KYjXvkIwQ_fJE"
}
```

   Incorrect username&password:

```
{
    "status": "error",
    "message": "Invalid username or password!"
}
```

   Available username & password:

   pop/password

   rock/password

   hiphop/password

   mix/password

2. Search Songs by song title – contains typed letters. If no search query string provided, it’ll list all available songs.

   HTTP Request:

   GET http://localhost:3000/api/music?search=Bird

   Headers:

   {

```
              'Authorization': `Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImQ5MzJjNmQ2LWM3MjktNDlkYi05OTJhLTJjZmM4M2Y5ZTA5O
CIsImlhdCI6MTY1MjMyNDg3OSwiZXhwIjoxNjUyMzI4NDc5fQ.Nz2SpbEnx7ODeu43ER3xDqhNTh6q4zFStnxaPQ3pJKM

`}
```

HTTP Response: If no matching data, return empty array []

```
[
    {
        "id": "b7120e4d-69b1-454d-8fc7-dc403c86f669",
        "urlPath": "music/mocking_bird.mp3",
        "title": "Mocking Bird",
        "releaseDate": "1989-1-2"
    }
]
```

If no Authorization Header:

```
 {

    "status": "error",
    "message": "Invalid or Expired token"
}
```

3. Playlist
    a. Get playlist
        i. HTTP Request

           GET http://localhost:3000/api/playlist

           Header:

           {

```
              'Authorization': `Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImQ5MzJjNmQ2LWM3MjktNDlkYi05OTJhLTJ
jZmM4M2Y5ZTA5OCIsImlhdCI6MTY1MjMyNDg3OSwiZXhwIjoxNjUyMzI4NDc5fQ.Nz2SpbEnx7ODeu43
ER3xDqhNTh6q4zFStnxaPQ3pJKM

`}
```

        ii. HTTP Response

```
[
    {
        "id": "7446906f-7029-4a81-b97c-2f329545e758",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "298e11ff-9914-46ad-b2d4-b219fc433b3e",
        "orderId": 1,
            "title": "Gangnum Style",
            "urlPath": "music/gagnum_style.mp3"
        },
        {
            "id": "2ded6b37-d1ac-4185-bb11-be87813e8b70",
            "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
            "songId": "053edf01-29d8-4efb-97ec-680eb449ba2a",
            "orderId": 2,
            "title": "Mission Impossible",
            "urlPath": "music/mission_impossible.mp3"
        },
        {
            "id": "1e8b6bb8-6895-44c0-91ce-499862850781",
            "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
            "songId": "8d19f0f8-9579-4bf5-9009-3bf66841e363",
            "orderId": 3,
            "title": "Single Lady",
            "urlPath": "music/single_lady.mp3"
        }
    ]
```

b. Add to playlist

HTTP Request:

POST http://localhost:3000/api/playlist/add

Header:

```
       {

               'Authorization': `Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImQ5MzJjNmQ2LWM3MjktNDlkYi05OTJhLTJ
jZmM4M2Y5ZTA5OCIsImlhdCI6MTY1MjMyNDg3OSwiZXhwIjoxNjUyMzI4NDc5fQ.Nz2SpbEnx7ODeu43
ER3xDqhNTh6q4zFStnxaPQ3pJKM

`}
```

POST body:

```
{
    "songId": "aa6d1f58-5dcd-4b71-8c6e-88b96882f338"
}
```

HTTP Response: the playlist

```
[
    {
        "id": "7446906f-7029-4a81-b97c-2f329545e758",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "298e11ff-9914-46ad-b2d4-b219fc433b3e",
        "orderId": 1,
        "title": "Gangnum Style",
        "urlPath": "music/gagnum_style.mp3"
    },
    {
        "id": "2ded6b37-d1ac-4185-bb11-be87813e8b70",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "053edf01-29d8-4efb-97ec-680eb449ba2a",
        "orderId": 2,
        "title": "Mission Impossible",
        "urlPath": "music/mission_impossible.mp3"
    },
    {
        "id": "1e8b6bb8-6895-44c0-91ce-499862850781",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "8d19f0f8-9579-4bf5-9009-3bf66841e363",
        "orderId": 3,
        "title": "Single Lady",
        "urlPath": "music/single_lady.mp3"
    },
    {
        "id": "71b8b256-9ff6-46ac-867b-dc5db22fba3d",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "b7120e4d-69b1-454d-8fc7-dc403c86f669",
        "orderId": 4,
        "title": "Mocking Bird",
        "urlPath": "music/mocking_bird.mp3"
    },
    {
        "id": "df44b1be-2441-451a-a57f-7cc590b0c71c",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "aa6d1f58-5dcd-4b71-8c6e-88b96882f338",
        "orderId": 5,
        "title": "Smooth Criminal",
        "urlPath": "music/smooth_criminal.mp3"
    }
]
```

c. Remove from playlist

HTTP Request:

POST http://localhost:3000/api/playlist/remove

Header:

```
{
    'Authorization': `Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6ImQ5MzJjNmQ2LWM3MjktNDlkYi0
5OTJhLTJjZmM4M2Y5ZTA5OCIsImlhdCI6MTY1MjMyNDg3OSwiZXhwIjoxNjUyMzI4NDc5fQ.
Nz2SpbEnx7ODeu43ER3xDqhNTh6q4zFStnxaPQ3pJKM

`}
```

POST body:

```
{
    "songId": "298e11ff-9914-46ad-b2d4-b219fc433b3e"
}
```

HTTP Response: the playlist

```
[
    {
        "id": "7446906f-7029-4a81-b97c-2f329545e758",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "298e11ff-9914-46ad-b2d4-b219fc433b3e",
        "orderId": 1,
        "title": "Gangnum Style",
        "urlPath": "music/gagnum_style.mp3"
    },
    {
        "id": "2ded6b37-d1ac-4185-bb11-be87813e8b70",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "053edf01-29d8-4efb-97ec-680eb449ba2a",
        "orderId": 2,
        "title": "Mission Impossible",
        "urlPath": "music/mission_impossible.mp3"
    },
    {
        "id": "1e8b6bb8-6895-44c0-91ce-499862850781",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "8d19f0f8-9579-4bf5-9009-3bf66841e363",
        "orderId": 3,
        "title": "Single Lady",
        "urlPath": "music/single_lady.mp3"
    },
    {
        "id": "71b8b256-9ff6-46ac-867b-dc5db22fba3d",
        "userId": "d932c6d6-c729-49db-992a-2cfc83f9e098",
        "songId": "b7120e4d-69b1-454d-8fc7-dc403c86f669",
        "orderId": 4,
        "title": "Mocking Bird",
        "urlPath": "music/mocking_bird.mp3"
    }
```

]