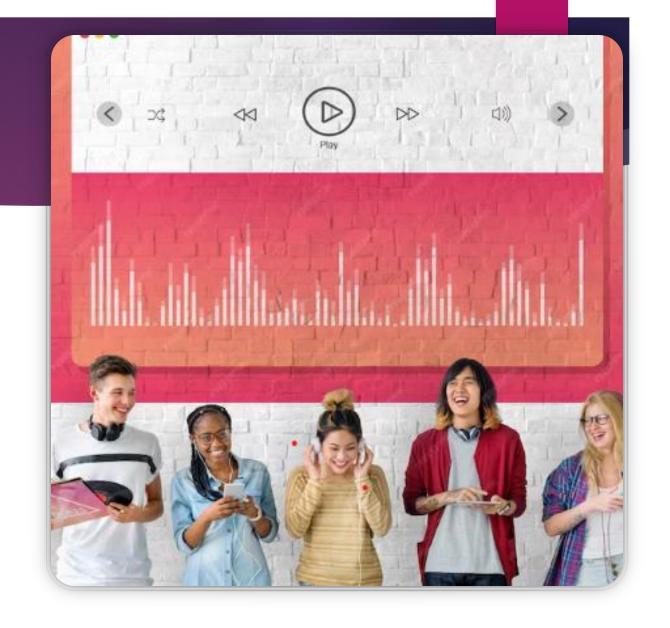
Software Project

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Project description

- Website called Moodify
- Suggests music to the user based on a mood and genre



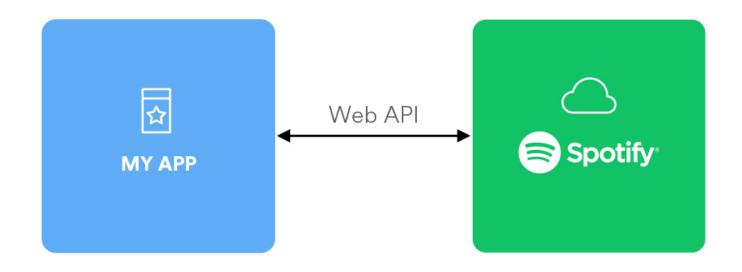


Methods

Language



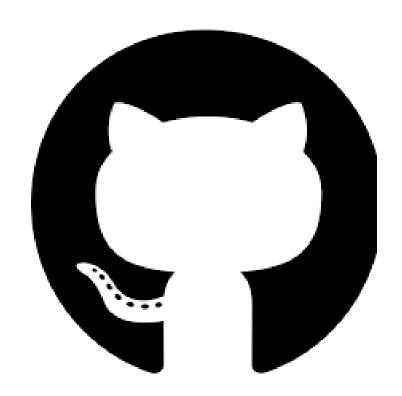
Library/API



Tool used

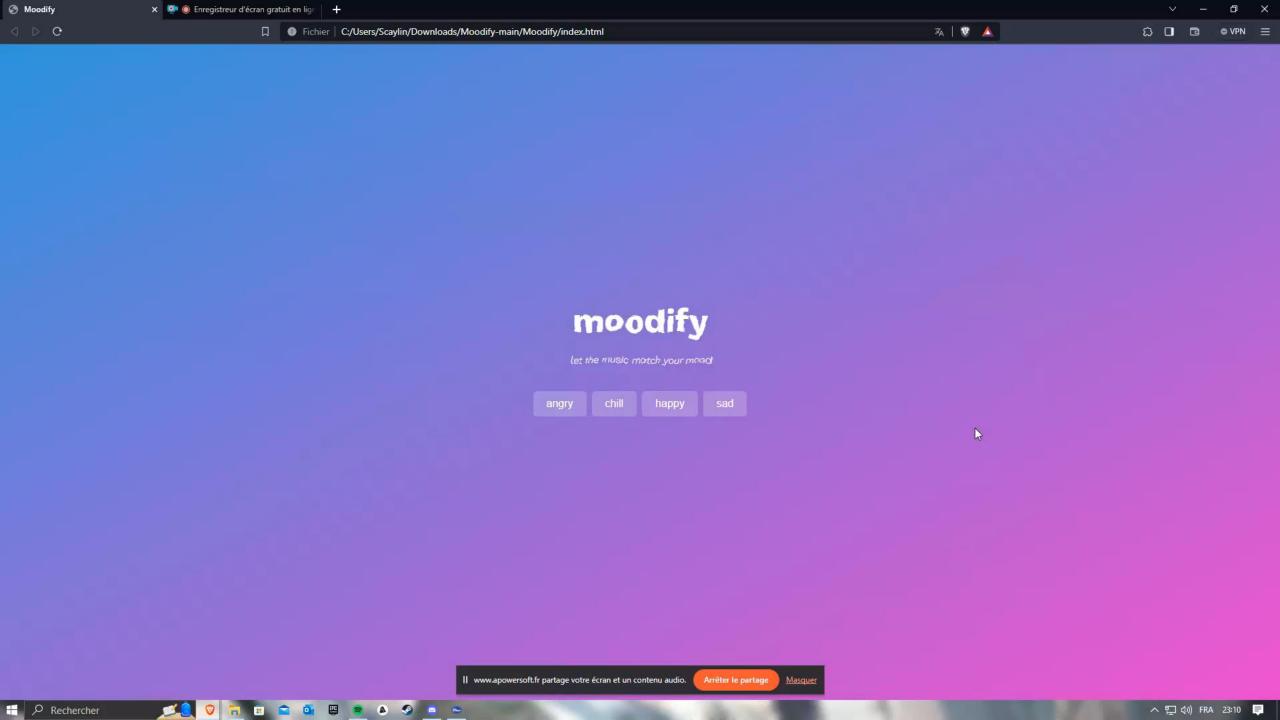








Design choice



Code insight (1)

Variables input

```
switch (mood) [
    case 'happy':
        targetDanceabilityMin = 0.5;
        targetDanceabilityMax = 1;
        targetDanceability = 0.75;
        targetEnergyMin = 0.6;
        targetEnergyMax = 1;
        targetLoudness = 0.8;
        targetPopularity = 1;
        targetTempoMin = 100;
        targetTempoMax = 180;
        targetTempo = 135;
        targetValence = 0.85;
        targetMode = 1;
        break;
```

Code insight (2)

Link to Spotify

```
const url = `https://api.spotify.com/v1/recommendations?limit=100&market=FR&seed genres=${seedGenres}&min danceability=
${targetDanceabilityMin}&max_danceability=${targetDanceabilityMax}&target_danceability=${targetDanceability}&min_energy=
${targetEnergyMin}&max_energy=${targetEnergyMax}&target_loudness=${targetLoudness}&target_popularity=${targetPopularity}&min_tempo=
${targetTempoMin}&max tempo=${targetTempoMax}&target tempo=${targetTempo}&target valence=${targetValence}&target mode=${targetMode}`;
const headers = {
    Authorization: `Bearer ${accessToken}`,
const response = await fetch(url, { headers });
const jsonResponse = await response.json();
const recommendedSongs = jsonResponse.tracks.map((track) => {
    return {
        name: track.name,
        artist: track.artists.map((artist) => artist.name).join(', '),
        uri: track.uri,
        images: track.album.images, // Assuming you still want the track's album images
        albumCover: track.album.images[0]?.url, // Use optional chaining to handle potential missing images
});
return recommendedSongs;
```

Code insight (3)

Shuffle function

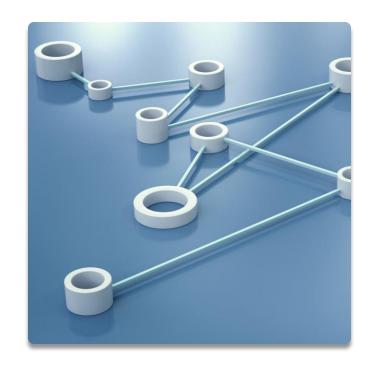
```
function shuffle(array) {
  let currentIndex = array.length;
  let randomIndex;

while (currentIndex !== 0) {
    randomIndex = Math.floor(Math.random() * currentIndex);
    currentIndex--;
    [array[currentIndex], array[randomIndex]] = [array[randomIndex], array[currentIndex]];
  }

return array;
}
```

Retrospective

- ▶ Recommendation algorithm
- ► API Spotify
- ► Application --> site
- ▶ Too much scattering



Conclusion

Happy with our prototype

Our next steps:

- Expansion (not only music)
- Optimise the recommendation algorithm
- Improve the design of the site
- New functionnalities
- additional API (Deezer)

