

Assignment 2 – Interactive Data Visualisation

Group Participants:

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Link to Repository: <https://github.com/exxarah/MusicTastes>

Ideas:

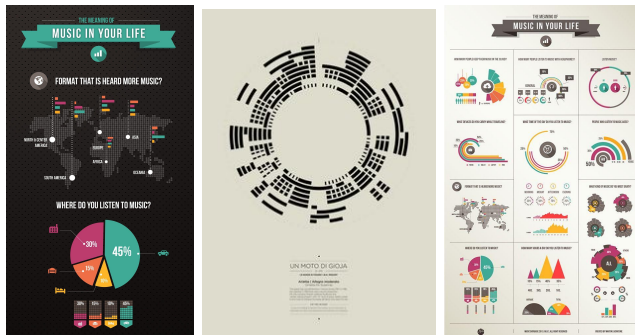
- Music - Spotify - Genre - Who listens to what more? - Random bits of stats, user history.
- Scatter Graph
- Pie Graph
- Timeline
- Bar Graph

Bar chart/colours bars showing which period, timestamps your last 50 songs correspond to using a Spotify api by using an average of album cover colour to determine what colour the bar has and the width determined by the popularity.

Mood Board/Examples:

Pinterest board: <https://www.pinterest.nz/sophieharding90/web/>

Ideas around data visualization not interactive data visualization.

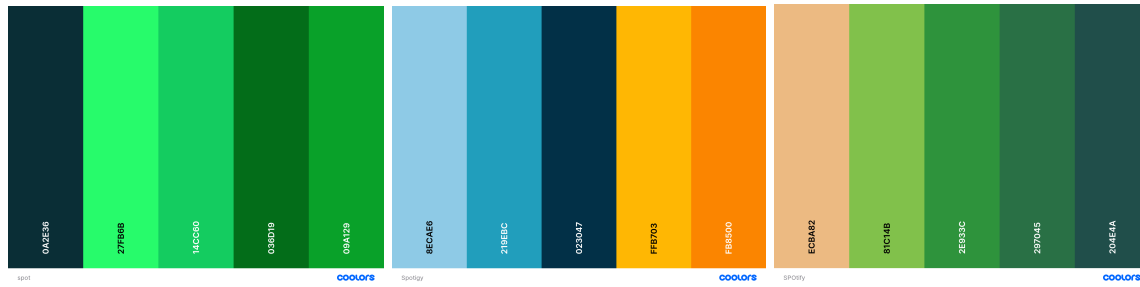


How about we do a tree? Like a hierarchy tree which allows you to click on each branch and see some stats?

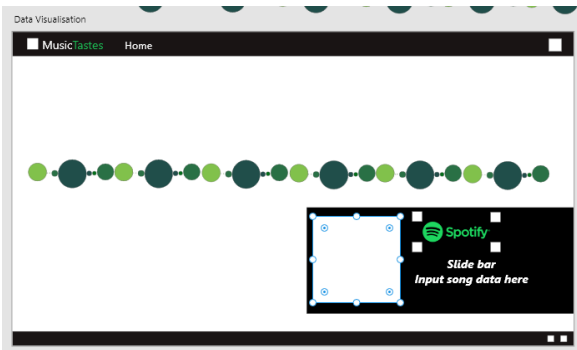
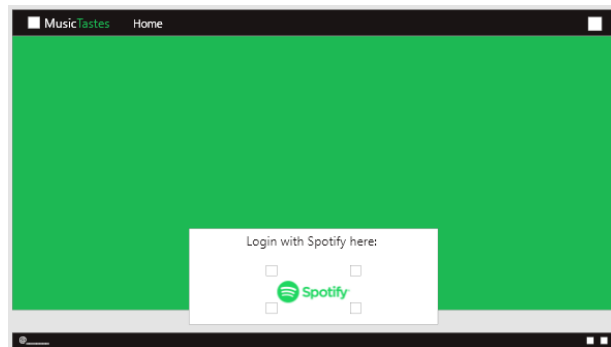
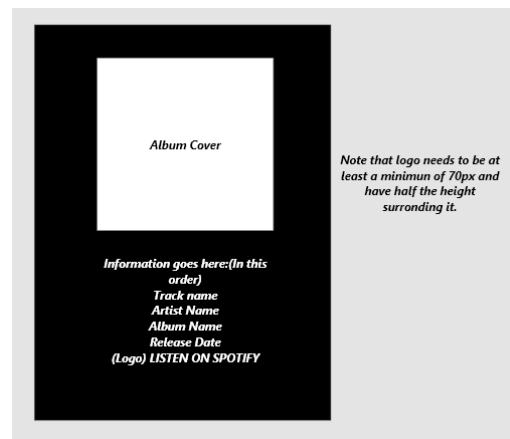
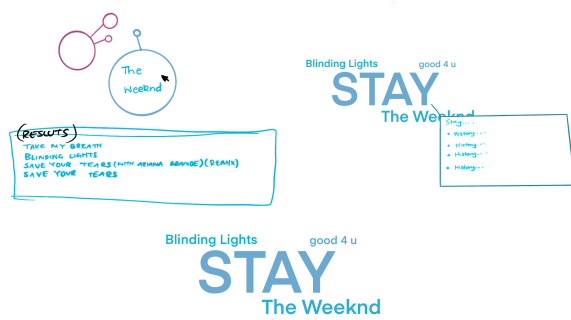


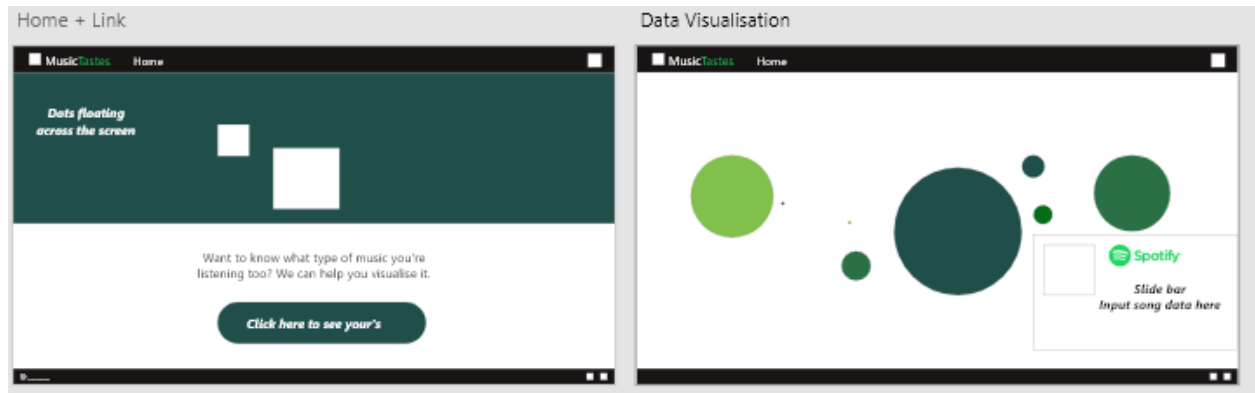
<--p5js

Ideas for colour Palettes/schemes



Concepts and Wireframes





What variables are there in the data?

- Release date ('release_date')
- Popularity ('popularity')
- Song Name ("name')
- Artist
- Genre (We do not have this metadata)

Song name vs Release date

(What does this look like in the data)

'name': 'Coffee Rain',
'release_date': '2020-12-11',

Idea:

If we use the release date it will not be a scatter graph, it will be a timeline.

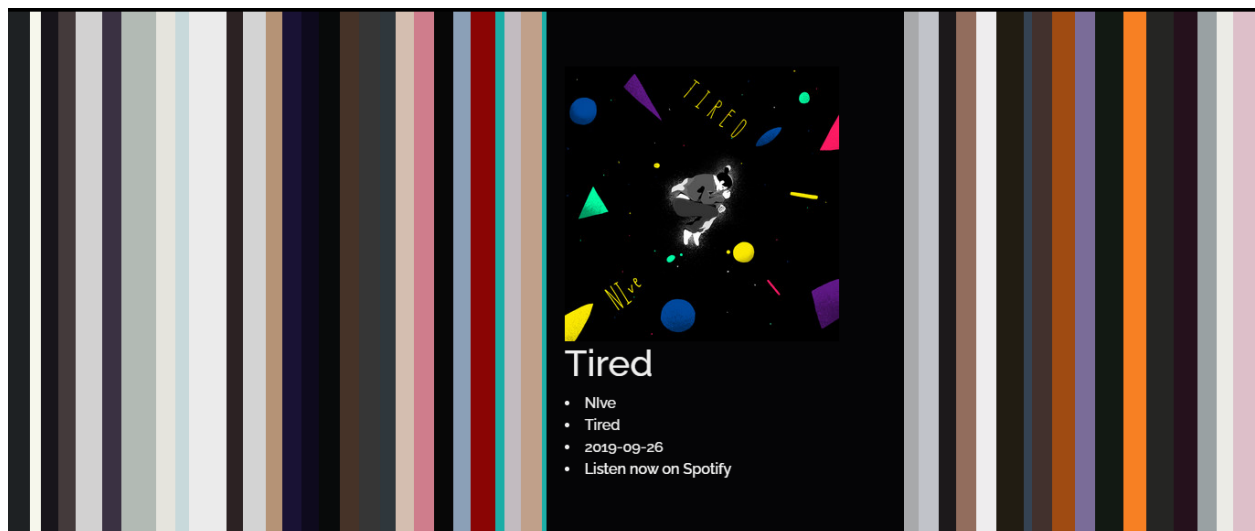
- Popularity is width
- Bar expands to give info (Metadata)
- Time measurement across screen
- Colour of the bars is determined by averaging the colour of the album cover.



Body copy for homepage:

<Hero>Welcome to MusicTastes

<2nd Div>Want to see what you've been listening to? We can help you visualise it. By signing in with Spotify it allows us to take the last 50 songs you have been listening to, so we can visualise and cater for your listening.



Rationale/Description

The aim of our app is to produce a visualization using the last 50 songs a user has listened to on the condition that they agree for us to use their data. We then map out coloured bars, determined by averaging out the colours used in the album cover. The width of the coloured bar is based on the popularity of the particular song, then mapping it in order of release date. This helps us visualize trends in album cover colours over a time period.

Sources, references, licenses, and resources.

Data Visualisation/Design Example:

Data visualisation on cats and dogs: <https://whydocatsanddogs.com>

Music visualization on music taking over in the top charts:

<https://pudding.cool/projects/music-history/>

Music Visualization using album covers: <https://pudding.cool/2021/04/solo/>

P5js data visualization example: <https://p5js.org/examples/data-variable-scope.html>

Examples of Songs for ideas and wireframes: <https://spotifycharts.com/regional>

Pinterest board for inspiration: <https://www.pinterest.nz/sophieharding90/web/>

Colour palette Resource: <https://coolors.co/>

Spotify Guidelines: <https://developer.spotify.com/documentation/general/design-and-branding/>

CSS Resource: https://www.w3schools.com/css/css_background.asp

To change text colour dependent on their background colour:

<https://discourse.webflow.com/t/text-color-change-depending-on-background/126134>

[Flask Reference](<https://flask.palletsprojects.com/en/2.0.x/>)

[Python 3 Reference](<https://docs.python.org/3/>)

[Spotify API Reference](<https://developer.spotify.com/documentation/web-api/reference>)

[Spotipy Python Spotify Wrapper](<https://github.com/plamere/spotipy>)

[OAuth Tutorial](<https://realpython.com/flask-google-login/>)