

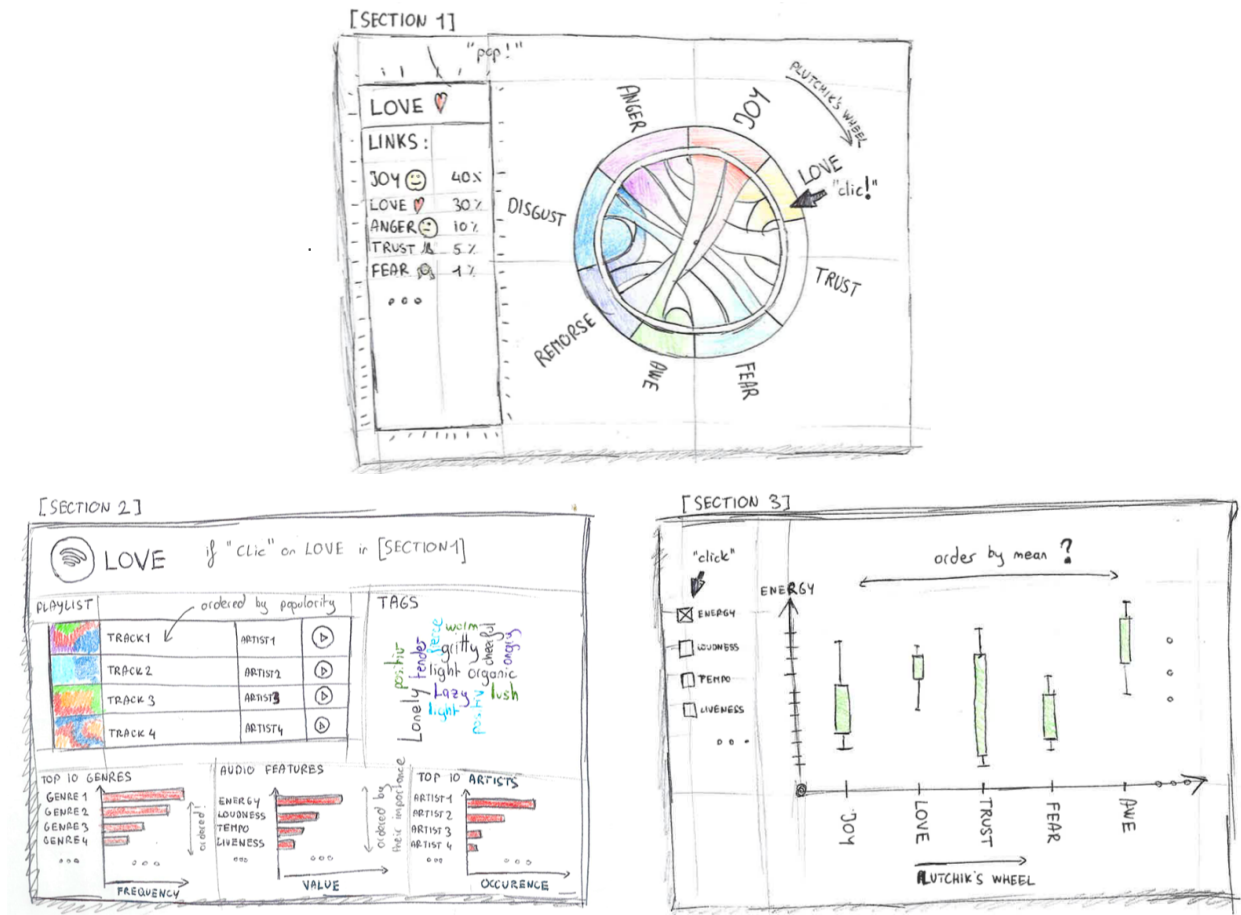
# COM-480 : Milestone 2

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## 1 Website sketch

### 1.1 Sketch



## 2 Website Description

Our website will be divided into three sections. The first two sections are related together and the last one is an independent section. Each of these sections are explained below.

### 2.1 Section1 : Chord diagram

#### 2.1.1 Description

The first part consist of a chord diagram that shows links between the different emotions. Recall that, according to our first milestone, each track is associated to an emotion between joy, love, trust, submission, fear, awe, surprise, disapproval, sadness, remorse, disgust, contempt, anger, aggressiveness, anticipation and optimism. On the graph,

each emotion represents a set of tracks and the links between the emotions represent how much of their tracks are found in the same playlist. On the graph, if we click on an emotion, it highlights its links to the other emotions. Left of the graph, we also plot the proportions of links that go from the selected emotion to the other emotions.

### 2.1.2 Tools and related lectures

|                        |  |
|------------------------|--|
| <b>Tools</b>           | D3, Vue.js, Vuetify  |
| <b>Related courses</b> | 5.2_More_interactive_d3, 5.1_Interaction, 6.1_Perception_colors, 10_Graphs |

## 2.2 Section2 : Main features

### 2.2.1 Description

The second section is linked to the first section because it appears only if we select an emotion from the thirteen emotions on the chord diagram. This section shows the data related to the selected emotion and is divided into five sub-sections. These five sub-sections will be displayed in two rows. The first row will include the first sub-section which displays a snapshot of a proposed list of 50 tracks or less if it's not enough associated with this emotion and the second sub-section which is a word-cloud of the tags that are related to this emotion. The second row will include the third sub-section which will show the top 10 genres associated with the selected emotion, the fourth sub-section which will be a bar chart with the audio features of the selected emotion and the fifth sub-section which will show a bar chart with the top 10 artists.

### 2.2.2 Tools and related lectures

|                        |   |
|------------------------|---|
| <b>Tools</b>           | D3, Vue.js, Vuetify   |
| <b>Related courses</b> | 4.1_Data, 5.1_Interaction, 5.2_More_interactive_d3, 6.2_Mark_channel, 11.1_Tabular_data |

## 2.3 Section3 : Boxplot chart

### 2.3.1 Description

In the last part, we display a boxplot chart with one box per emotion and the values represented on this chart are the different music features that we have for each track according to the Spotify API. These features are acousticness, danceability, energy, instrumentalness, liveness, speechiness, valence and loudness. It's an interactive graph because we can choose which feature we want to display by clicking on the corresponding button. We can choose only one feature to display. The boxes will be sorted by their mean in descending order from left to right. The aim of this section is to show the difference in features between the emotions.

### 2.3.2 Tools and related lectures

|                        |   |
|------------------------|---|
| <b>Tools</b>           | D3, Vue.js, Vuetify   |
| <b>Related courses</b> | 5.2_More_interactive_d3, 5.1_Interaction, 11.1_Tabular_data, 6.2_Mark_channel |

## 3 Extra ideas

We also have other ideas to improve our website and our visualisation. First, on the third section, we think to add the possibility to show more than one feature at the same time on the boxplot. This option will add the ability to compare multiple music features. An other idea would be to add more interactions on the second section. For example, if we select an specific tag, we display musics only with this tag, the same if we select artists or genres. An other idea would be to add a fourth section that aims to explain why we have such links between emotions. Try to find hypothesis and list them. It would improve the website, especially its storytelling.