# Song Hot or Not Design Opts

Goal: Since it’s meant to interactive and informative, every element should be equally readable. The interaction and connections between nodes likewise. Therefore, I do not have the option of prioritizing some and sending others to the background.

Colors:

Background: Dark (but not black) background to 1) reduce eyestrain, 2) enhance readability of fine, light-colored edge lines.

Text: White because best contrast to dark background, and neutral to colors of the chords. Avoiding giving any impression that all labels are tied to a specific subsets of chord.

Mid-chord node circle: node already have so much going on, helps the user match the label with the node, most importantly FIND THE HOVEROVER activation. Minimally distracting. Set to black to give slight offset to background.

Node and edge palette: optimize the gaps in colorspace for ~30 nodes. Colors represent separation only, not encoding other meaning so can choose something visually pleasing. Unfortunately, no way to avoid pairs of colors in common colorblindness space. However, bright edges against dark background would still help with finding connections.

Fonts:

Sized to maximum that will fit on screen. This is dependent on maximum word length as width, rather than height, is the biggest limiting factor. Why? Desktop displays are 16:9 aspect ratio, horizontal. Ex: Samsung galaxy S10 3200x1440, iphone 11 1792x828, both 20:9 aspect ratio VERTICAL.

And yeah, you can make people turn their phones but it’s an extra second of work which is a meaningful amount.

Font selected: Arial, it’s a classic, it’s web-safe, it’s free. Pretty well readable.

Probably little difference in serif vs sans: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4612630/>

San Francisco

Salt Lake City

Washington

Rotation:

Struggled so much with rotation. Rotation helps to fit in more nodes. But diminishes readability especially near 12 and 6 o clock. Not rotation requires smaller font sizes and destroys the visual entry angle (follow the direction of the word to the chord and then along the curve). I don’t know dawg, choices be hard.

Layout:

Title up top naturally. Chords are less popular so needs some explanation of what the user can do with it.

Diagram in the middle, large. Bright colors draw the eye and interactivity encourages users to play with it.

Samples at the bottom. If the user gets bored or lost and starts to scroll, samples help capture their attention for what’s possible. Even if they leave, they still leave with something and not empty-handed.

Number of nodes and edges: This is a huge part of testing. The more nodes and edges, the more complex and interesting connections are revealed. There is a massive tradeoff in usability and readability beyond a certain point.

|  |  |  |
| --- | --- | --- |
| **Nodes** | **Time to first title** | **Time to 3rd title** |
| 10 |  |  |
| 20 |  |  |
| 30 |  |  |
| 40 |  |  |

Admittedly, testing not scientifically rigorous but indicates the problem: too few nodes doesn’t give enough choices. Too many nodes makes it impossible to follow or overloads the mental map.

Can help the user by weight of edges. Too many edges of weight = 1 clutters up the space but introduces options which are simply not very popular in practice i.e. only one song title has this combination of words. Whereas, setting edge weight of 4 means four songs had this combination of words.

Even better, and this is what is implemented, choosing by node weight. If a word has weight 4, then it was used in some combination 4 times. So user has more possible paths from that word.

Retain definite and indefinite article since it’s a useful origin and intermediate

[to be implemented]

Subject: standardized subjects like “I, I’ll” > “I”

Linked meganodes (verb “to be”)

Annotator