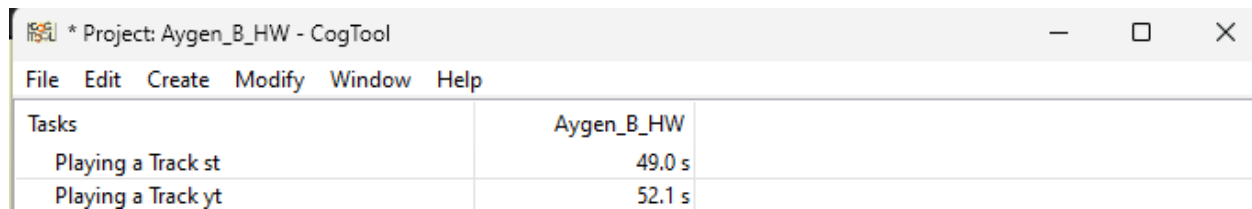


## CS549 ASSIGNMENT 3 REPORT

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CogTool is used to do the calculations for a specific task on both applications. Appropriate widgets are used to measure the time to complete each task. According to my calculations, Spotify is slightly faster than YouTube Music.



The screenshot shows a CogTool window titled '\* Project: Aygen\_B\_HW - CogTool'. It has a menu bar with 'File', 'Edit', 'Create', 'Modify', 'Window', and 'Help'. Below the menu is a table with two columns: 'Tasks' and 'Aygen\_B\_HW'. The table contains two rows of data.

Tasks	Aygen_B_HW
Playing a Track st	49.0 s
Playing a Track yt	52.1 s

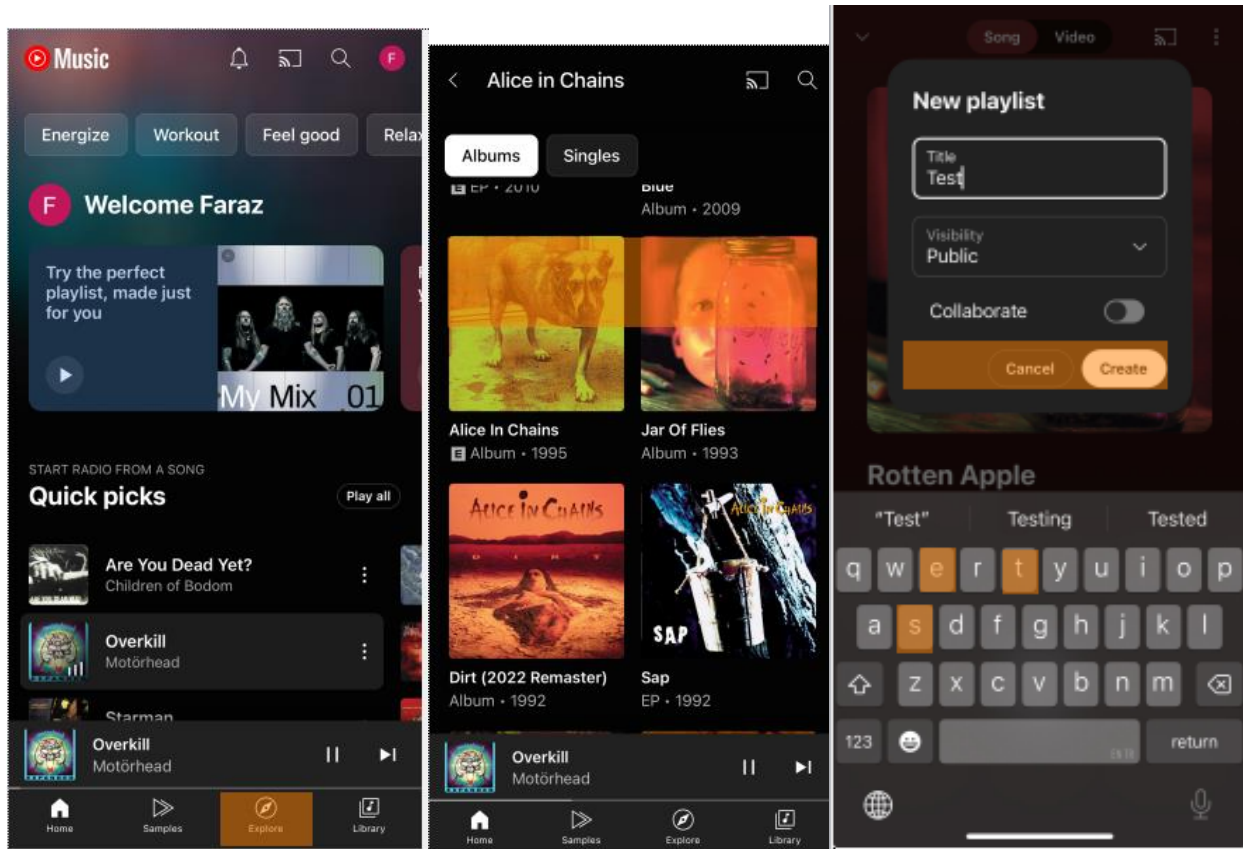
The procedure is faster in Spotify for several reasons. According to the Fitts Law, the buttons should be placed closer to the edge and should be big. In Spotify, the search button is bigger and placed in a better place in terms of Fitts' Law. This reduces the time it takes to see and click on that button. Furthermore, in YouTube Music when user wants to enter an album and pick a song from it as in the task, it takes too much time to find the album. The user needs to change pages and scroll down. On the other hand, in Spotify, features that users mostly use are easy to approach. Benyon asserts that a clear visual hierarchy allows users to locate essential features faster by guiding their attention effectively. Spotify's interface, through prominent placement of key navigation and search elements, likely benefits from this principle, allowing skilled users to complete tasks in less time compared to YouTube Music" (Benyon, 2014).

My new design reduces the time on YouTube Music to seconds.

Playing a Track st	49.0 s
Playing a Track yt	52.1 s
Playing a Track yt new	46.9 s

I did my design by considering that in human-computer interaction, the efficiency of an interface is often determined by how well it supports users in achieving their goals with minimal cognitive load and physical effort (Dix, Finlay, Abowd, & Beale, 2004). I started with the search button first. Search feature is highly used on an application, and it should be placed on a better place. That is why I changed its size and location. Furthermore, the user does not have to click on the search button to implement search action. Moreover, I changed the application in a way that albums are all visible on the page. I also minimized the album covers so that I can fit more

albums on the page and user does not have to scroll down to find the album this time. The user does not need to scroll down and look for a certain album. Moreover, I made create\_playlist\_button bigger. And changed its place to the center.



## REFERENCES

- Benyon, D. (2019). *Designing user experience: A guide to HCI, UX, and interaction design* (4th ed.). Pearson.
- Dix, A., Finlay, J., Abowd, G., & Beale, R. (2004). *Human-computer interaction* (2nd ed.). Pearson.