

Stylian Design Document

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Screens Interaction

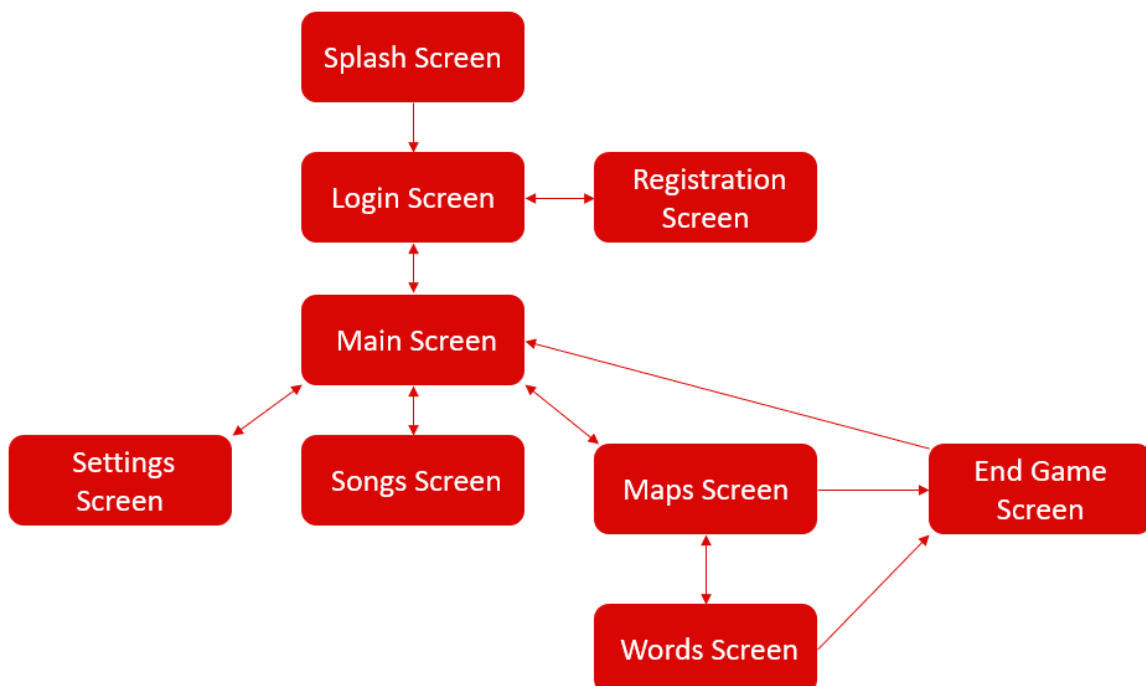
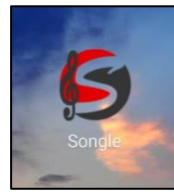


Figure 1 – Logo

Figure 2 – Splash Screen

Splash Screen

Every time the user starts the app by clicking on the icon shown in *Figure 1* on his device, the screen shown in *Figure 2* will be displayed for 2 seconds.



Login and Registration Screens (Bonus)

After splash screen, the login screen is displayed as shown in *Figure 3*. This requires a user name and password. If the user is not a member of the database yet, he can create a new account by clicking on “No account yet? Create one”. By choosing to create an account, the registration screen is displayed as shown in *Figure 4*. He can create a new account with a name, an email and password. If the email is already used, a message is displayed as shown in *Figure 5*. After finishing with the registration, a message “Registration successful” is displayed and he can login normally with his account in the login screen. In case the user enters incorrect email or password, a message will be displayed as shown in *Figure 6*.

Figure 3 – Login Screen

Figure 4 – Registration Screen

Figure 5 – Email Exist

Figure 6 – Wrong Input

Main Screen

If the user already logged in, in his account, the Main Screen of the app will be displayed as shown in [Figure 7](#). A welcome message is displayed together with the name registered to that account. There is a settings button on the top right of the screen where the user can choose his preferences for the game. The “Play” button starts the map screen for the specific song that user plays. Songs are not chosen, instead they come one after the other. If user finds a song, then he proceeds to the next one. The “Songs” button directs the user to his songs found.

(Bonus)

At the bottom of the screen the user can see his current game statics, which includes the coins that he has, his score, the total number of songs found, the total distance walked in kilometres and the difficulty of the game. A coin will be collected each time the user gets a word from the map in “Play” mode. Coins will then be used to buy things. Ten score points are received when the user collects a word and 1000 points when the user finds a song. Kilometres walked are calculated only if the user travels with speeds less than 10 km/h. Multiple accounts are available for this game, each one with its own game progress and statistics. As you can see in [Figure 8](#), game statistics for user “Petros” are different from user “Stelios” in [Figure 7](#), they have different number of coins, score, distance walked, songs found and difficulty. The user can any time go back to the login screen by pressing the back button on his device and login as another user, or even create a new account. The game will always require login details on start.

Figure 7 – Main Screen (User: Stelios)

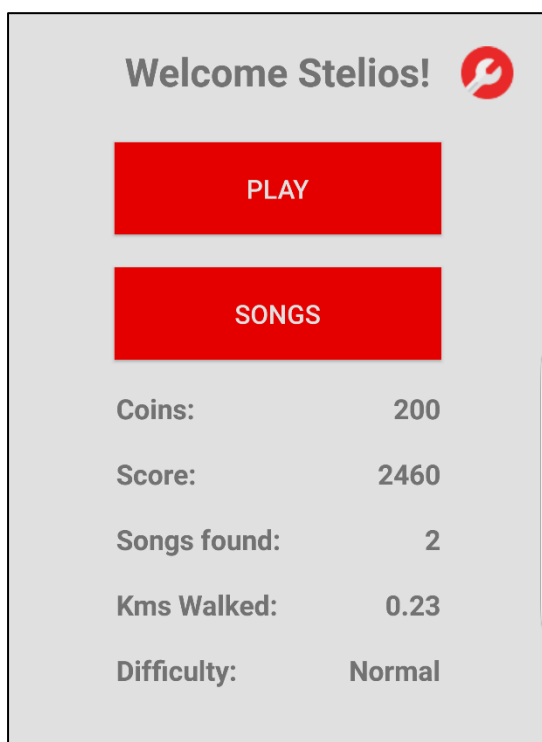
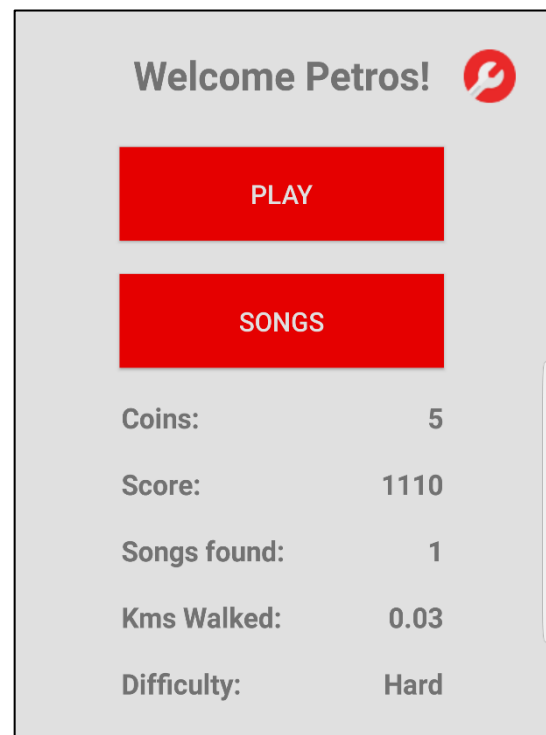


Figure 8 – Main Screen (User: Petros)



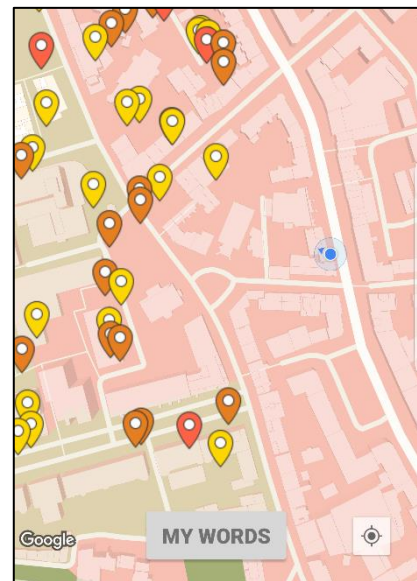
Map Screen

This screen comes out when user clicks on the “Play” button in main screen, as shown in [Figure 9](#). The blue dot represents user’s current location which is automatically recalibrated as he walks. As you can see from the map there are different placemarks with different colours. Each one of these placemarks represents a word from the lyrics of the song currently played. Markers have different symbols according to the word weight. There are five weights as shown on [Figure 10](#), “Unclassified”, “Boring”, “Not Boring”, “Interesting”, “Very Interesting”.

Figure 10 – Placemarks



Figure 9 – Map Screen (Day Mode)



In order to collect a marker, the user has to be at distance from it of 15 meters. He can collect it by clicking on the placemark, which is then disappeared from the map and added to his bag of words for the current song. In addition to that, the user receives a coin and 10 score points for each placemark. If he is close enough to the placemark and clicks on it, a “Success” screen will be displayed together with the word found, as shown in [Figure 11](#), if not, a “Failure” message is displayed as shown in [Figure 12](#).

Figure 11 – Word Found Dialog

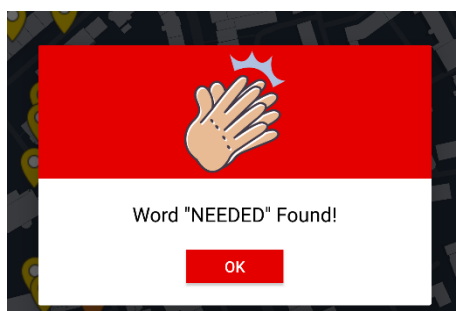
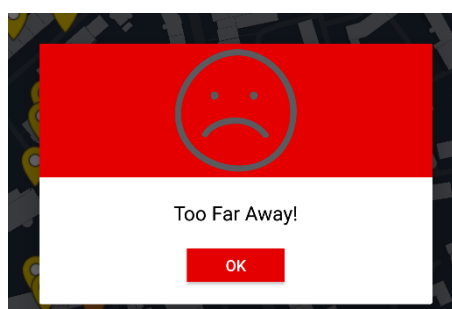


Figure 12 – Word Far Away Dialog



The compass icon at the bottom right of the Map as seen in [Figure 9](#), recenters user’s current location and zooms in to that location. User can, at any time, zoom in or out the map to see the other placemarks. If the location on his devices is not enabled, a toast is displayed as shown in [Figure 13](#). Apart from that if there is no available internet connection, that is either WiFi or Data, another toast is displayed on the screen as shown in [Figure 14](#) and the placemarks are not parsed into the map, as long as user doesn’t have access to the internet.

Figure 13 – No Location Toast

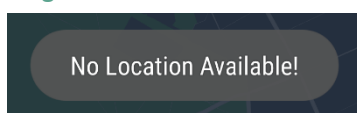


Figure 14 – No Internet Toast

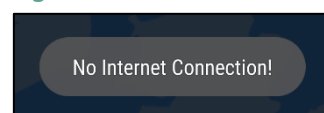


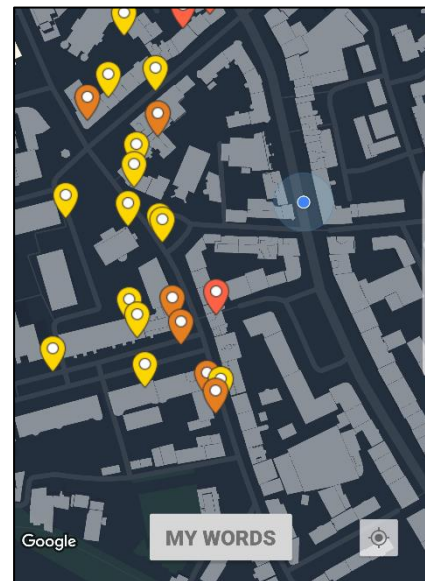
Figure 15 – Map Screen (Night Mode)

By clicking on the “Words” button, user is transferred to the words screen where the words collected for the current song are stored.

(Bonus)

The map changes style depending on the time that user plays the game. There are two modes, day mode which is the style shown on [Figure 9](#), that is activated from 6:00 am to 5:59 pm. And, night mode which is the style shown on [Figure 15](#), that is activated from 6:00 pm to 5:59 am.

In addition to that, a background music is played while user is on the Map Screen, which he can always disable.



Words Screen

The screen shown on [Figure 16](#) is displayed when user clicks on the “Words” button from the map screen. In this screen he can see a list of all the words collected for the current playing song. In the [Figure 16](#), seven words were collected, and the user can view them by scrolling on the list. Like the previous screen, if there is no internet connection a toast will be displayed informing the user, showing no words.

As seen in [Figure 16](#), there is an Input Text which requires the user to enter the title of the song he is playing and should click on the “Submit Song” button. If his guess is correct or similar to the current song, a success message will be displayed as in [Figure 17](#), he will proceed to the next song on the map screen and the words from his bag will be erased since the song changed. If his guess is incorrect or not similar to the current song, then a “Failure” message will be displayed as shown on [Figure 18](#).

Figure 16 – Words Screen

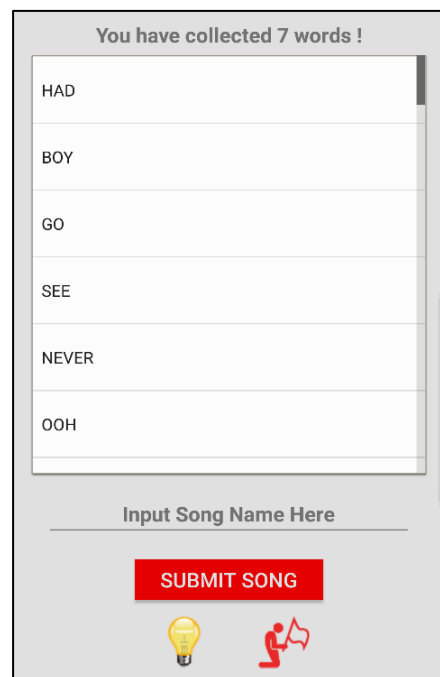


Figure 17 – Song Found Dialog

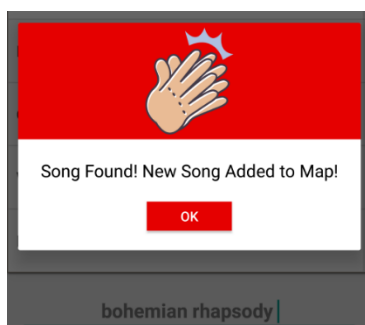
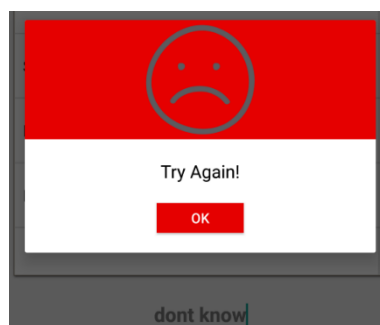


Figure 18 – Wrong Song Dialog



(Bonus)

When a player thinks that he can't guess the song, he could use a hint by clicking on the small light bulb icon on the bottom left of the screen. The hint costs 25 coins to buy as shown on [Figure 19](#), if he has enough coins, the hint is displayed as in [Figure 20](#), if not, a "Failure" message is displayed as in [Figure 21](#).

Figure 19 – Buy Hint

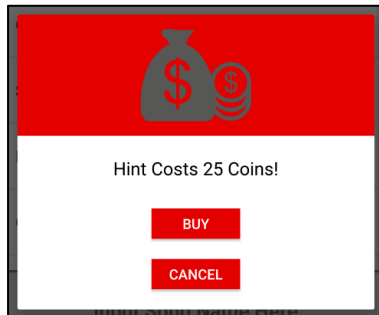


Figure 20 – Hint

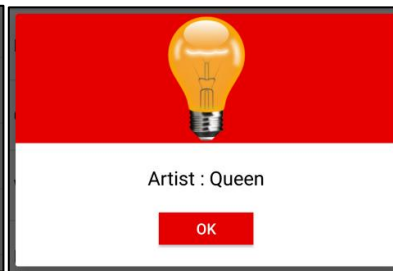


Figure 21 – Not enough coins

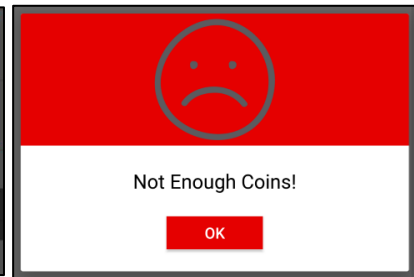
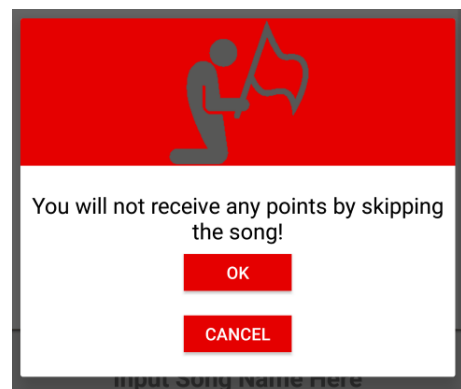


Figure 22– Surrender

If the player still cannot guess the song, he can click on the surrender icon at the bottom right of the screen. By doing this, a dialog will be displayed as shown in [Figure 22](#). If he chooses to proceed, the song will be revealed, he will proceed to the next song and he will receive no score points for that song.

Levenshtein Distance with threshold 66% will be used to check if the song title entered is similar to the current song title.



Game End Screen

The screen in [Figure 23](#) is displayed, when the user finishes the game. That means that he has found all songs available up to that time. He can start a new game, which will reset all his game data by clicking on the "Start New Game" button or he can go back to the main activity and wait for new songs to be available and continue the game when it will be updated, by pressing on the "Wait For New Songs" button.

Figure 23 – Game Over



Songs Screen

This screen can be accessed from Main screen by pressing the “Songs” button. It contains a list of all the song found up to that point, as show in **Figure 24**. The user can scroll down the list to view his songs, together with the artist that sings each one. If there is no internet connection a toast will be displayed informing the user, showing no songs.

(Bonus)

By clicking on a song, the YouTube application is executed, and the song’s video is played as shown in **Figure 25**. If the device doesn’t have the YouTube application installed, a toast message is displayed informing the user as in **Figure 26**.

Figure 24 – Songs Screen



Figure 25 – YouTube Video

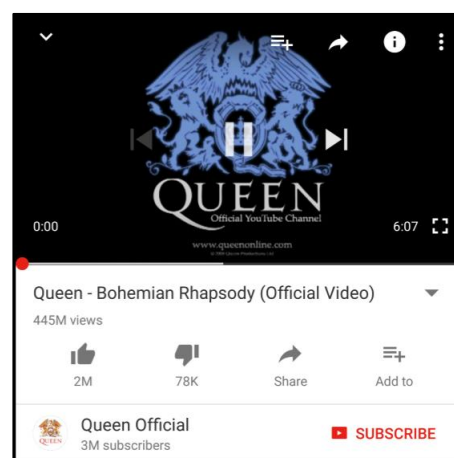


Figure 26 – No YouTube Application

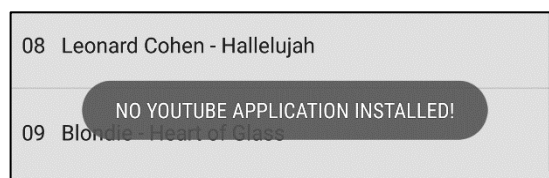


Figure 27 – Settings Screen

Settings Screen

This screen is accessed from the main screen by clicking on the “Settings” button. From there, the user can change difficulty, watch the help video of the game, reset his game data or even mute or unmute the music that is played in map screen. A representation of this screen is shown in *Figure 27*. By clicking on the “Change difficulty”, the screen seen in *Figure 28* is displayed, showing you all available difficulties and your current difficulty. You can choose between 5 difficulty levels, which determines which version of the map is displayed:

- ⊙ **Very Hard:** Words are Unclassified, and only 25% of the lyrics’ words are displayed.
- ⊙ **Hard:** Words are classified as either Boring or Not Boring, and only 50% of the lyrics’ words are displayed.
- ⊙ **Normal:** Words are classified as either Boring, Not Boring or Interesting, and only 75% of the lyrics’ words are displayed.
- ⊙ **Easy:** Words are classified as either Boring, Not Boring or Interesting, and all of the lyrics’ words are displayed.
- ⊙ **Very Easy:** Words are classified as either Boring, Not Boring, Interesting, or Very Interesting, and all of the lyrics’ words are displayed.

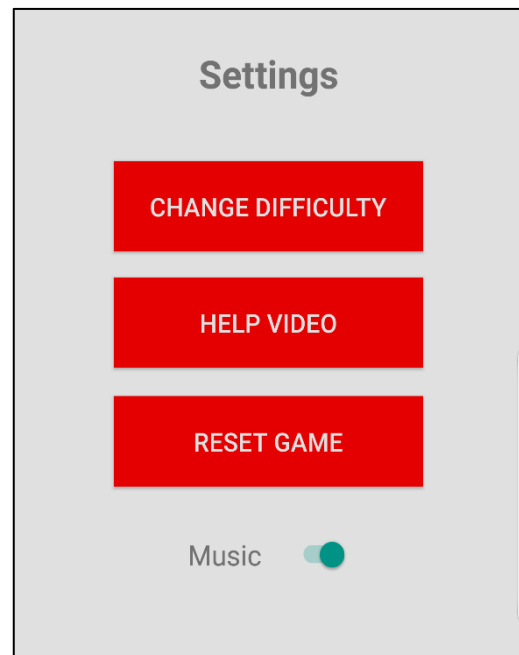
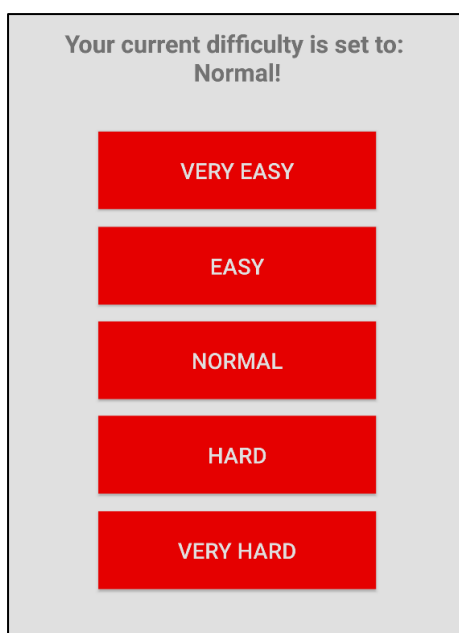
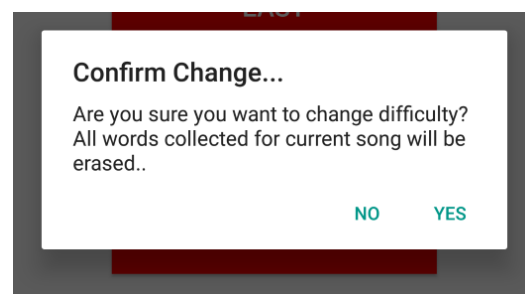


Figure 28 – Difficulties Screen



When the user selects a difficulty that is not the current one, a confirmation message is displayed, telling him that all words collected for the current song he is playing will be erased as in *Figure 29*. If he anyway wants to change difficulty, he is transferred back to the main page with the difficulty that he chose.

Figure 29 – Confirm Difficulty Change



If he wishes to reset his game from the settings menu, a confirmation message is also displayed as in *Figure 30*. If he chooses “Yes” then a new game is started on the main activity and all his game data is erased. If he chooses “No” nothings changes.

(Bonus)

If the user clicks on the “Help Video” button, a how to play video is played in full screen either portrait or landscape as seen in *Figure 31*.

Figure 30 – Confirm Game Reset

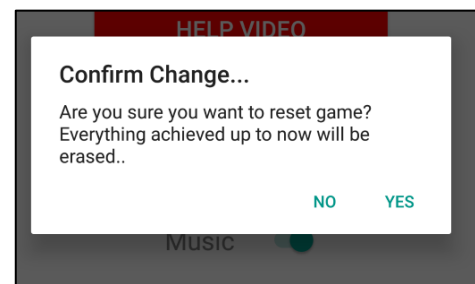
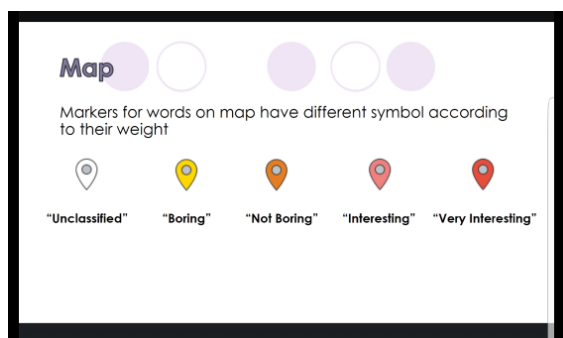


Figure 31 – Help Video



Conclusion

A lot of things offered in this design document have been implemented and tested. Features and bonuses promised in this document will be well-engineered implemented in the third part of the Software Engineering Large Practical.