

VARpedia – User Manual

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LAUNCHING FOR THE FIRST TIME

Disclaimer: This Application is made for ages 18-25 who's first language is not English.

Thank you for your choice in VARpedia as your Visual, Aural and Reading English educational application. Before using the application, please ensure that you are running it on a Linux operating system with a java runtime environment of 11 or above. Without this environment, VARpedia will not be able to function properly.

Additionally, VARpedia utilizes festival, a text to speech software, and the Flickr API for image downloading, hence some preparation for these are necessary.

To download festival, run the following command in your command line/terminal:

```
sudo apt-get install festival festvox-kallpc16k
```

To use the Flickr API, please sign-up on <https://www.flickr.com/services/api/> to obtain an API key. Afterwards, input your key and the secret into the flickr-api-key.txt file.

To run the application, go to terminal and cd to the directory containing the application. Enter the following command to run the program:

```
./VARpedia.sh
```

If you didn't understand any of these steps, don't be afraid to ask for some help from someone that does.

Now you should be all set and ready to go!

OPENING SCREEN

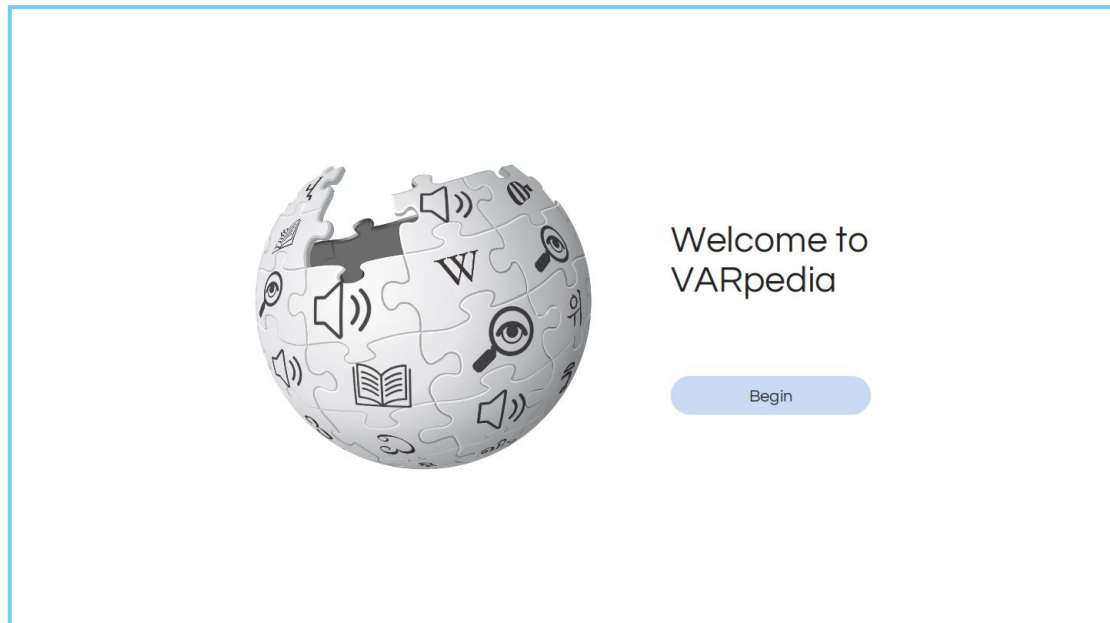


Figure 1: Opening screen of VARpedia

Once you start up the program, you will be met with this screen. This is just the opening screen, to use the application, click the begin button.

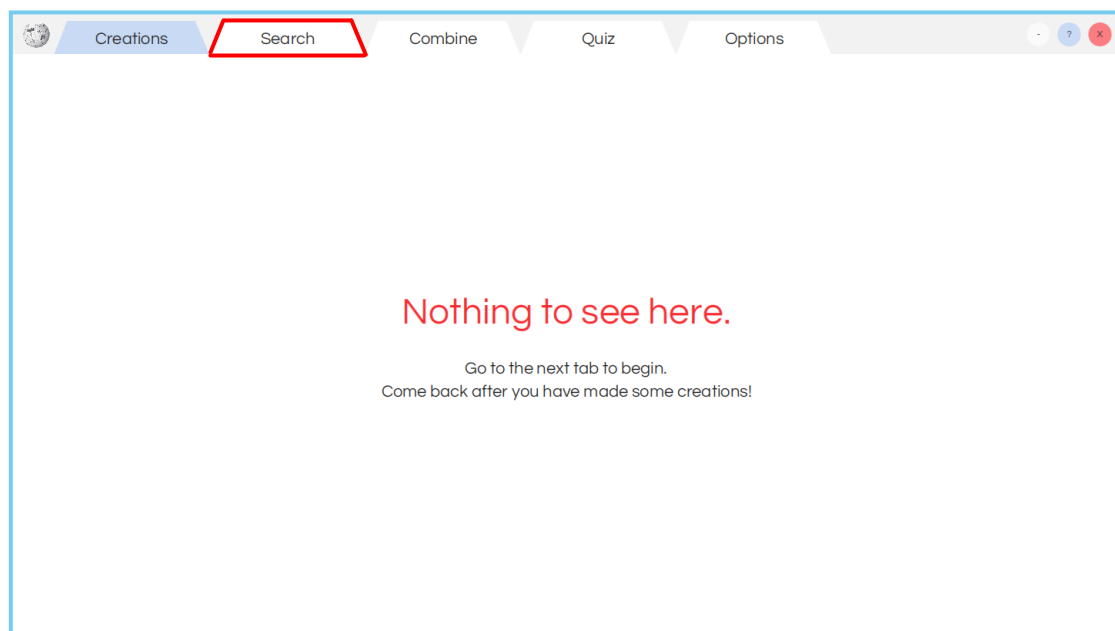


Figure 2: Creation screen after beginning

After clicking the begin button, the above page will pop-up. This is the Creations screen, however, since nothing has been made yet, there is nothing to see. To begin the creation process, click on the Search tab as highlighted red in Figure 2.

SEARCHING A TERM

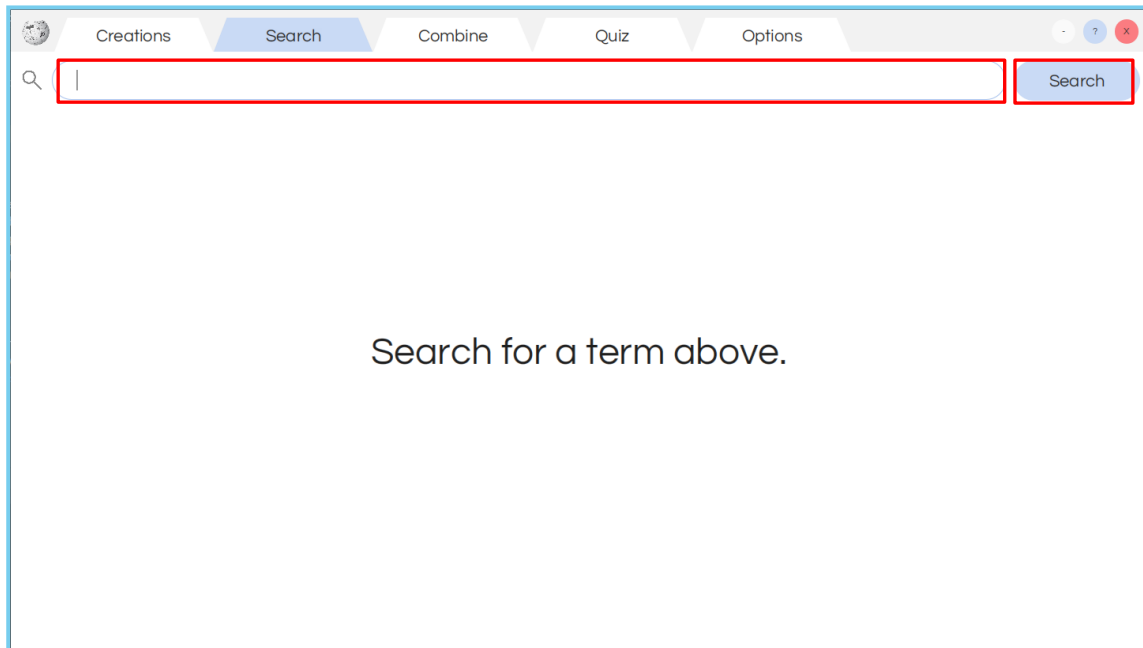


Figure 3: Search tab

Now that you are on the search tab, the first course of action is to search for a term. Simply input your desired term into the text field and click search.

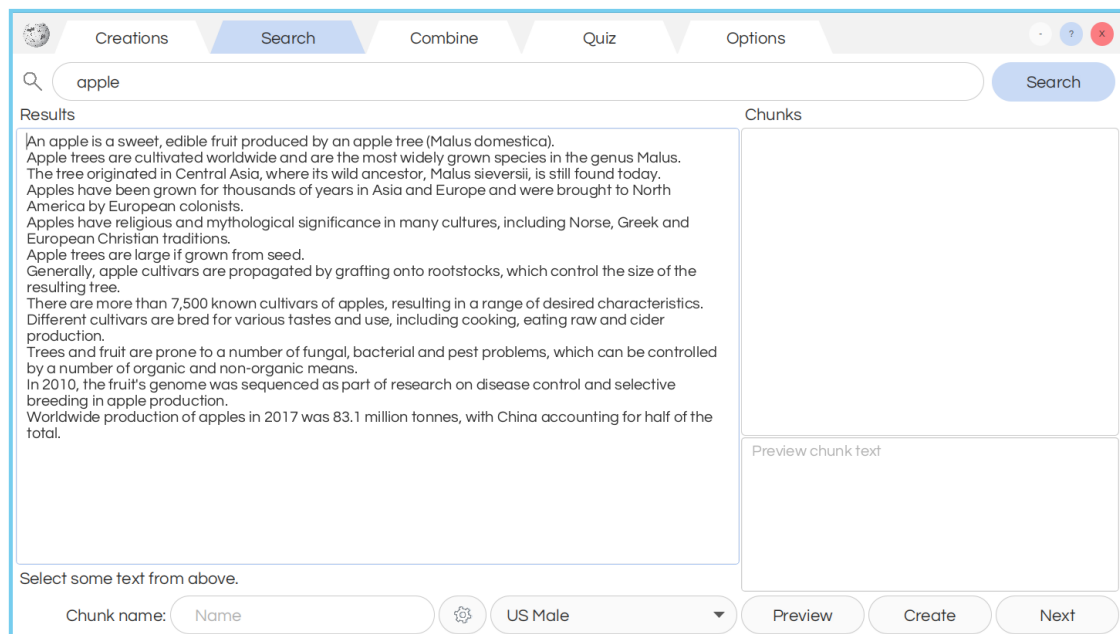


Figure 4: Searched term for apple

Your search term will pop up onto the larger blank area below Results along with all the other controls necessary for chunk creation. The next step is to now use this result to actually create audio chunks.

CREATING AUDIO CHUNKS

Creations Search Combine Quiz Options

apple Search

Results

Chunks

An apple is a sweet, edible fruit produced by an apple tree (*Malus domestica*). Apple trees are cultivated worldwide and are the most widely grown species in the genus *Malus*. The tree originated in Central Asia, where its wild ancestor, *Malus sieversii*, is still found today. Apples have been grown for thousands of years in Asia and Europe and were brought to North America by European colonists. Apples have religious and mythological significance in many cultures, including Norse, Greek and European Christian traditions. Apple trees are large if grown from seed. Generally, apple cultivars are propagated by grafting onto rootstocks, which control the size of the resulting tree. There are more than 7,500 known cultivars of apples, resulting in a range of desired characteristics. Different cultivars are bred for various tastes and use, including cooking, eating raw and cider production. Trees and fruit are prone to a number of fungal, bacterial and pest problems, which can be controlled by a number of organic and non-organic means. In 2010, the fruit's genome was sequenced as part of research on disease control and selective breeding in apple production. Worldwide production of apples in 2017 was 83.1 million tonnes, with China accounting for half of the total.

You have selected 12 words.

Chunk name: coolName US Male Preview Create Next

Figure 5: Highlighting text for audio chunk

1. Firstly, highlight the text from the search result that you intend on using for the audio chunk. This text is editable so feel free to edit before highlighting. Also, keep in mind that an audio chunk must contain between 0 – 40 words. The word counter below the search result will help you keep track and warn you if the highlighted text is insufficient.
2. (Optional) You can name the chunk in the small text field at the bottom as demonstrated with "coolName". If you don't, the application will automatically assign the chunk with a default name.
3. Now select a voice by clicking the dropdown area at the bottom of the page as seen below. Though please keep in mind that the NZ Male voice is less versatile than the US Male voice.

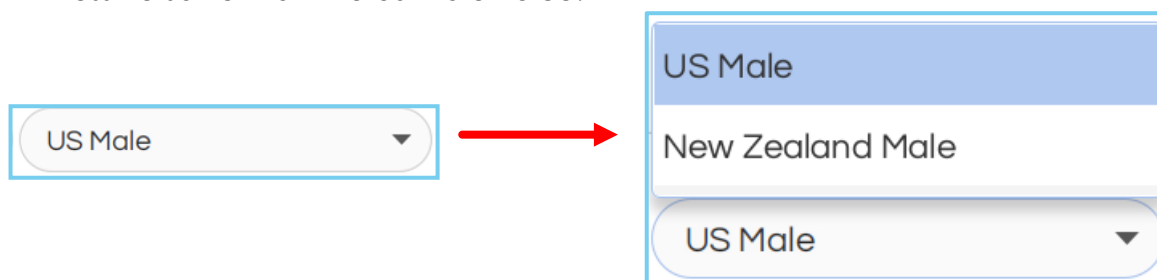


Figure 6: Selecting a voice

- (Optional) On top of selecting a voice, you can also change the voice's settings. Simply click on the settings button to the left of the voice selection and drag the sliders to adjust pitch and speed.

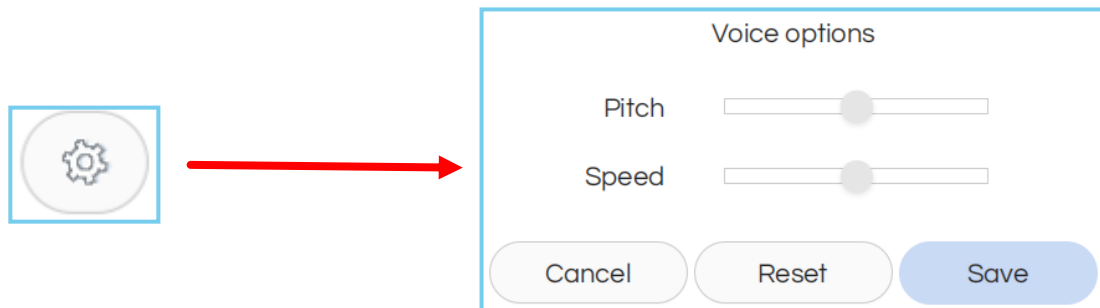


Figure 7: Adjusting voice settings

- (Optional) You can then preview your audio chunk by clicking on the preview button on the right of the voice selection drop box. If you want to end the preview early, simply click the button again to stop it.
- After all this preparation is done, you can proceed to create the audio chunk by pressing the create button at the bottom right. Doing so should yield the following result.

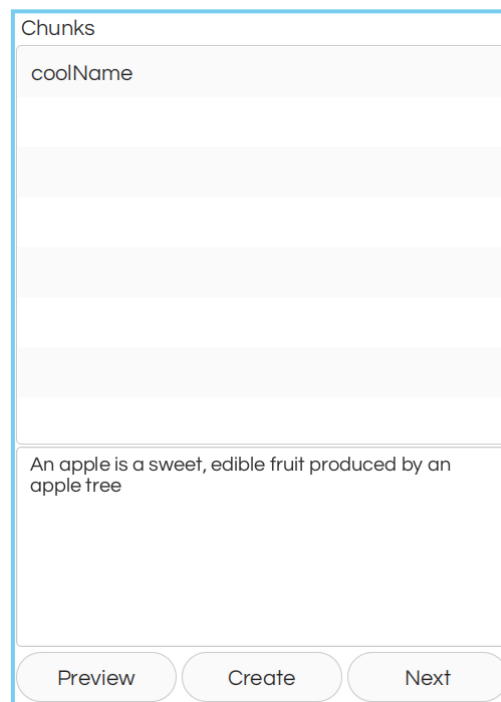


Figure 8: Creating a chunk

- Okay, now you know how to create a chunk, feel free to create more, or click the next button at the bottom right corner, or the combine tab at the top to start combining your chunks.

CREATING THE VIDEOS

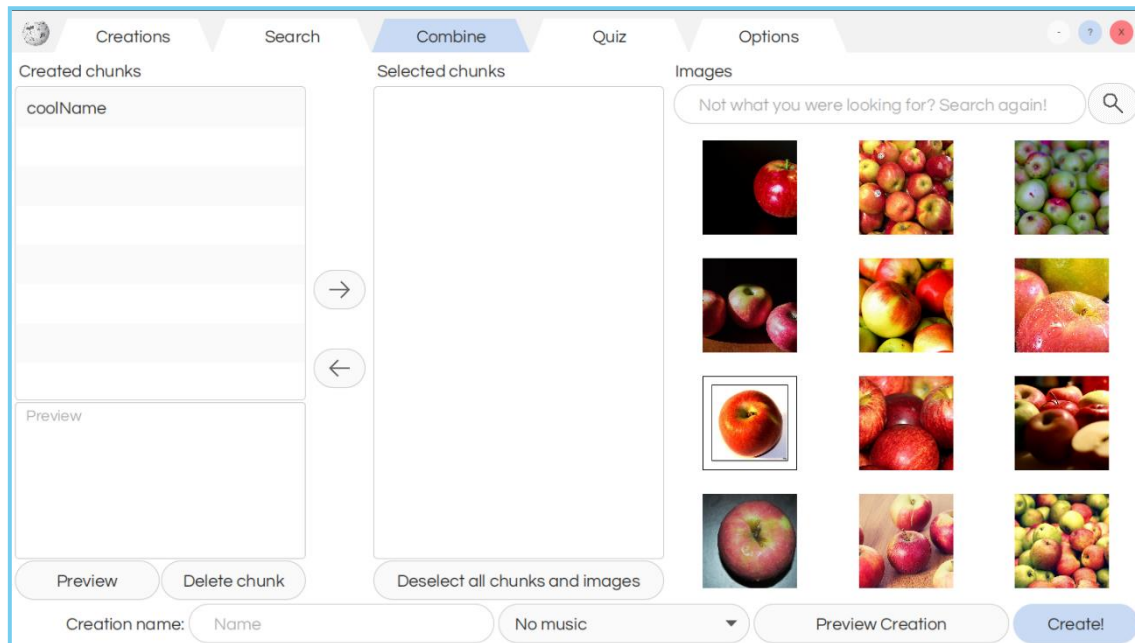


Figure 9: Combine Tab

Now that you are on the combine tab, you can see your list of created chunks and a set of 12 images relating to your search term. Using these items, you can create your new creation!

1. Firstly, while you don't have to do this first, you should create a list, or sequence of audio chunks in which the creation should combine for its audio. To do this, simply select a chunk from the Created Chunks list and click on the right-pointing arrow. This will add the chunk onto the Selected chunks list, which will later be combined for the audio.

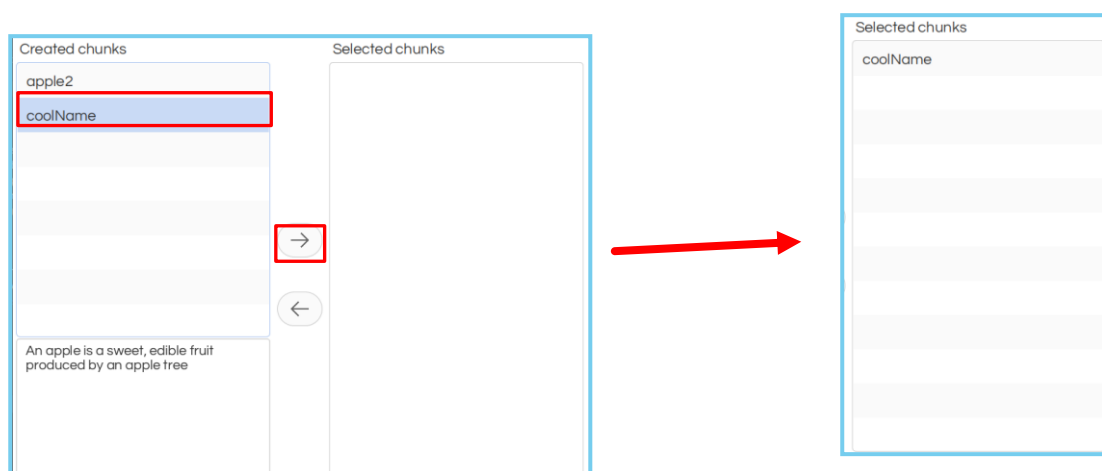


Figure 10: Selecting Chunks

If this new list is not the sequence in which you want the chunks arranged, simply select a chunk from Selected chunks that you don't want and click the left-pointing arrow to get rid of it. If you want to start the list over, simply click the Deselect all chunks and Images button to clear the list.

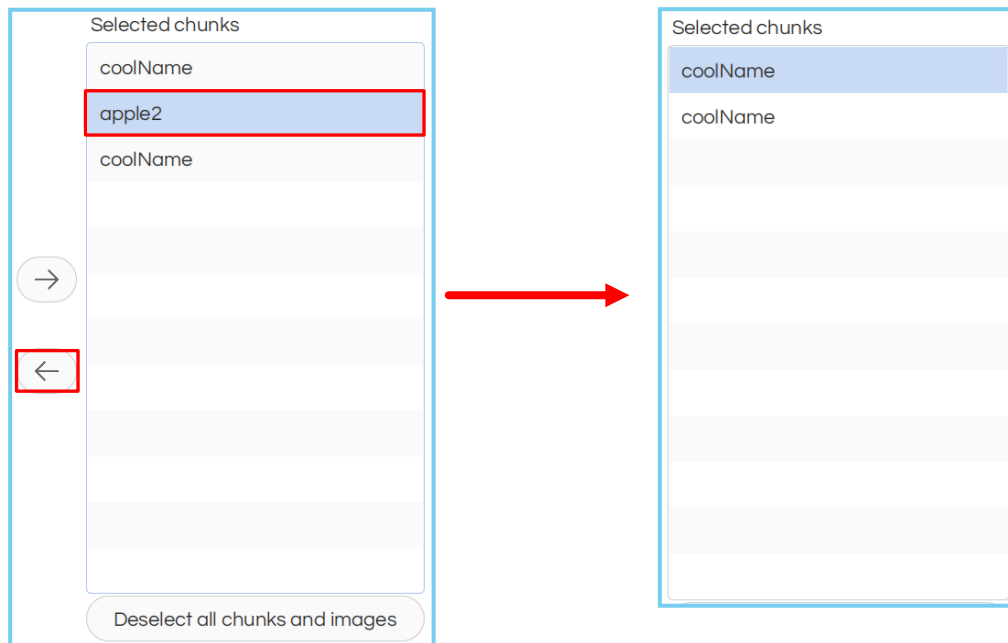


Figure 11: Deselecting chunks

Additionally, we provide a preview chunk option for you to hear the chunk before adding them on, and if a chunk is unsatisfactory, you can delete it by selecting the chunk and pressing delete.

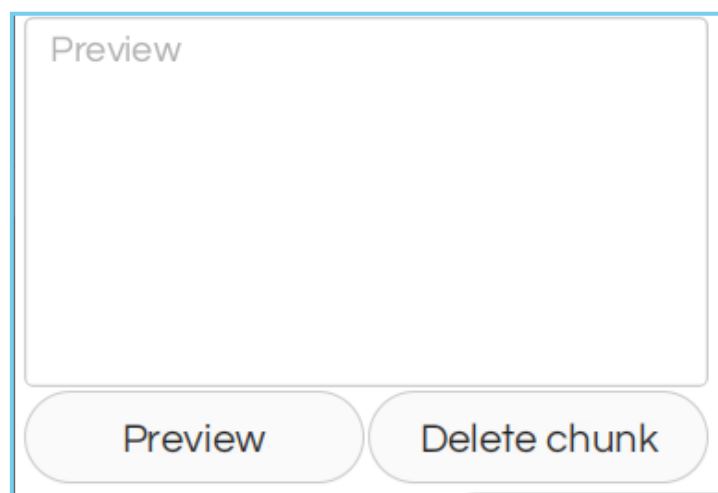


Figure 12: Previewing and deleting chunks

2. Okay, now that the tough stuff is gone, we can go on to selecting images. To select an image for the creation, simply click on the desired image/s. This image will then become bordered to show that it is selected.

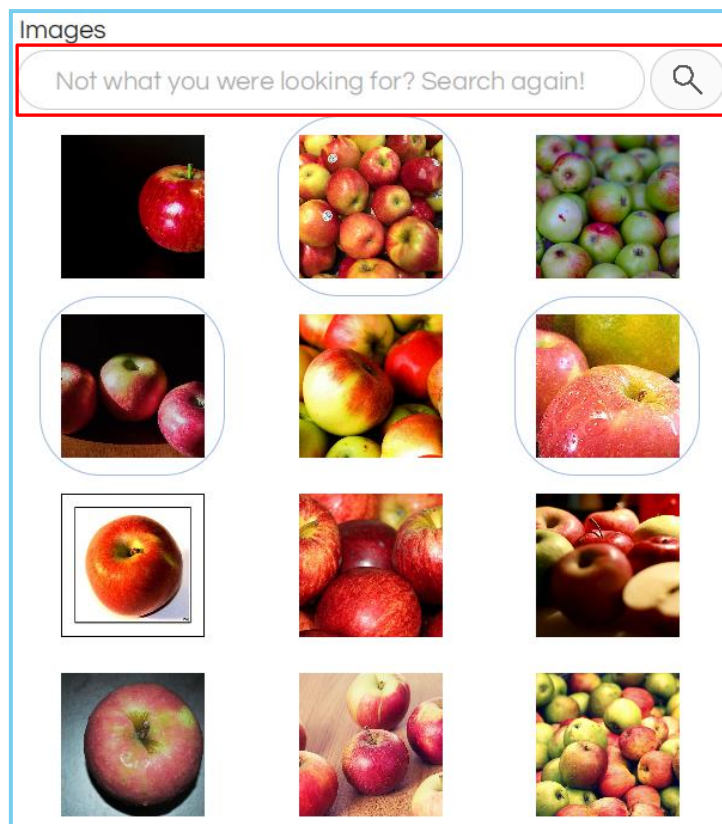


Figure 13: Image selection

If you don't like this search term's set of images, you can change the search by going to the above text field and searching for something new as highlighted above.

3. Now you can decide if you want music or not. This can be done by clicking on the music drop box and selecting one of the four options.

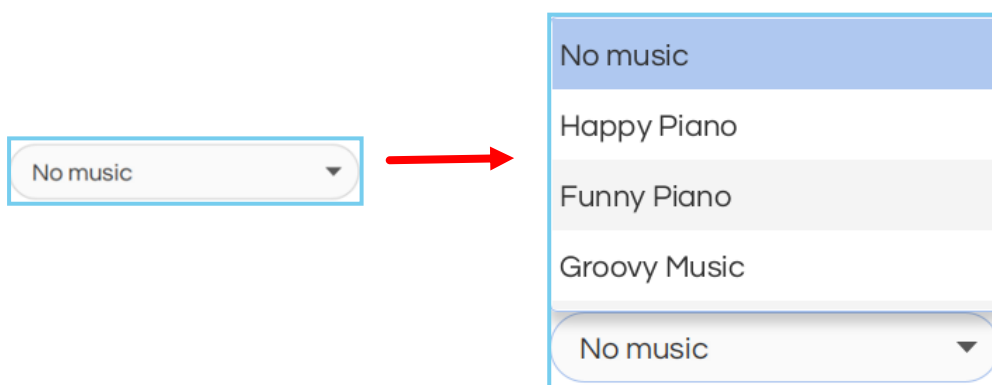


Figure 14: Music Selection

- (Optional) Now that you have set up most of the video's components, you can check it out using the preview button.

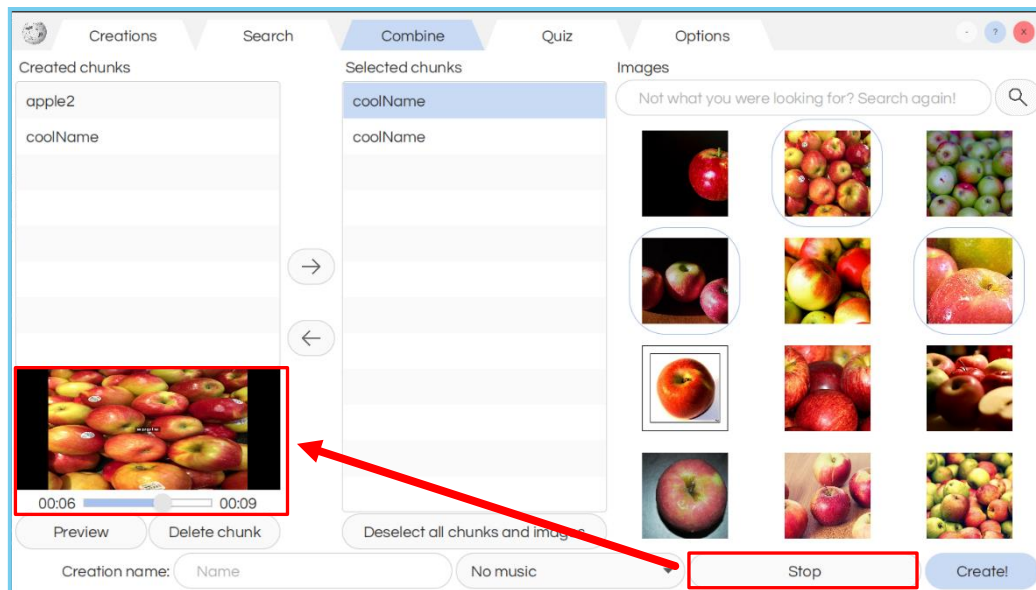


Figure 15: Previewing Creation

- All the video's features are set, but you still need to name your new creation. Go on over to the bottom left text field and give the creation a name.

Creation name:

Figure 16: Naming the creation

- Now that everything is ready, click Create! At the bottom left to make your creation! After the creation finishes, a pop-up will appear. Select Yes to clear all the chunks and information you used for this creation, or No to reuse the existing chunks and images.

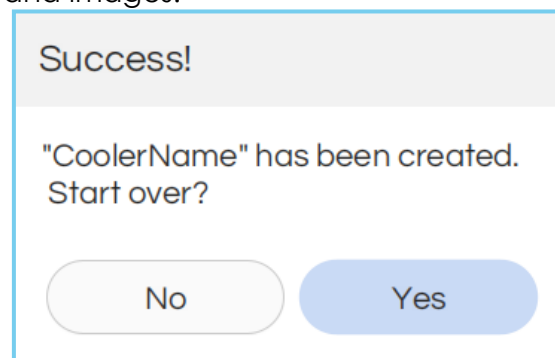


Figure 17: Successful creation pop-up

- Once that is finished, you can check out your new creation by clicking the Creations tab at the top left.

INTERACTING WITH CREATIONS

Now that you have made your creations, you can return to the Creations tab and play or delete them.

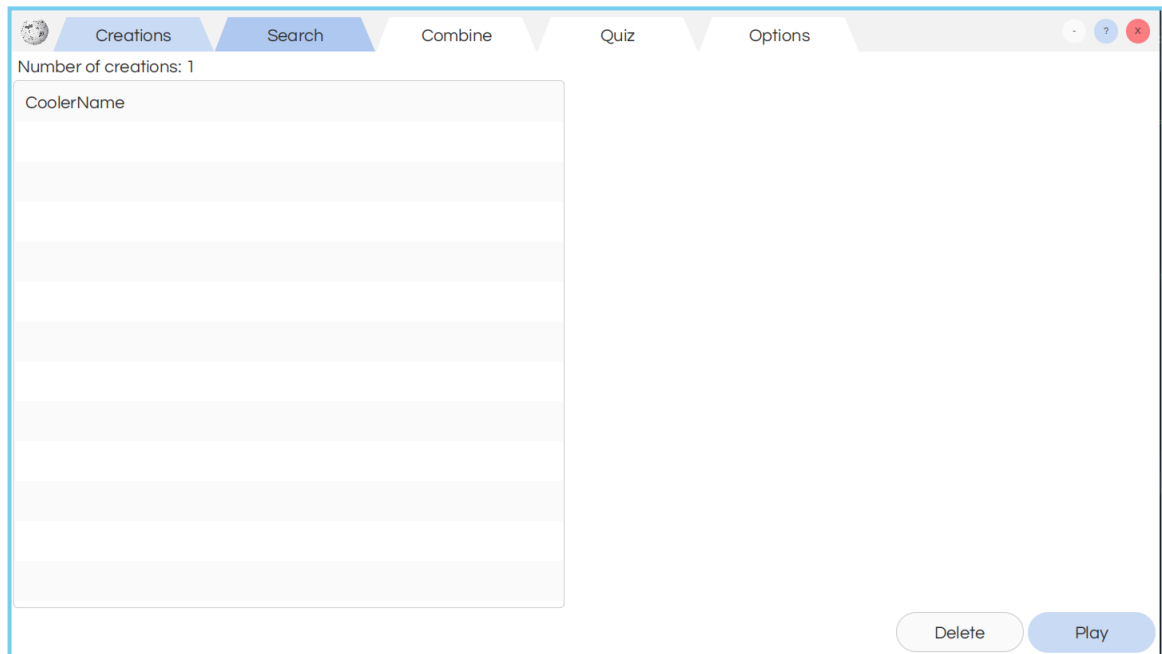


Figure 18: Populated Creations Screen

Playing a Creation:

1. To play a creation, just select the desired video from the list and click play at the bottom right.

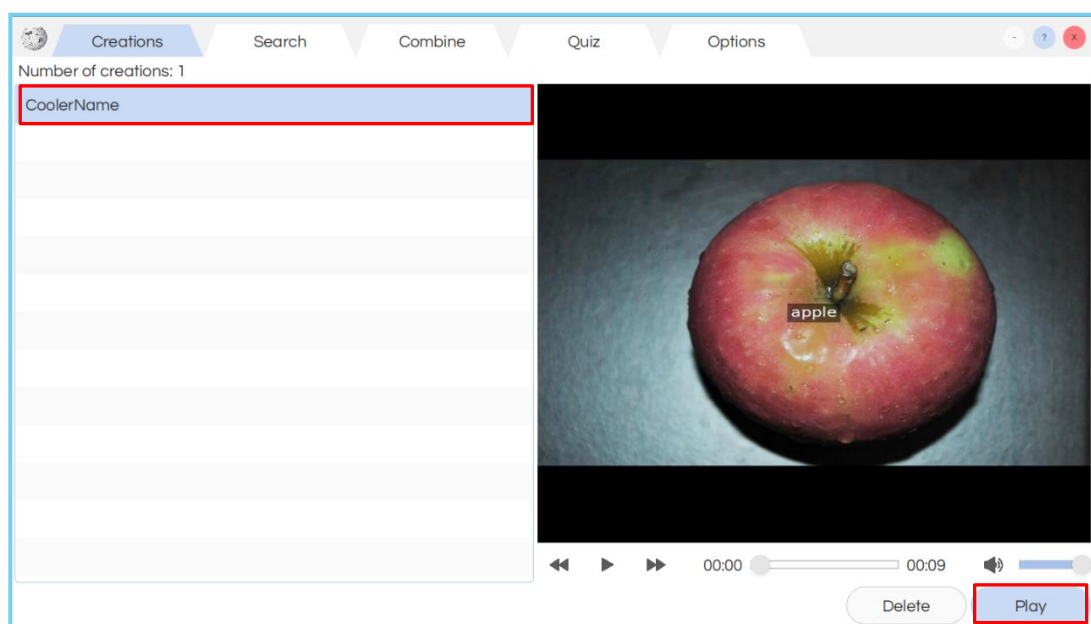


Figure 19: Playing a video

- (Optional) While the video is ongoing, you can interact with the various video-player controls:
 - Volume adjustment
 - Pausing the video
 - Fast-Forwards
 - Fast-Backwards

Play around!



Figure 20: Video-player controls

Deleting a creation:

1. Select a video that you want to delete just as you did when playing a creation.
2. Click on the delete button at the bottom right corner. A pop-up will appear to reconfirm that you really do want to delete the selected creation. If you don't want to, select No, otherwise select Yes to confirm the deletion.

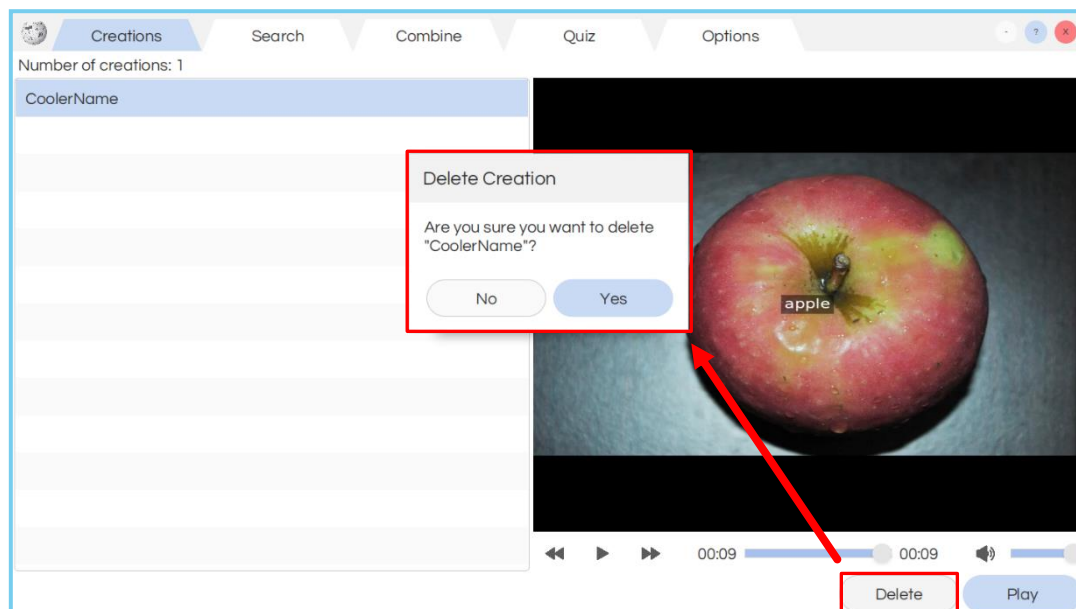


Figure 21: Deleting a creation pop-up

PLAYING THE QUIZ

Now that you have some creations, you can now play the Quiz!

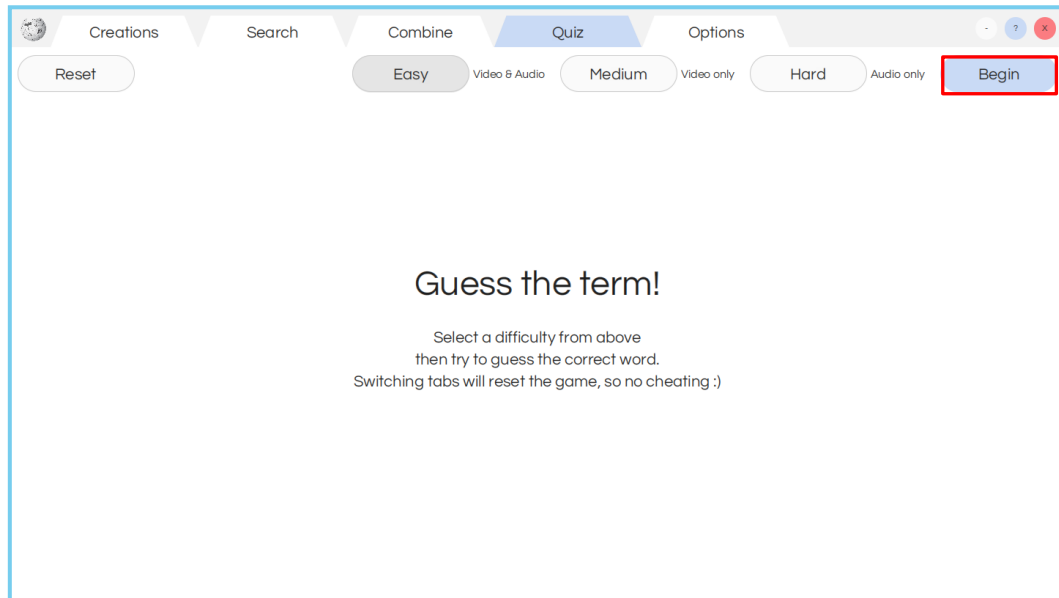


Figure 22: Quiz Tab

1. Firstly, select your desired difficulty level, then click Begin as highlighted above to start the quiz.
2. Now a video will start playing for 20 seconds. Within that time, you must guess the search term used to obtain that video, audio or both by inputting your answer within the bottom text field and clicking enter.

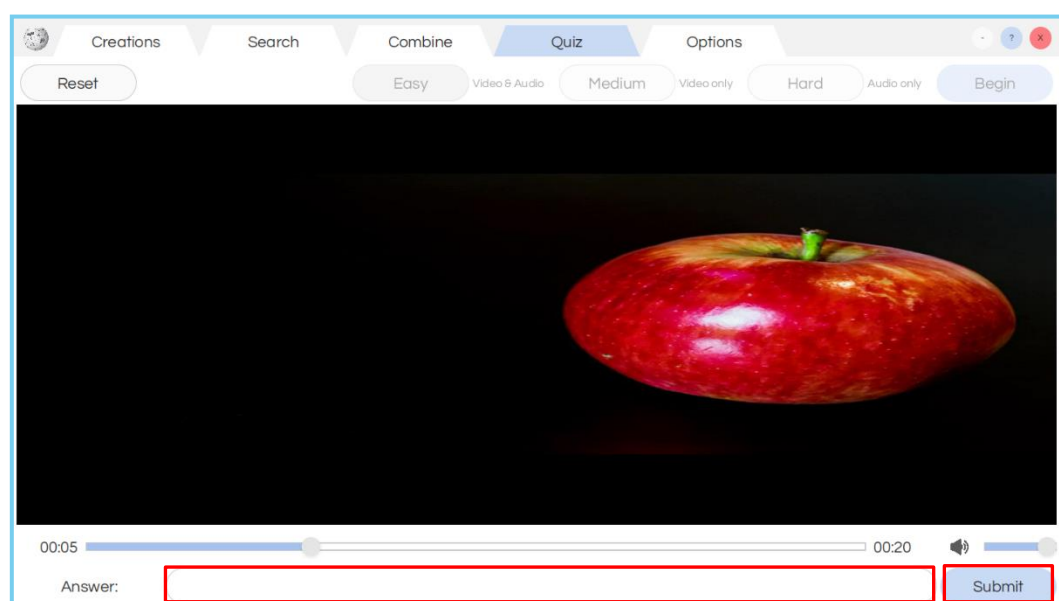


Figure 23: Playing the Quiz

3. If the answer is Correct, the following will appear where you can either finish the quiz or go to the next question.

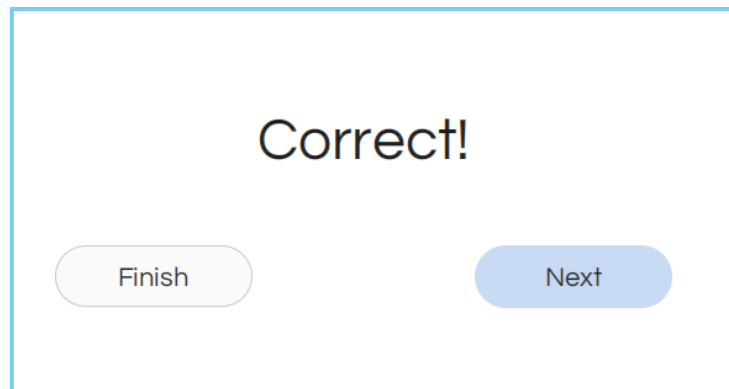


Figure 24: Correct Quiz answer

4. If the answer is incorrect, a small red message will appear to the left of the text field, telling you that your answer isn't right. You can still try to get the right answer until the time runs out.

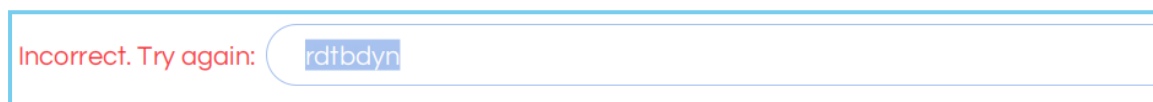


Figure 25: Incorrect Quiz answer

5. If you run out of time for a question, you can either; finish the quiz, retry the question or go to the next question.

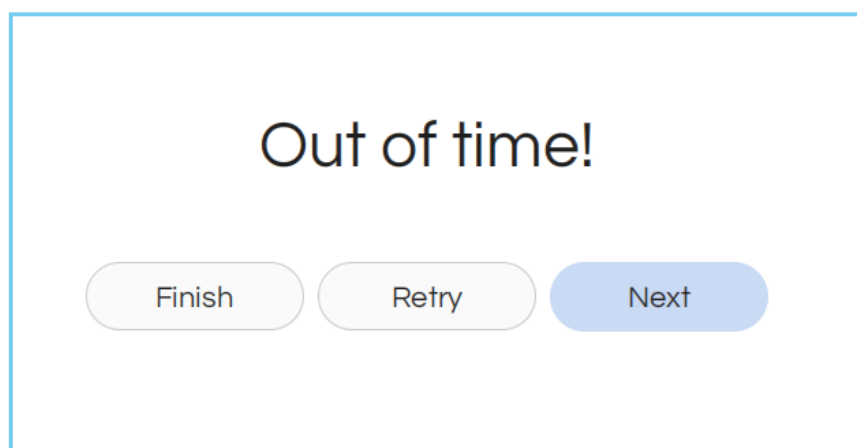


Figure 26: Out of time in the quiz

6. Once you decide to finish the quiz, the below screen will appear showing you your score. From this point on, to reset the quiz tab to play again, click the reset button at the top left corner.

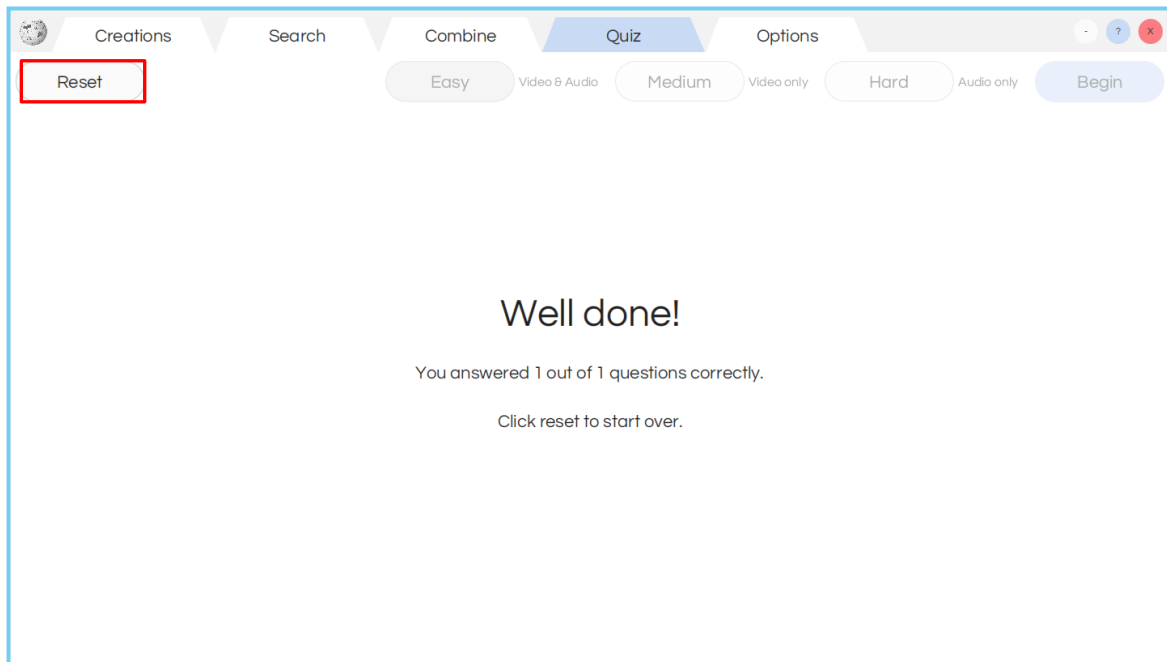


Figure 27: Finished Quiz

CHANGING THEMES

Getting tired of the light background? Well you can change the theme of the application in the options tab.

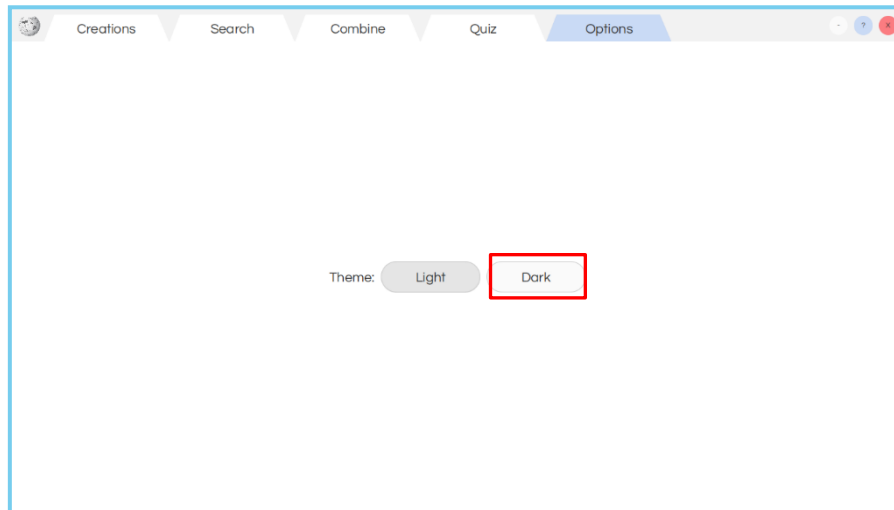


Figure 28: Options tab

Simply select the dark button to change to a dark theme, or light button to return to the default light theme.

Dark theme:

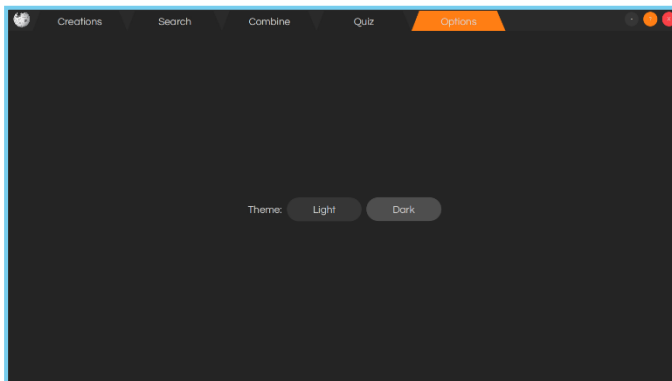
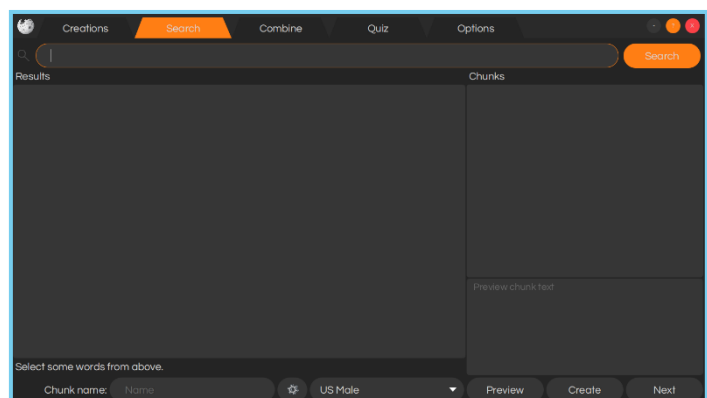


Figure 29: Options tab Dark-theme

Figure 30: Search tab Dark-theme



EXITING THE APPLICATION

Exiting at any point is very easy, just click on the x button at the top right corner. You don't have to worry about losing any of your creations, they are already saved into a folder, so the next time you open up VARpedia, they will be right where you left them!

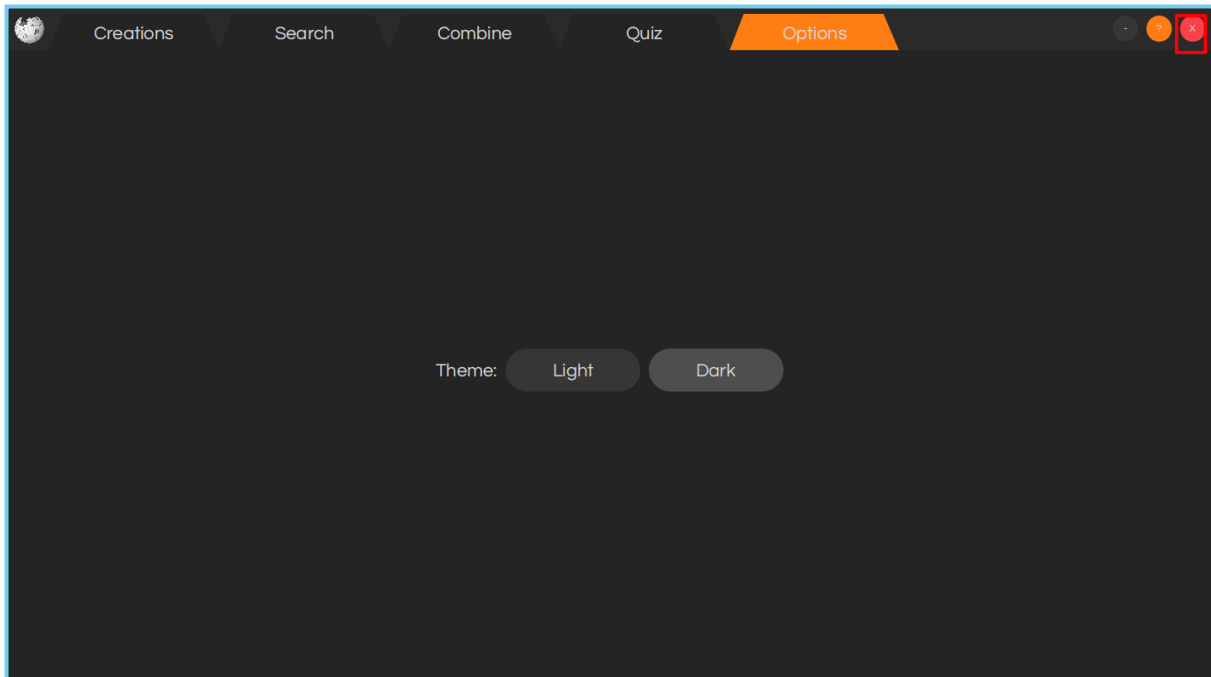


Figure 31: Exiting VARpedia

ADDITIONAL FEATURES

Help Button:

If at any stage you need some quick help when using this application, click on the (?) button on the upper-right, next to the exit button to pull up the help menu. On this menu, there are basic instructions on how to:

1. Create chunks
2. Combine chunks for creations
3. Play and delete videos
4. Play the Quiz

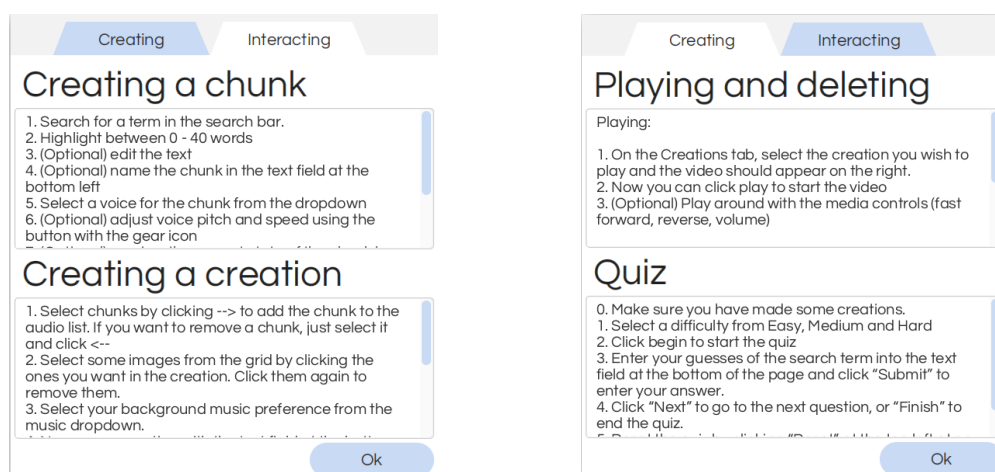


Figure 32: Help pop-up

Key Shortcuts:

The following key shortcuts have been added to keep your life a little bit easier.

- Enter key:
 - On the opening screen to begin instead of clicking the begin button
 - After typing into text fields e.g. searching a term, to enter the text input
 - When there's a highlighted button, most of the time, using Enter will click it
- Left and right arrow keys:
 - Can be used to slide the voice option sliders
 - Quickly switch between tabs
- Double-click on List views:
 - Can be used to preview created chunks in Search tab.
 - Add or remove chunks from selected chunks list in Combine tab.
 - Play a creation in the Creations tab.