SPIPHY

A Speech-To-Text Image Searcher
By Noah Kellem

Product Definition Statement: This app allows users to search for GIFs and images using their voice and is for anyone who wants to easily find GIFs and images.

List of Features
- Speech-to-text gif and image searching
- Save gifs and images
- Gif sharing via social media
- Ability to choose which gif or image user wants to use

Architecture
Everything was coded in IIFEs in separate JavaScript files and organised accordingly.

Design Decisions
- Ttitle at the top of the page to show clear hierarchy of elements on the page
- Microphone and search buttons next to the search bar to indicate where searching will be done and show various methods for searching
- Radio buttons for either GIPHY or Flickr displayed underneath to allow the user to clearly see and choose which service they want to search
- A border and caption where the images will be displayed to show the user where to expect their search results to be displayed in
- All social media and sharing links located directly under the image to show the user what they can do after they have selected an image
- On results page, results are arranged in rows of 4 and scaled so that each fit nicely on the page and allow the user to easily peruse their results

Technical Decisions
- GIPHY and Flickr APIs used due to their popularity among users who want to search for images as well as their difficulty to implement
- Search allows for users to either use their voice or keyboard to search due to accuracy of Speech-to-text; keyboard input allows for corrections to be made
- Putting all the code in an IIFE was an easy and straightforward way to allow no global variables to be used as well as allowed code to separate from each other as needed

HTML5 Technology
For this project I used the Web Speech API HTML5 technology.

- Used for speech synthesis to allow for speech-to-text voice searches

Document Extras
- Website is very responsive. Not truly "mobile ready", but everything scales appropriately and looks nice on a variety of screens
- The ability to save images, tweet them out, and send them via Facebook Messenger as attachments are all extra features I added to allow my project to be more usable. It also gives you access to the direct image link
- My app was designed in such a way that it is extremely easy to use and straightforward

Credit and API Documentation
Separated by file
- speechRecognizer
  - Technology Documentation
    - https://developer.mozilla.org/en-US/docs/Web/API/Web_Speech_API
    - https://developer.mozilla.org/en-US/docs/Web/API/Web_Speech_API/Using_the_Web_Speech_API
  - Technology Demo (used to gain better understanding of how to implement the technology in code)
    - https://shapeshed.com/html5-speech-recognition-api/
    - https://github.com/GoogleChrome/webplatform-samples/blob/master/webspeechdemo/webspeechdemo.html
- twitterWidgetLoader
  - Twitter Developer Pages
    - https://dev.twitter.com/web/javascript/loading
    - https://dev.twitter.com/web/tweet-button
- facebookSDK
  - Facebook Developer Pages
    - https://developers.facebook.com/docs/javascript/quickstart
      - implement and load the FB SDK
    - https://developers.facebook.com/docs/sharing/messenger
      - Allow sending on messenger
    - https://developers.facebook.com/docs/sharing/reference/send-dialog
      - for the sending method
  - How to use the FB.ui method to create custom FB Links

- - ■ http://stackoverflow.com/questions/11093828/how-to-customize-a-facebook-send-button
  - ● searchAPI
    - ○ GIPHY Documentation
      - ■ https://giphy.com/posts/how-to-embed-giphy-gifs-on-your-website
      - ■ https://github.com/Giphy/GiphyAPI#search-endpoint
    - ○ Flickr API Documentation
      - ■ https://www.flickr.com/services/api/
    - ○ How to replace all spaces in a string
      - ■ http://stackoverflow.com/questions/3794919/replace-all-spaces-in-a-string-with

Self Grade

Personally I believe I deserve a 95 on this project. A considerable amount of work was put into my app to allow for gif and image searching as well as creating a functional and practical service that people would actually use. It has all of the functionality that you would expect from a gif or image searcher in today's world, which was all extra work. Overall, I am simply extremely proud of the way my app turned out. While there is still more that could be done, I believe I did very well on this project and deserve a high grade.