

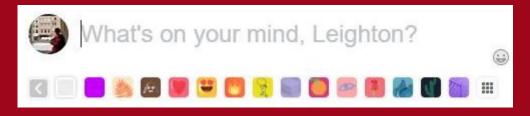
Project #84: Visualising Short Texts By Leighton Jonker and William Chao Supervisors: Gill Dobbie and Danielle Lottridge



The web application that gives your words life and gives you the choice to choose how you want your words to shine!

Motivation

While social media websites allow you to update your status with your current mood, they limit the updates to texts and a selection of predefined templates users can choose from. We wanted to create a smart-system that would be able to scan the status update and return a selection of images that relate to the update that the user can then choose to accompany their status update.

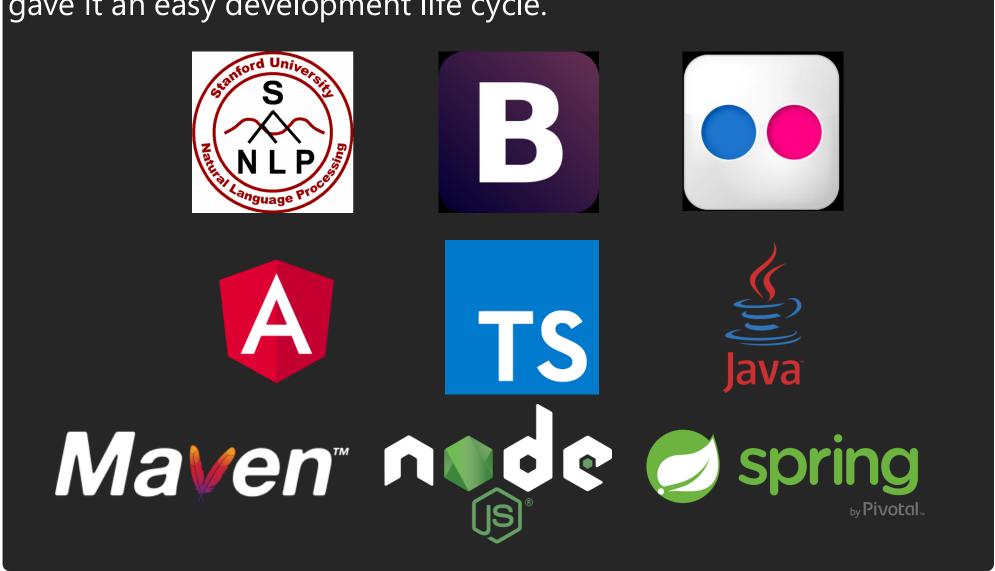


Goals

- A text analysis algorithm capable of searching for key words
- A robust and refined website application that provides the user with free choice
- A user interface that is very intuitive and easy to use
- The ability to email your PicTex or save it to your machine

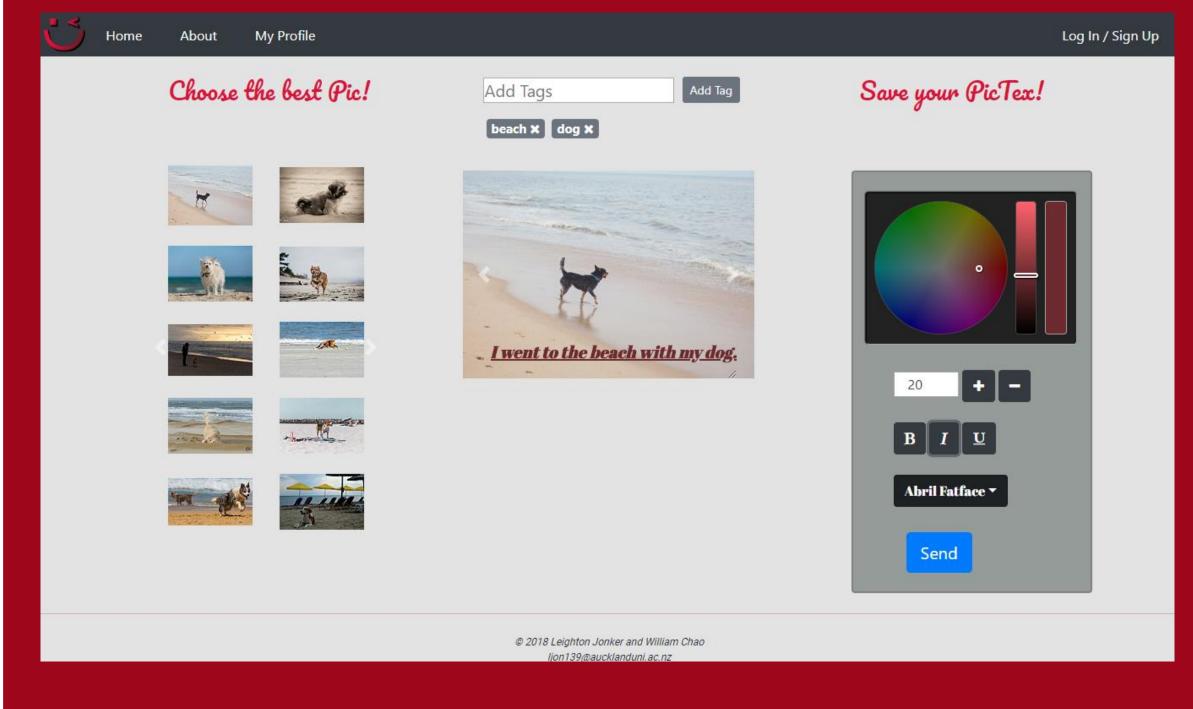
Design Decisions

When it came to the creation of our web application, we wanted to use a framework and programming language that was well known, which gave it better compatibility with other applications as well as gave it an easy development life cycle.



The Website

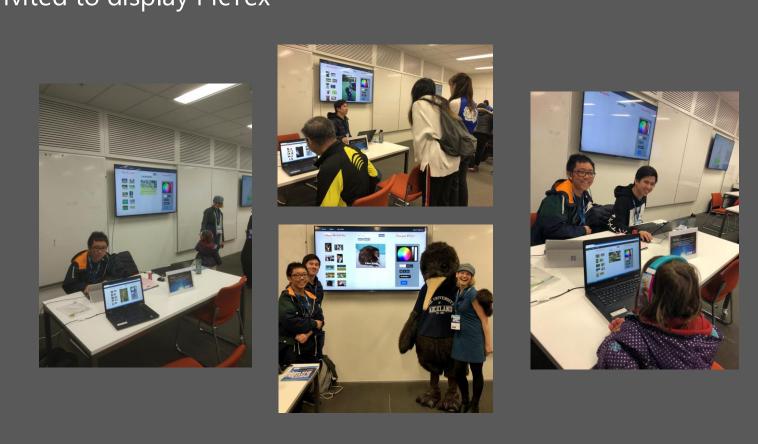
Our current product mainly focuses on the home and result page, which have the text analysis and image search code. The inputs are fed into the home page and sent to the back end which then analyses the text and returns the keywords to the result page. The result page (shown below) then utilises the keywords in a Flickr search API and returns a list of relevant photos.



User Input Flow Diagram Analyse text and User Input return keywords Searches for images using keywords on Flickr API User adds or with the images with removes keywords text editor on the side Send text, font Save Image information and Applies text with font tions on image and Sends e-mail to user E-mail image e-mail with image attached **FRONTEND BACKEND**

Usability and Live Demonstrations

Here are images of Courses and Careers day where we were invited to display PicTex



Conclusions and Future Work

We have created a web application that:

- Analyses text
- Finds pictures that match the keywords in the text
- Places the text on the chosen picture
- Enables the user to changes the placement and font of the text
- Provides a way to email the completed PicTex
- Is simple and easy to use

In the future, we wish to:

- Expand the features of PicTex
- Further refine the text analysis and front-end of the website
- Integrate the website with other popular social media websites
- Port the system over to the smart-phone and create an application

Facebook, Stanford NLP, Bootstrap, Flickr, Angular, TypeScript, Java, Maven, NodeJS and Spring.io