A Web Based Annotation Interface Based of Wheel of Emotions

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Description

This project, in short, is based on Robert Plutchik's Wheel of Emotion which was constructed in 1980. [1] The aim of this project is to develop and interface which will provide users with two option:

- Users will be able to classify an emotion for given text or image by navigating though the wheel
- Users should be placed on the Wheel of Emotion based on extracted knowledge

The wheel is divided into eight sections, each of which has a basic emotion. Plutchik suggested that these eight emotions have opposites so joy, trust, fear and surprise are the opposites of sadness, disgust, anger and anticipation.

In addition to the eight basic emotions, there are degrees of intensity for each. For example let's take the emotion joy, on Plutchik's Wheel of Emotion, joy is the basic emotion, less intense joy is labelled serenity in comparison to complete joy which is labelled ecstasy.

The final thing to note about the wheel is the combination emotions, those emotions which require to basic emotions first. An example of a combination emotion on the wheel is love, Plutchik says that love is a combination of the emotions joy and trust.
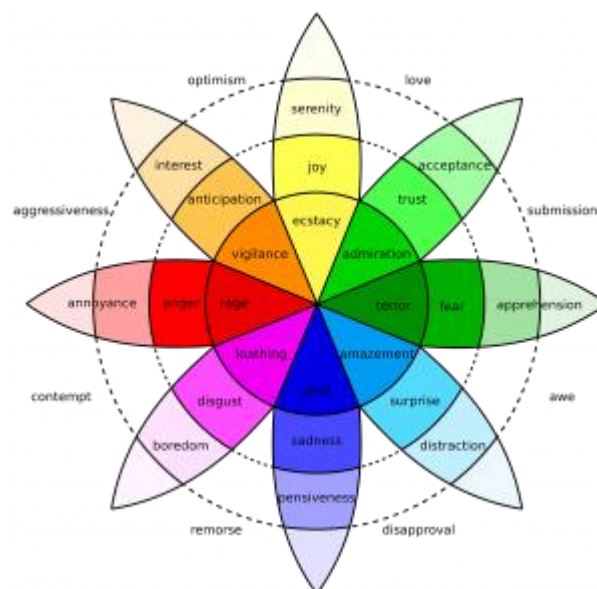
[2]

As already stated, the interface should provide users with two options however I hope that through their improved understanding of the Wheel of Emotion they will gain a greater understanding of their own, and others, emotions. The underlying aim of this project is to try and get individuals to be more understanding of emotions and hope they apply this new found knowledge to everyday life to benefit not only themselves but those around them.

Aims and Objectives

The following is a list of objectives which will need to be achieved to successfully complete this project.

Research Technologies and Techniques
- Research the best technologies available to complete this project
- Explore which techniques will best help be create a successful intuitive interface

Compile and Store Necessary Data
- Data on different emotions, such as name and location on the wheel, will need to be accessed and extracted from sources such as WordNet Affect to allow users to place emotions on the wheel.
- Data which the user inputs to the interface, such as names of emotions, will need to be extracted and used to use which ever website feature they are looking to use.
- Emotions' names and locations will need to be stored in a database which can be accessed at relevant points on the site.

Design and Create a User Interface
- The interface must be intuitive and easy to navigate, users should be able to complete the task they are attempting in the shortest amount of time possible without being confused. If the interface achieved isn't intuitive then users will be less likely to stay on the site and they may become tempted to go elsewhere.
- The interface must have a section dedicated to data entry as the user of the site will need to classify emotions or provide a name for an emotion to be placed on the Wheel of Emotion.
- The interface must be accessible on desktop and tablet computers.

Testing of Interface
- Find individuals who are willing to participate in the testing of the interface
- Test the interface on users who have no previous experience using it and ask for feedback based on different aspects such as:
  - ✓ Usability
  - ✓ Clarity
  - ✓ Design

Ethics

For the creation of this project I do believe that the project needs ethical approval. The project does require human users to test and to continue to use and although no data about users will be saved or ever asked for, so complete anonymity is preserved for users, questionnaires from users will need to be completed for testing purposes.

I have decided to complete the University's Ethical Approval Form, which can take up to 14 days to be processed, so during the later parts of this project, where user interaction is required, I have already done so.

Work Plan

The following is a week by week plan which should see the project completed successfully and on time. Weekly reviews will be scheduled for Tuesdays to discuss current progress and the next short term aims. Weeks in red text are those where meetings will not be available. Two more in-depth reviews will take place in weeks 5 and 10:

Week 1 (25/01/16)-
- Background Research
- Initial Plan

Week 2 (01/02/16)-
- More In-Depth Research
- Create Database
- Design Wireframes
- Decide which Software Development Lifecycle to Adhere To
- Begin Obtaining and Saving Information

Week 3 (08/02/16)-
- Ensure Research is Complete
- Complete Report Introduction
- Start Design of System
- Write Background of Final Report

Week 4 (15/02/16)-
- Continue with Design
- Connect Database to UI
- Start Specification and Design

Week 5 (22/02/16)-
- Continue work on UI

Week 6 (29/02/16)-
- Continue work on UI

Week 7 (07/03/16)-
- Finish UI

Week 8 (14/03/16)-
- Create Test Cases
- Test Project on Others

Easter Recess (21/03/16 - 10/04/16)-
- Work on the Final Report

Week 9 (11/04/16)-
- Implementation Section of Report
- Continue Final Report

Week 10 (18/04/16)-
- Results and Evaluation Section of Report
- Continue Final Report

Week 11 (25/04/16)-
- Conclusion and Reflection Sections of Report
- Finish Final Report

Week 12 (02/05/16)-
- Submit Final Report

References

[1]: Contrasting and Categorization of Emotions, Published by Wikipedia
https://en.wikipedia.org/wiki/Contrasting_and_categorization_of_emotions#Plutchik.27s_wheel_of
_emotions (Accessed 26th January 2016)

[2]: Image of Wheel of Emotion, Published by IT Knowledge Exchange
http://itknowledgeexchange.techtarget.com/writing-for-business/files/2012/09/wheel-of-emotions-
300x293.png (Accessed 26th January 2016)