Discount Siri
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1. **Abstract**
   1.1. **Project Purpose**
   Provides a GUI analog of Apple's Siri for anyone to use, instead of speaking into your device.
   1.2. **Background/Motivation**
   Speaking into Siri has been quite annoying in my experience; I always ended up opening my phone's browser and doing my task from there (through Google, often involving multiple page clicks to finish task). My roommate introduced me to Dank Memer BOT and FredBoat BOT on a Discord server one night, and I thought some of their functionality would be nice to include in an application like this also.

2. **Technical Specifications**
   2.1. **Platform:** Website
   2.2. **Programming Languages:** Python, HTML, JavaScript
   2.3. **Stylistic Conventions:** PEP 8
   2.4. **SDK:** Python 3
   2.5. **IDE:** PyCharm, Sublime
   2.6. **Tools/Interfaces:** Mozilla Firefox, Flask, Bootstrap, openCV, Open Weather Map API, YouTube Data API, Oxford Dictionaries API, Reddit API, unittest.
   2.7. **Target Audience:** People that utilize Apple's Siri regularly, people that don't want to use Google, and people that like memes.
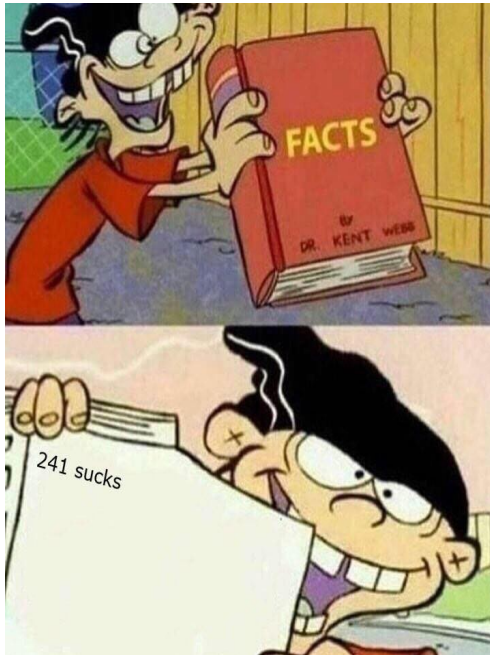
3. **Functional Specifications**
   3.1. **Features**
   - Users can request the weather from a location of their choice.
   - Users can request a definition for a word to be pulled up.
   - Users can request a random fact to be pulled up.
   - Users can request a random shower thought to be pulled up.
   - User can request a preview of the front page of Reddit.
   - Users can request a random meme to be pulled up.
   - Users can request a "trash vision" meme to be generated from image upload.
     - Ex.

- Users can request a "facts" meme to be generated from text input.
  - Ex. 241 sucks ==>

- Users can request to "memeify" text input.
  - "Spongebob mocking" meme
    - Ex. 241 sucks ==> 241 SuCkS
  - "Alternating text/emoji meme" meme
    - Ex. 241 sucks ==> :clap: 241 :clap: sucks
- Users can request a YouTube video to be played.
  - Audio only (like background music), like FredBoat BOT.

  3.2. **Scope of project**
The site is intended to implement a mere fraction of what Siri can normally do (i.e. not completely custom tasks) and a fraction of what Dank Memer BOT and FredBoat BOT can do (since not much functionality is needed to bring memes into people's lives).

4. Timeline

  4.1. **Week 1 – Weather Page**
- Pull up detailed weather for current day.
- Pull up three/seven day weather forecast.
- Make site pull user's current location, and give user the choice to use a different location.
- Write unit tests for proper weather API requests & parsed data.

  4.2. **Week 2 – Misc. Serious Requests**
- Let the user request a definition for a word to be pulled up.
- Let the user request a random fact to be pulled up.
- Let the user request a random shower thought to be pulled up.
- Let the user pull up a preview of the front page of Reddit.
- Write unit tests for API requests and data parsing of above.

  4.3. **Week 3 – Image Memes**
- Implement "trash vision" meme sub page.
- Implement "facts" meme sub page.
- Let the user pull a random meme up.

- Write unit tests for "facts" functionality.

    4.4.   **Week 4 – YouTube Audio & Misc. Memes**
- Let the user search and see results for videos to play audio off of.
- Let the user play a video's audio in the background.
- Let the user generate a "Spongebob Mocking" meme from text input.
- Let the user generate a "alternating text/emoji" meme from text input.
- Write unit tests for text input memes.

5.   Future Enhancements

In future versions of Discount Siri, I would add the following:
- Pull up news for the user to read:
  - Politics
  - Sports
  - Technology
  - etc.
- Letting the user auto-generate "caption-memes".
  - Like Messenger's "Dankland" BOT.