DESCRIPTION:

The idea for creating a web app for IPG Inc. would essentially consist of a membership database accessible by up to three unique user groups. The database aspect of this project would include a way to search and display all members of IPG along with a set of data related to each member. The search and display would be designed for the consumer/pet owner user group. The second user group would be the members themselves who would be able to edit/update their own user profile within the confines of the design(AKA cannot lie about membership status, that is automated by the system). The third user group would be the company owners/operators who can make changes to the database which would then reflect on member pages(Could also alert members of additional features they may gain with such changes).

IPG is a certification company, which means that there are certifications that each member can attain. The ability to take the required tests, or at least pay for/sign up for such test or to pay their membership fees, would be another aspect of the web app separate from the database search. Though this would also need to be able to reference the database material.

- What is new/original about this idea? What are related websites/apps? (Be able to answer the question: isn't somebody already doing this?)

    New and/or Related: This resembles many of the social networking sites or member database sites out there. This one would present some different challenges because there has not been one done in this field before. Most crossover would be from a site like this:
    https://www.apps.akc.org/apps/insideAKC/delegates/delegates_search.cfm
    Mixed with a social networking/dating website feel of more information on each search result.

- Why is this idea worth doing? Why is it useful and not boring?

    This idea is worth doing because it helps a small business gain an improved online presence and experience, and it makes their organization easier to manage. This is also a potential product that we could tailor to organizations after the senior project is over.

- What resources will be required for you to complete this project that are not already included in the class. i.e. you already have the Microsoft stack, server, database so what else would you need? Additional API's, frameworks or platforms you'll need to use.

    ❖ Third party user authentication api
    ❖ Internationalization framework
    ❖ Potentially web-store api(like paypal)
    ❖ Google Map integration

- What algorithmic content is there in this project? i.e. what algorithm(s) will you have to develop or implement in order to do something central to your project idea? (Remember, this isn't just a software engineering course, it is your CS degree capstone course!)

    - ❖ There will be database search algorithms involved.
    - ❖ If google map integration is implemented there will need to be an algorithm to decide what results constitute 'nearby' or are within specified range.

- Rate the topic with a difficulty rating of 1-10. One being supremely easy to implement (not necessarily short though). Ten would require the best CS students using lots of what they learned in their CS degree, plus additional independent learning, to complete successfully.

    - ❖ Sarah: I would rate this project a 5.
    - ❖ Cameron: 6
    - ❖ Chris: Doing the bare minimum would be a 3, but could scale up to 9 if all possible additions are addressed (multiple external api)
    - ❖ Wayne: I would rate this as a 7 since we'll need to design a database, use an API and design the website so multiple user types could use it.