

DESCRIPTION:

The basic idea could go one of multiple possible directions (if not a bit of all). This application would provide users the ability to search and select favorite charities, or types of charities (or we could select the charities for them based on ethical ratings), and have a desired amount donated to their favorite charities for them on a regular basis. Basically creating a centralized place for individuals to donate to charities they want without having to do their own research.

Probably a better direction, we would create a subscription based (or optional one time donations as the user sees fit) that allocates a weekly/monthly pledge across multiple non-profit organizations/charities; kind of like what [humblebundle.com](https://www.humblebundle.com) does with video games. We could select "charities of focus" on each week/month based on current world crises or needs and the user can then choose how much they want to donate to that "bundle of charities." They can personally choose how much of their donation they wish to be allocated to each of the charities, to the provider of the API (if there is one), and/or to us for providing the service through our application (basically an optional digital tip jar, if they choose to use it). They can then see how much they helped donate to the charities of choice. This could also be how donating to the charities on their "favorites list" could work as well.

An expansion of this idea would be for us to seek out groups or businesses that want to support a cause. For example, if the campaign was to help the homeless, we would line up a group of charities to match that goal. Then make a deal with a corporation like Walmart to match a percent of the donations. People would be able to see the 'good' that these large corporations are doing and feel like they are part of the cause of that good.

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

Some parts of this idea are based loosely on other sites like Humble Bundle and Charity Navigator, but we think that this brings a new way for people to give without hassle and lots of research. There are other sites that offer ways to give charitably, but none that we've found that 'packages' giving in the same way.

Similar sites:

[GlobalGiving](https://www.globalgiving.org): Crowdfund giving that focuses on international giving.

[FirstGiving](https://www.firstgiving.com): Giving platform that works with non profits to help them execute fundraising campaigns.

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

With money donated from churches to charities going down, and a lack of available federal grants, this project will provide an easy and innovative way to bolster the philanthropic bone in the collective community's body. Any work done toward this project could potentially lead towards a positive impact on the world.

- 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.
 - ❖ Potentially a third party charity api (e.g.: Charity Navigator or BBB)
 - ❖ Third party authentication api
 - ❖ Potentially a third party payment api (Paypal)
 - ❖ Third party map api (google) if we users to be able to visually search for charities in their area
 - ❖ A way to know what the current needs are in order to drive donations

- 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!)
 - ❖ Splitting money into multiple areas based on how the user allocates their donation
 - Possibly ways to automate this depending on the situation
 - ❖ 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 a 7.
 - ❖ Cameron: 7 as in order to do this for senior project, we'll need to design our own database and way to simulate a feature like Paypal in order to show how it would work. The primary feature (charity bundles) would constantly be changing depending on outside influences, so the app needs to be able to adapt with that.
 - ❖ Chris: 7
 - ❖ Wayne: I would rate this mostly a 5. I think most of the complexity would be in using the API to do the search. The rest would involve grouping the results and displaying them. Security could make it a 7 since it would need to be secure for monetary transactions but there are APIs for that as well.