**What is the problem you want to solve?**

I would like to help nonprofits grow and retain their donor base by better understanding donor characteristics and behavior. By understanding donor characteristics, nonprofits can… target donors in specific ways, retain donors, find new donors, act at the “right” time, and suggest ways to get involved or donate that fit the donors’ lifestyle.

* Target Donors: By better understanding the characteristics of the “groups” that donors fall into, they can more effectively use their marketing resources as they reach out their donors. For example, some groups may respond better to phone calls or emails rather than a mailing campaign. The nonprofit could save money by not sending mail to certain groups, but rather send an email instead.
* Retain Donors: There may be certain donors who love going to happy hour events, and others who volunteer events. By better understanding what drives each donor to engage, i.e. – their lifestyle and preferences, nonprofits can better engage with donors on their level.
* Find new Donors: Understanding the donor base allows nonprofits to grow their donor base by finding donors with similar interests and drives. The deeper knowledge allows a more focused approach to reaching out to new donors.
* Pinpoint Timing: By better understanding the donor base, the nonprofit also has insight into when their different segments of donors are most likely to donate.
* Set “donor levels” or specific campaigns: Nonprofits would have a better idea of specific “asks”. For example, Bernie Sanders often talked about his average $27 donation. This gave people a specific amount to think about when they went to donate. Or another example is the Silver/Gold/Platinum membership level.

**Who is your client and why do they care about this problem? In other words, what will your client DO or DECIDE based on your analysis that they wouldn’t have otherwise?**

The client is a clothing store, “Threads”. I will help Threads better understand who their clients are, and analyze the response rate to a mail marketing campaign. Threads will better understand the effectiveness of the marketing campaign and save money in the future by targeting only the responsive users with similar campaigns. Threads can then try other methods to engage with the customers who were nonresponsive to the mail marketing campaign.

**What data are you going to use for this? How will you acquire this data?**

I will use the dataset associated with the cast study discussed in chapter seven of the book “Data Mining Methods and Models”, by Daniel Larose (2006). The dataset will be retrieved from this website: http://www.dataminingconsultant.com/DMMM.htm.

**In brief, outline your approach to solving this problem (knowing that this might change later).**

I will look at customer segmentation through clustering, and the response to the mail marketing campaign through classification.

**What are your deliverables? Typically, this would include code, along with a paper and/or a slide deck.**

I will have code for implementing the models, a paper describing the steps I took and in-depth analysis of the results, and I will also include a slide deck for presenting the results in a summarized view.