`Python Project Proposal

1. The Big Idea: What is the main idea of your project? What topics will you explore and what will you generate? What is your minimum viable product? What is a stretch goal?

* Main Idea: understand Babson’s academic course requirement and allow users to check their required academic requirements ( what they need to take in order to graduate)
* It is hard to fully understand which classes we need to take before graduation, so we are going to provide better system that can help people understand what they need to take in general. So, we are going to put Babson’s entire course listing and credit number.
* Users can see which course is under which category.
* Minimum Viable Product:  Program that checks required course and tell what else is left along with the total number of credits one took. Along with those information, users will get access to professor’s reputation from ratemyprofessor.com.
* Stretch Goal:  Tell every courses available depending on users and then link them to each professors at ratemyprofessor.com. By combining all these information, our goal is to provide comprehensive yet convenient course registering tool for students in any colleges.

2. Learning Goals: Since this is a team project, you may want to articulate both shared and individual learning goals.

* How to deal with list and groups and match right variables
  + List and groups will be very important for our project because our main subject will be the Babson courses. Listing and grouping them properly will be our main goal to achieve this project.
* How to scrape the course listing to python from the Babson website
  + Able to analyze the address on Babson course listing and put it into the program.
* Able to understand the whole coding and utilize the same coding for different work/project.
  + This project should be the stepping stone for us to understand python more deeply and by accomplish this project, we should be able to apply the same knowledge when we have different types of work/project with python.
* Collaborative mindset / work
  + Able to share what each person has researched and learned
  + Able to disperse the work effectively while working together as a group
  + The point of working as a group is to accomplish work more effectively. Collaborative mindset/work on this project will not only be helpful for this assignment but also be helpful for our future project.
* Developing strategy to identify problems and solve them
  + Identifying problem is the most important thing to do. While working on this project, we will going to face a lot of problems and by able to identify them and solve them, it will be easier for our group to finish the project.

3. Implementation Plan: this will probably be pretty vague initially. Perhaps at this early juncture you will have identified a library or a framework that you think will be useful for your project. If you don't have any idea how you will implement your project, provide a rough plan for how you will determine this information.

* First, we will get the full list of courses in our school along with the number of credits
* Second, we will compile them together through the dictionary.
* Third, develop the code that can calculate the total number of credits the user took. Then, it will also provide information of which kind of classes the user have to take to graduate.
* We do not have clear implementation plan yet, we need more time to discuss and finalize the plan

4. Project schedule: You have 8 weeks (roughly - I know thanksgiving week is off) to finish the project. Sketch out a rough schedule for completing the project. Depending on your project, you may be able to do this in great specificity or you may only be able to give a broad outline. Additionally, longer projects come with increased uncertainty, and this schedule will likely need to be refined along the way

* Week 1: gather list of courses and number of credits
* Week 2: we are going to ask some questions to peers regarding any inconvenience they experienced when they look up information of courses.
* Week 3: make Final decision which information is necessary and unnecessary and begin to design our program.
* Week 4 & 5: Building systems and check any errors in our coding
* Week 6: Check any errors and pre-run the program
* Week 7: Finalize
* Week 8: Review and submit

5. Collaboration plan: How do you plan to collaborate with your teammates on this project? Will you split tasks up, complete them independently, and then integrate? Will you pair program the entire thing? Make sure to articulate your plan for successfully working together as a team. This might also include information about any software development methodologies you plan to use (e.g. agile development). Make sure to make clear why you are choosing this particular organizational structure.

* We are going to do whole task together.
* We are going to meet at least once a week and check our progress.
* After we finished coding, we will review together
* We are going to divide into two parts in searching for codes related to our project, then we are going to share what we found and learned.

6. Risks: What do you view as the biggest risks to the success of this project?

* Our understanding of coding.
  + When we have to do more than we learn
  + Also we need to find where errors occurred, but we don’t have enough knowledge on finding and fixing errors
* Time management
  + With teammates
  + With our current school schedule
  + How to overcome long Thanksgiving break and finish the work in time
* Getting enough materials for this project
* Getting right course list and able to scrape it

7. Additional Course Content: What are some topics that we might cover in class that you think would be especially helpful for your project?

* Dictionary
* List
* Loops
* Dealing with multiple groups of list