1. The hardest part of the project was probably planning everything out before getting into the coding. It took some time to get used to UML diagrams and models like the MVC model. I knew what I wanted to do, but it was hard to put my ideas into a diagram. Sometimes I would have to go back to the drawing board after realizing that my code was too inefficient, and I ended up changing from reading a text file with the colleges to creating and pulling information from a database. I had to go back and try to detail that, so that is why my UML diagram changed so drastically from my second to third edition after not changing very much between the first two editions. I think in the actual building of my app, the part that gave me the most difficulty was the pulling the colleges from a database to be able to match them to the student’s academic profile. I had first decided to write a text file and then read the text file to get the universities in my app. However, I realized that it might be more efficient and easier to create a database on the user’s computer using user input and then filter my results for student GPA when returning them to and from the database. This made the whole situation easier, but it was a lot of work to get the database functioning properly, so the time and thought going into this portion of the app probably made it the hardest.
2. My inspiration for the application actually came from my experiences and the experiences of my classmates at school. I am currently a senior in high school and am applying to colleges, and I have seen a lot of students struggle with trying to find the right colleges to apply to. I wanted to see if I could make an application that could make the process slightly easier for stressed out seniors, and I feel like this application is on the right track. After the academic profile, it might be good to have the user input other extra information that could better help match them to schools, other than just their GPA and academic profile.
3. I feel like I got pretty close to my project proposal with my final project. I ended up receiving the classes and grades from the user and calculating the student’s GPA. I was then able to connect to and create a database that allows for the GPA to filter the results of matched colleges from the student. Originally, I had thought that I would have to use a text file and retrieve colleges that way, but after the lecture on databases, I was able to code my app to retrieve the colleges from a database instead. However, the one thing that I did not do was set the colleges up for the user. So, there wasn’t a set of colleges the user could compare themselves to. Instead, the user had to input information for each college, which would then put that information into the database. So, this ended up being more user oriented, with the user having to be more interactive. I was not able to add the colleges because of the labor intensity of putting every college in. At the beginning, I was able to have about 10 colleges, but after that it became too much to add. Instead, I let the user decide which colleges they would like to compare to.
4. I might need to explore using a GUI to make the application more user-friendly, with buttons to decide whether they want to input university information or compare themselves to the universities that they have added to the database. I also might need to explore an alternative to having the user input college information because that could take a long time. Instead, I could try sourcing the information from a different source. I definitely see myself doing this in the future and maybe even adding on to the academic profile with some personal/extracurricular activities that could match up nicely with the colleges in the database. This could be some further exploration for me in the next few months and I am definitely looking forward to continuing to experiment with my application.