**Executive Summary**

*This project aims to look at some of the big-ticket items that NSS advertises as a measure of the school’s success (i.e. rates of graduation, placement rate of graduates in the workforce, etc.) as well as other factors like location, price of tuition, available programs, classroom structure, and school reviews- things that may influence a prospective student’s decision to apply or attend a coding bootcamp- and compare these results to similar nonprofit programs around the nation. How does NSS compare nationally? Is there anything obvious that this school can do to improve? I intend to begin my analysis by investigating the data collected by the Council on Integrity in Results Reporting (CIRR) that collects some of this general data from bootcamps and coding schools around the country.*

**Motivation**

*My motivation for choosing NSS was that I personally know many people with NSS success stories, and since we are all Nashville locals, it seemed like a natural choice. However, I’ve seen how many people in my cohort were not currently living in Nashville themselves, but rather intend on moving to the city post-graduation or are working/living outside of the city but still within Middle Tennessee. I began to wonder, since many of these programs have gone fully online in recent years, are there other similar bootcamps within the country? Do these bootcamps provide results similar to those advertised by NSS? Are there MORE successful bootcamps? Are they successfully doing something that is generating higher rates of graduate employment that NSS is not? If I had a more clearly defined and convenient option, would I still have been incentivized to apply for NSS? These are some of the questions I intend to solve.*

**Data Question**

*How well do NSS and its competitors prepare their students for success, and what are those competitors excelling at where NSS is not?*

**Minimum Viable Product (MVP)**

*Ideally, my presentation will follow the format of:*

1. *An explanation of my motivation and data question*
2. *An explanation of the logic and criteria used to investigate certain schools/bootcamps over others, and an explanation of why and how those selected schools satisfy those criteria*
3. *A brief analysis of NSS’s data to be used as a control to which other schools’ data is compared*
4. *A section describing where NSS’s results are on par with what should be perceived as the national average*
5. *A section describing and analyzing which factors NSS exceeds the national average with*
6. *A section describing and analyzing the factors that NSS trails behind in*
7. *A section describing and analyzing any factors that other schools have demonstrated results noticeably or significantly more substantial than NSS’s results, regardless of relation to national average*
8. *A conclusion highlighting NSS’s data to the national average and, if applicable, potential recommendations for the school that may help reflect another school’s successes.*

*The primary intended audience would include my fellow students, who may be curious about the weight of what NSS advertises as the primary reasons to attend, while a secondary audience might include NSS faculty/administrators, in the event that this analysis identifies a point where NSS’s pedagogy may be falling behind similar programs nationwide.*

*I intend to construct all my visuals within python through pyplot or seaborn, but plotting is a topic I’ve struggled with significantly in recent weeks, so I may delegate the task to tableau depending on my ability to adhere to the schedule below.*

**Schedule (through <date of demo day>)**

1. Get the Data (11/21/2022-11/28/22)
2. Clean & Explore the Data (11/21/2022-12/12/2022)
3. Create Presentation of your Analysis (12/15/2022)

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI

1. Internal demos (12/16/2022)
2. Demo Day!! (1/5/2023)

**Data Sources**

*Cirr.org is my primary source of data for the moment, though I intend to expand the list as I identify more interesting points of investigation worth pursuing from different coding bootcamps/programs.*

**Known Issues and Challenges**

*The data from CIRR consists primarily of tables that summarize big results in a PDF, and which will be difficult to pull from in that state. I have not yet determined what criteria will be used to investigate certain bootcamps but not others.*

*NSS’s data on cirr.org is pulled from the 2018-2019 report sourced from the Tennessee Higher Education Commission, and that report is showing what I believe to be strange behavior, meaning that I suspect this specific report may potentially be displaying incorrect information, and will require further validation on my part before moving forward. NSS’s outcomes report is ‘non CIRR validated’, whereas ‘CIRR validated’ reports are showing data that is much less suspicious looking initially. Validated or not, CIRR maintains an interactive map showing the location of many different bootcamps or schools around the country, regardless of whether this organization has collected data from it or not, which may be useful in pointing me in another direction to access data that I’m searching for.*