ISM 647 Assignment 2:
Cognitive Computing and Artificial Intelligence Application Development and Tutorial

Now that you have a better understanding of Cognitive Computing and Artificial Intelligence, you need to start developing applications using these technologies. As I mentioned earlier, and you have seen from the Gartner Magic Quadrant report on these technologies there is no shortage of vendors and developers. Since these systems are new, the development environments are fragmented and not standardized yet. It takes a while for the industry to mature, but I think IBM, MS and/or Amazon will be the ones that will determine the set of standards used and will dominate the future of these technologies.

So, for this assignment you are not locked into using any specific vendor, language or development environment. But since IBM and Microsoft represent the two most dominate vendors and their cognitive application development environments (Watson and Azure) are easiest to use for new comers, I have decided that for this assignment you choose one of these environments to develop your first cognitive application.   Now here is what you need to do:

1. Familiarize yourself with the basic capabilities of both environments. You need to do this step to make an educated selection between the two.
2. Selection either IBM Watson or Microsoft Azure and explain the rationale behind your selection.
3. Although both these environments allow the users to develop applications with high degree of customization using either their own propriety development language or other open source languages like R or Python, they also allow for basic applications to be developed with minimal or very little programming requirement. So, Learn the environment that you selected at the level of developing a very basic application with no to minimal programming requirement.
4. Select one of the cognitive technologies that we have discussed (e.g., Image recognition, Voice and Natural Language processing or automation, etc.) and use the capabilities the environment you have chosen in item 2 to develop a very basic cognitive application.
5. Describe the problem that your application is intended solves and explain how the application to solve. Does it achieve the goals you set for it? Could you speculate on how to improve the application to do more.
6. If possible, do an actual demo of your application by showing it to a few potential users and get their feedback. Although this step in not mandatory, it is highly recommended.
7. Provide actual evidence of the application and how it is used. For example, give screen shots of the application while it is used or a link to it.
8. Describe your development process. Please comment on the overall experience.
9. Develop a "How-to" document for aspiring Cognitive Technology application developers who do not know anything about either Watson or Azure. Your "how to" document should be in form of a tutorial and should provide a step by step instructions as how to develop the application. Please make this "how to" tutorial very detailed and user friendly and assume no specific knowledge from the user beyond very basic computing capabilities.

In a report of around 20 pages, not including the title page, executive summary and figures or appendices, if any, please address at minimum issues that I have raised above and if there are any other relevant issues that are not mentioned above that you consider important, please include it in your report.