**Part 1**

A. **CHATBOT FUNCTIONS**

The chatbot is designed to talk to a student as though they were talking to another person. The student can ask the bot to help decide on which computer science career path to take. It will then ask questions based on specific careers to see if they would be a good fit with the student. If the student selects one of the careers, a website will be linked that will further explain what the career entails. The bot can also give a short description of all careers currently programmed into its knowledge base.

B. **JOB TYPES**

The files for the chatbot’s code is included. The career paths that are included are:

Software Developer

Database Manager

Web Designer

Security Analysist

Data Scientist

C. **CHATBOT FILES**

The chatbot files are provided in the zip file submitted with this document.

D. **TRAINING CASES**

The chatbot is trained to ask questions about the student’s preferences. It will ask specific questions if a student is interested in a general area and provide more information if selected.

For example, Chad is a graduating student that wants help deciding on a career path. The bot asks if he enjoys analyzing data, but he says no. But when asked if he enjoys developing software, he says yes. He is given a message about how becoming a Software Developer might be a good choice and gives a website for him to further his search.

Rosie is also graduating soon, and she wants to know where exactly she fits in. She asks the chatbot to help her suggest what area to go into. When asked if she enjoys SQL, she says yes. She is then suggested to pursue a Database Management career.

AIML enhanced the chatbot by allowing the student to ask questions and receive feedback to help it decide what career path would be best for them. The chatbot uses topics to ask questions, and if the student is not interested in that subject, the chatbot will then switch to the next topic.

E. **INSTALLATION**

1. Open a web browser and go to pandorabots.com
2. Create/Log-in to your account
3. Go to [home.pandorabots.com/dash/bot-directory](http://home.pandorabots.com/dash/bot-directory)
4. In the search bar in the top right, search for “Brandobot” (WGU C951)
5. Click on the chat widget on the bottom right to chat with Brandobot.
6. You may now speak with Brandobot for career advice
   1. Ask “Help me decide” if you would like for Brandobot to ask you questions and suggest a career field. Reply with simply “Yes” or “No” to advance.
   2. You can also type “Computer Science” for Brandobot to specify all available career paths it currently knows. Type the specific career field to learn more about it. E.g. “Data Scientist”
7. Once done, please continue to pursue said computer science career. Brandobot is designed to be very accurate with a 99.9% chance of successful suggestion.

F. **ENVIRONMENT**

Strengths:

* AIML uses sets to allow a student to search for a specific career path and to move onto the next path. If the career path is not inside the set of known career paths, it gives a message saying it does not know about that career path and to select one it does know about.
* Pandorabots is very useful in helping set up a bot with ease and being able to test and use it. It can be deployed so anyone may use it.
* Pandorabots also sets up the directories for all Maps, Sets, Systems, Substitutions, and AIML so that it does not manually have to be set up by the user.

Weaknesses:

* Pandorabots’ code editor does not provide any debugging or error detections while trying to code the chatbot. If you have made an error, you must retrace your steps very closely.
* AIML has somewhat of a learning curve. If one is not familiar with xml tags or with searches that include wildcards, it could be very tedious for new developers to grasp the concept and will continue to create many bugs without knowing the reason why.

G. **MAINTENCE/MONITORING**

Maintenance includes adding more computer science fields with better descriptions, more resources for the students to find out more information, developing an interests tree that will allow the bot to ask more specific questions based on the user’s current interests, and giving more of a sincere suggestion rather than saying “this is the field you should pursue.”

Monitoring will include recording how often a student has trouble using the bot and/or receives and error message, and then fixing these disturbances. How often each career path is selected, and if one is selected much more often then others then that path can be split into more specific careers in that field.

J. **PANOPTO RECORDING**

A Panopto recording is included that will show the process for opening and using the chatbot through the process of that of a student.

K. **Sources**

No external sources were used.