

Task 1: Chatbot

A. Explanation of Chatbot Functionalities

The chatbot will function as a career counselor for computer science students approaching graduation by asking them questions about their likes. From the five potential job types the chatbot can suggest, one job type will be returned to students based on students' answers along with a link to more information. This meets the needs of the scenario because it allows the career advisor to no longer need to interact with such a high number of students since the chatbot uses students' strengths and gives recommendations the advisor would've given.

B. Computing Job Types

The five job types the chatbot can recommend are data science, information security, web development, software development, and database administration. I will associate traits and preferences to provide recommendations.

C. Chatbot Code Files

```
<?xml version="1.0" encoding="UTF-8"?>
<aiml version="2.0">
  <category>
    <pattern>*/</pattern>
    <template>Let's stay on topic. Type 'hi' to start over.</template>
  </category>

  <category>
    <pattern>HI</pattern>
    <template>
      Hello! This is Ailene. Congrats on almost graduating. I'm going
      to ask you some questions to help you get a little clarity for your future
```

job search.
Do you prefer to work alone or with people?

```
<button>
  <text>Alone</text>
  <postback>ALONE</postback>
</button>
<button>
  <text>With People</text>
  <postback>WITH PEOPLE</postback>
</button>
</template>
</category>
```

```
<category>
  <pattern>ALONE</pattern>
  <template>Are you better at solving problems or statistics? Click one of the
options below:
```

```
  <button>
    <text>Problem Solving</text>
    <postback>PROBLEM SOLVING</postback>
  </button>
  <button>
    <text>Statistics</text>
    <postback>STATISTICS</postback>
  </button>
</template>
</category>
```

```
<category>
  <pattern>WITH PEOPLE</pattern>
  <template>Which best describes you? Click one of the options below:
  <button>
    <text>Creative</text>
    <postback>CREATIVE</postback>
  </button>
  <button>
    <text>Organized</text>
    <postback>ORGANIZED</postback>
  </button>
  <button>
    <text>Ethical</text>
    <postback>ETHICAL</postback>
  </button>
</template>
</category>
```

<category>
 <pattern>PROBLEM SOLVING</pattern>
 <template>You should look into software development.
 <link>
 <text>Click here to learn more about software development.</text>
 <url>https://money.usnews.com/careers/best-jobs/software-developer</url>
 </link>
 </template>
</category>

<category>
 <pattern>STATISTICS</pattern>
 <template>Data science would be a great fit for you.
 <link>
 <text>Click here to learn more about data science.</text>
 <url>https://money.usnews.com/careers/best-jobs/data-scientist</url>
 </link>
 </template>
</category>

<category>
 <pattern>CREATIVE</pattern>
 <template>You would be a great web developer.
 <link>
 <text>Click here to learn more about web development.</text>
 <url>https://money.usnews.com/careers/best-jobs/web-developer</url>
 </link>
 </template>
</category>

<category>
 <pattern>ORGANIZED</pattern>
 <template>You would make an excellent database administrator.
 <link>
 <text>Click here to learn more about database administration.</text>
 <url>https://money.usnews.com/careers/best-jobs/database-
administrator</url>
 </link>
 </template>
</category>

<category>
 <pattern>ETHICAL</pattern>

```
<template>You should go into information security.  
<link>  
  <text>Click here to learn more about information security.</text>  
  <url>https://money.usnews.com/careers/best-jobs/information-security-  
analyst#</url>  
</link>  
</template>  
</category>  
  
</aiml>
```

D. Chatbot Training Cases

Training occurred during initial testing. Having users answer in an open-ended way would cause it to be too unfocused. Instead, I created buttons that guide users to select traits that help determine a fitting job type in a focused manner.

Angie is a student who likes to work alone and excels in statistics. After answering the questions, Angie is directed to learn more about data science. Fred is a student who likes to work with people and considers himself creative. The chatbot directed him to explore a career in web development. By choosing traits that best describe themselves, the chatbot recommended a job type to explore that fit their specific attributes.

E. Installation Manual

1. Open an internet browser and navigate to <http://www.pandorabots.com/>.
2. Click “Sign in.”
3. Once signed in, you should be at your dash. From there, click on “Directory” in the left panel.
4. Click the empty box on the upper right next to the search symbol. Type “acl.” From there, click on “C951 Career Bot.”

5. Click on the yellow circle on the bottom with the speech bubble with three periods.

Where it says, "Type a message...," type "hi."

F. Chatbot Environment

Pandorabots provides a user-friendly interface with convenient drop-down menu

"Insert" options, simplifying the addition of various features to chatbots. Furthermore,

Pandorabots offers a free tier with support, ideal for beginner chatbot creators.

However, one weakness is that Pandorabots' platform may have limitations in handling conversational scenarios, particularly when it requires advanced natural language processing capabilities. Finally, lacking a direct link to the bot via a dedicated URL impedes the sharing and testing of chatbots.

G. Monitoring and Maintaining

The chatbot will be monitored by observing user interactions through the data logs to better understand user behavior. The chatbot's functionality will continually improve through regular log checks and adjustments based on this analysis, ensuring an improved user experience over time.

H. Panopto Recording

<https://wgu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=8c06c9e0-7413-4682-9449-b181015f672b#>

I. Sources

No outside sources were used.