# Computer Science 311: Artificial Intelligence

# Assignment 2 – AI Survey Program

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| **Category** | **Unacceptable  (0-2)** | **Needs Improvement  (3-6)** | **Good (7-8)** | **Excellent (9-10)** | **Total Possible Points** |
| Data Files and Storage (x1) | No data files created or do not function correctly at all. | Some data files created and work accurately, but not at least four created. | Your Assignment: All four data files created and store data accurately with just a few minor issues. | All four data files created and store data with no errors and is well-organized. | 8/10 |
| Obtaining Data (x2.5) | Student doesn't follow instructions on how to obtain data at all/fails to obtain any data. | Your Assignment: Student somewhat follows directions but doesn't obtain correct data needed and/or doesn't attempt to obtain data enough to make an accurate program | Student obtains data as instructed and obtains enough data to ensure accurate program. | Student obtains data better than instructed with no errors. Exceeds the amount of data required to create great program. | 15/25 |
| Program Specifications (x2.5) | No code submitted/Program does not function consistently or at all. | Your Assignment: Code incorrectly guesses political party affiliation or takes too long to guess. | Code correctly guesses political party. Student doesn't account for weights of answers. | Code correctly and rapidly guesses political party and accounts for weights of answers | 15/25 |
| Good Practice/Efficiency (x1) | Code not written efficiently, succinctly, or using best practices. No comments or headers. | Your Assignment: Code is repetitive and complicated. Excessive commenting or lack of comments. | Code is written well with good practices. Minor issues related to commenting and organization. | Code is written in a sophisticated manner and uses best practice in all areas. Code is commented appropriately and in a meaningful manner. | 5/10 |

Total Points: 43/70

Grader Notes:

* Data Files and Storage: Your program creates four data files and stores the data collected by the survey. However, their organizations are not efficient. The purpose of storing data is to improve the accuracy of your AI program. How would you organize the collected data that will be used for finding an accurate answer? Your program needs to store the raw data collected from the survey (i.e. selected option numbers). It doesn’t need to store the sentences used for the survey questions. (-2)

* Obtaining Data: The last question should ask which political party they affiliate with. Also, the amount of data is not enough to accurately guess the user’s political affiliate. (-10)
* Program Specifications: Your code produces the result of its guess. However, it is not based on machine learning. It needs to weigh answers with differing levels of intensity depending on which parties they correspond best with. You need to read the collected responses in the data files to calculate the weight of each survey question. Then you have to apply the calculated weights for the current survey. Explore some algorithms for AI or ML to improve your logic. (-10)
* Good Practice/Efficiency: As your program doesn’t use machine learning, it’s impossible to determine if your code is efficient. (-5)