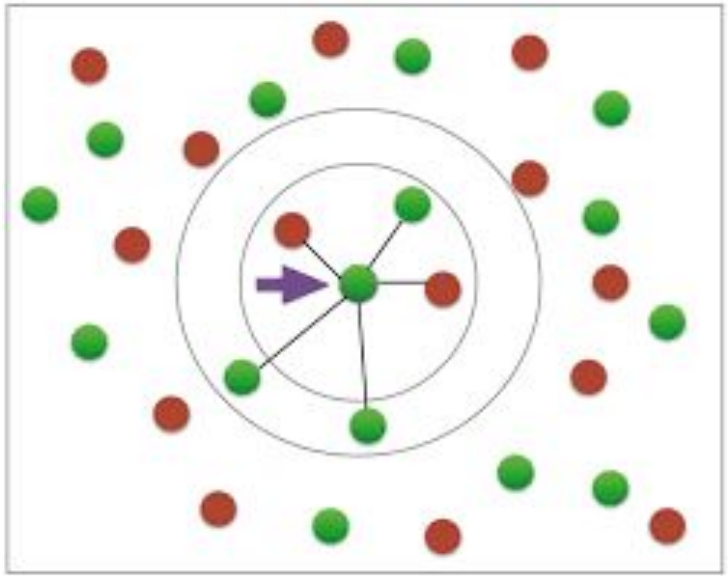
Problem: Determine which of two authors wrote a given book.

Solution: Text Classification using 3-Nearest-Neighbor.

Gitlab link: https://gitlab.com/znoble/Project1

Description:
We determine who the author of a new sample text is by how close it is to 3 points in the model.

This project determined if the new sample is written by Nathaniel Hawthorne or Mark Twain. First in the script setup.py, 5 books of each authors are processed: the 100 most frequent words that both authors use are saved as the model to determine the author of any new samples. In the second script guess.py, each new sample is read and the frequency of words that appear in the model are calculated. Using the Euclidean Norm (Generalized Pythagorean Theorem), the distance between each word in the sample and the model is determined. The 3 closest neighbors of the sample are used to determine who wrote the sample.



Visual example of 5-Nearest-Neighbor

Example for Contest

Zach Noble
Project 1 for CS[4|5]01 Programming for Data Scientist 1

Project: Implement Snake using Pygame

Gitlab link: https://gitlab.com/znoble/snake

Description:
This is a simple implementation of the game snake using the python module pygame.

This project allowed me to learn the pygame module and basic game looping mechanics. The major problems I had were getting the body to move smoothly and to get each body part to follow in line. I solved this by saving each body parts' position and setting the new position of each body part to the previous position of the part ahead of it.

My Implementation of Snake

Example for Contest

Zach Noble
Personal Project