CSCI1410 Fall 2021
Assignment 0: Installation & Setup

Submission 1 Due Sunday, September 12 at 11:59pm ET
Code Due Date Tuesday, September 14 at 11:59pm ET
Late Day Deadline Friday, September 17 at 11:59pm ET

1 Overview

Welcome to CS141! In this course, we'll explore the field of AI, including knowledge representation and algorithms for search, optimization, planning, logical and probabilistic reasoning, and machine learning. In this assignment, you will install and setup the software we will use throughout the course, familiarize yourselves with the platforms you will use to retrieve and submit assignments, and complete a short task in python using your newly set up virtual environment and VSCode.

2 Installation & Setup

Follow the instructions on the CS1410 webpage under the link "Installation and Setup" to download and install python3.7.x, VSCode, and set up your virtual environment.

Don't forget to activate the venv every time you work on a CS1410 assignment!

We will be using Gradescope to submit all projects. Follow the instructions on the CS1410 webpage under the link "Gradescope: Getting Started" for Gradescope Account instructions.

We will be using Github Classroom to post all projects. If you are unfamiliar with Github, learn more about it here. If you are having trouble accessing either of these platforms, feel free to make a post on EdStem.

3 Your Task

Once you're all set, go ahead and clone the assignment repository from Github classroom to your local or department machine.

3.1 Silly Premise

Welcome to the AI Arcade! Here, you will be able to receive tokens to play various games against AI bots and win tickets to redeem prizes. However, entry into the AI arcade is not a piece of cake! You must first complete a few challenges before you can redeem your tokens. In your cloned repository, you will see three files: `username.txt`, `python_hwk.py`,

and `test_np.py`. Your task is to create an encrypted username with a hash function we have provided for you, complete two numpy exercises, and test your numpy solutions with `pytest`.

3.2 `username.txt`

`username.txt` is given to you as a blank txt file. Open it using VSCode or with `vim` in your terminal, and type in your anonymous Gradescope username. Please make sure you do not include any extra whitespace (ie. tabs, spaces, newlines)!

3.3 `python_hwk.py`

In this code file, you will write python code to encrypt your special Arcade username using a hash function, and complete two numpy challenges. Complete this to be granted access to the Arcade! View block comments in `python_hwk.py` for more detailed instructions.

3.4 `test_np.py`

This file includes basic test cases for the functions you will complete in `python_hwk.py`. We recommend using `pytest`, which should be installed in your virtual environment (make sure it is activated!). `pytest` files and test function names should start with `test_`. You are encouraged to add some of your own test cases.

To run your tests from your command line: `pytest test_np.py`

If there are test failures, `pytest` will print assertion errors into your terminal. Otherwise, a green `.` indicates success.

If you receive a `pytest: command not found` when attempting to run this test file, you may not have installed required packages correctly in your virtual environment.

4 Handin

When submitting to Gradescope, make sure to upload all three files to the Installation Setup assignment. Congratulations on finishing your task! You have been granted tokens and entry to the AI Arcade.