**Software Development Project: Iteration 1 – Contact & Event Classes**

**(Fall 2024)**

## Project Description:

In this iteration, we will write code to handle some basic features of the CEROC Event Planning Application. This task will require us to create four classes:

1. The Contact class, which will contain the details pertaining to an individual contact (name, email, phone number, etc.).
2. The Event class, which will contain the details pertaining to an individual event (name, date, location, etc.).
3. The EventAttendee class, which associates a Contact object with an Event object the contact is attending.
4. The EventManager class, which coordinates the lists of contacts, events, etc. for the application.

The Contact and Event classes will read the relevant information from a dictionary and store it in attributes. The format for these dictionaries can be found in the provided input files ("contacts.json" and "events.json" respectively).

All of the work that you do for this iteration will be found in the **classes** folder. Do not modify any other files, as that could easily lead to the program not running.

## Instructions:

The instructions for each class can be found in the appropriate file:

- **Iteration 1 – Contact Class**
- **Iteration 1 – Event Class**
- **Iteration 1 – EventAttendee Class**
- **Iteration 1 – EventManager Class**

You may complete the classes in any order, but I strongly recommend completing them in the order listed above, as I feel this is the most intuitive.

Once you have completed all of the instructions listed above, your program should be ready to run. To run the program, do the following:

1. Install the **python-Levenshtein** package. This package is necessary for the project's search function to work.
    a. In PyCharm, navigate to the Packages tab. This will be at the bottom of your PyCharm, where the console is displayed. There is a button on the left side of the console that resembles three tiles stacked atop one another.

b. Search for "python-Levenshtein" in the search bar of the packages tab. Once you've found it, click the Install package button on the right of the console area.

c. After a few moments, the package should be installed. You may see a green loading bar in your PyCharm window.

2. In PyCharm, open the main.py file associated with this project. Once the file is opened, click the Run button as you would for any other program.

3. If you have completed the Iteration correctly, you will see the GUI appear and you will have access to all the features shown in class, such as Display Contacts, Display Events, Add Contact, Add Event, and the other functions associated with them.

4. When moving projects from one workstation to another, errors can always occur. If you are unable to run the program, but you are confident that the issue is not related to the code that you have written, please reach out to one of the TAs. They should be able to help you troubleshoot the issue.

**Deliverables:**

Place all files needed to run the program in a single .zip file named userid_iteration_1.zip, where "userid" is your Tech username. For example, "jstrickler_iteration_1.zip." Submit the .zip file to the Iteration 1 dropbox in iLearn.

NOTE: Whether or not your program runs (and does so correctly) will be the biggest determining factor for your grade in this iteration. Make sure your program runs on your machine, and that all the necessary features work, before you submit it. If you want, I do not mind you submitting a video of yourself running the program on your machine (along with your other files, of course), just in case something bizarre happens with your submission. You do not have to do this; it's just an option available to you.