INFO 5100 Application Engineering and Development

Assignment 2

Due Oct 6th 2024 11:59 PM

TASK 1 – Reading Assignment

- Study the Data Types presentation shared on Canvas and the Lab activities before working on the programming assignment.
- Java Conditions: https://www.w3schools.com/java/java_conditions.asp

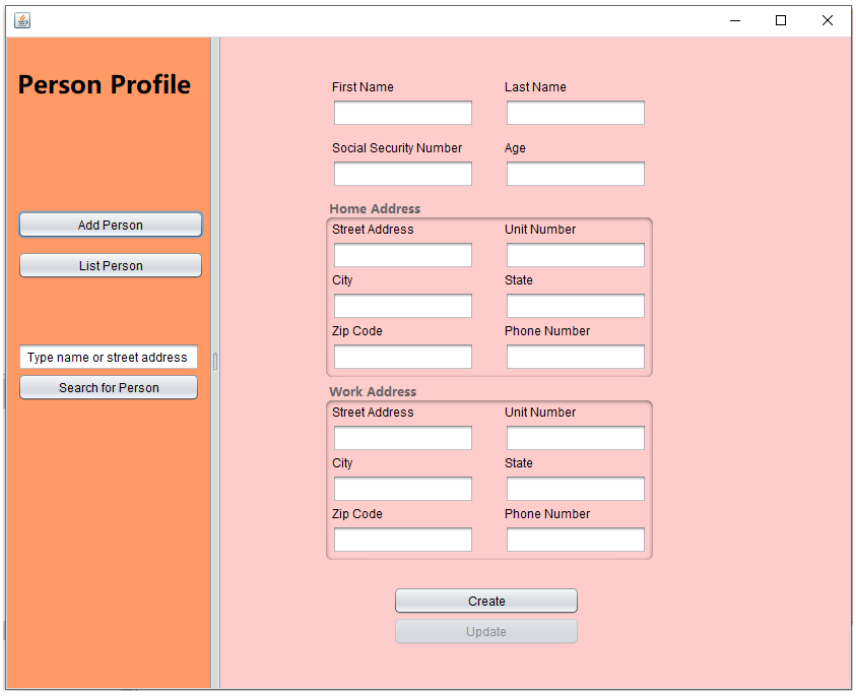
TASK 2 – Programming Assignment

Description

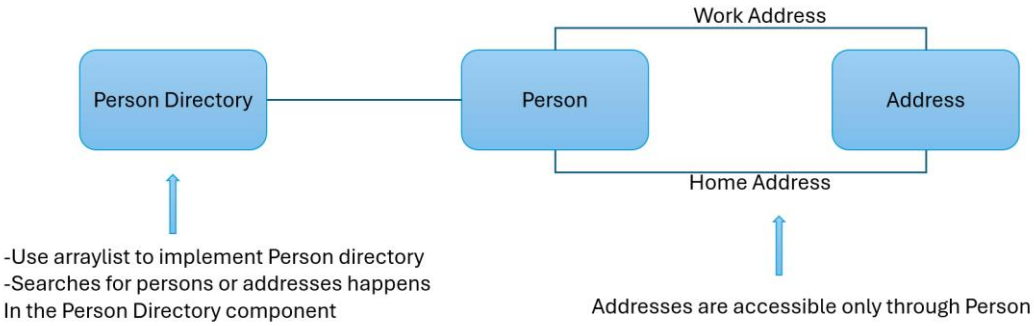
The objective of this assignment is to get you to practice the use of group patterns using swing, java classes and objects as well how button actions work in swing. You will learn how to manipulate groups of objects from associated classes, instantiated objects, and the ability to search directly (looking for a person) or indirectly by starting with address attributes like street addresses.

Your application must implement the functions (use-cases or buttons) in the attached screenshot. For each class you must define at least the attributes outlined in the screenshots.

Sample design (please do not replicate, make your own design):



The Model



Your swing app must have the ability to:

- Create a new person with their associated address. Address objects can only be accessed through the person class. (10 points)
- Search for person by their first name, last name, or street address. If a match is found, then display the complete person profile as shown in the screenshot. If no match found, then no action is required. (10 points)
- When a match is found the person is displayed, allow the user to update any attributes that are on display. (10 points)
- During the MainJFrame start up, create an initial set of person profiles to populate the person directory with person data (5 persons minimum). (5 points)
- List persons allow you to display the list in a table which will include, first name, last name, city and zip code of home address, as well as city and zip code of work address (one person row at the time). (10 points)
- Implement a function to delete a person from the list. (10 points)

Evaluation Criteria:

- All the Form fields are required, No Null value are accepted. (5 points)
- You must use at least 4 primitive data types. (10 points)
- You must demonstrate multi-step user flow using card layout. (5 points)
- Input validations are required for all forms and fields. (5 points)
- Class design patterns should be followed (5 points)
- UI/UX design with neat alignment and basic panel colors are sufficient, Use multiple Panels to work on this application, do not waste too much time on beautification (5 points)
- Relevant GitHub commits. More than **5** in number. Commit after each stage of implementation (5 points)

PLAGIARISM

When there is evidence that a student has committed plagiarism, copied the work of others, allowed others to copy their work, cheated on an exam, altered class material or scores, or has inappropriate possession of exams, or sensitive material, the incident will be investigated. The consequences for academic dishonesty are severe and that will include a straight F in the course with the potential for dismissal.