Logo

Description automatically generated

**22/SU-COP-2805C-72035 Java Programming**

**Exercise 11.2**

Document Version: 0.1

Version Date: June 6, 2022

Created By: Johnathan Webster

# Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Rationale |
| 0.1 | 2022 June 6 | Johnathan Webster | First Draft |

# Document Purpose

The purpose of this document is to define the updated Person\_Student\_Employee\_Faculty\_Staff() class.

# Technical Specifications

## Purpose of Technical Implementation

The purpose of this implementation is to create a hierarchical structure of the Person() class. From the person class we can create multiple persons in different areas of a facility.

## Technical Implementation Components

The class implementation starts with the Person class. The class has the framework for all persons created from it including:

*private* String name;

*private* String address;

*private* String phoneNumber;

*private* String emailAddress;

All with their respective getter and setter methods.

From there we can create a student class the inherits from person and we can add more specific information pertaining to a student.

*public* *class* Student *extends* Person {

*private* String classStatus;

*private* String className = this.*getClass*().*getSimpleName*();

*public* String *getClassStatus*() {

*return* this.*classStatus*;

    }

*public* void *setClassStatus*(String classStatus) {

        this.*classStatus* = classStatus;

    }

    @Override

*public* String *toString*(){

*return* ("This class name is: " + className + " and their name is: " + this.*getName*());

    }

}

On the other side we created Employee class that inherits from Person but creates specific information needed for an Employee and not for a student.

*private* String office;

*private* int salary;

    MyDate dateHired;

*private* String className = this.*getClass*().*getSimpleName*();

After establishing an employee class we created the FacultyMemeber and Staff class. Each with their respective requirements for their associated positions.

*private* String officeHours;

*private* String rank;

*private* String className = this.*getClass*().*getSimpleName*();

*private* String title;

*private* String className = this.*getClass*().*getSimpleName*();

## Person\_Student\_Employee\_Faculty\_Staff Implementation

The implementation of this class allows the user to create a new person and assign the appropriate properties given the persons role in the institution.