Logo

Description automatically generated

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

**Exercise 12.4**

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# Document Version Control

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# Document Purpose

The purpose of this document is to define the updated IllegalArgumentException() class.

# Technical Specifications

## Purpose of Technical Implementation

The purpose of this implementation is to check if the provided loan amount, interest rate, or number of years provided by the user are valid entries.

## Technical Implementation Components

The class implementation allows the designer to prevent users from entering invalid entries into a database system by validating entered information.

This is performed by validating each entry when the request is made.

*throws* IllegalArgumentException {

*public* void *setLoanAmount*(double loanAmount)

*throws* IllegalArgumentException {

*if* (loanAmount <= 0) {

*throw* *new* *IllegalArgumentException*(

                    "Loan amount must be greater than 0");

        }

        this.*loanAmount* = loanAmount;

    }

*throws* IllegalArgumentException {

*if* (numberOfYears <= 0) {

*throw* *new* *IllegalArgumentException*(

                    "Number of years must be greater than 0");

        }

        this.*numberOfYears* = numberOfYears;

    }

*throws* IllegalArgumentException {

*if* (annualInterestRate <= 0) {

*throw* *new* *IllegalArgumentException*(

                    "Annual interest rate must be greater than 0");

        }

        this.*annualInterestRate* = annualInterestRate;

    }

If any of the entered values are less than or equal to zero, an error message will be presented, and the user will be prompted to enter the values again with correct entries.

## IllegalArgumentException Class Implementation

The implementation of this class allows the designer the ability to validate user input. The user can input any number but with the implementation of this class the designer has more control over numbers that could be inaccurate.