Day 27

Questions

1. Create a class ElectionUtils with the following:
    a. public static void vote(String name, Integer age):
        i. throw exception is name or age is empty
        ii. throw exception if age is smaller than 18
    b. public static void checkTotalVotes(int total):
        i. throw exception if total is smaller than 0 or if total is greater than 20000.

2. Create a class Election with the following:
    a. Input the name and age from the user
    b. Call vote() method with name and age as parameters from ElectionUtils and handle the exception with suitable message
    c. Input the total votes
    d. Call checkTotalVotes() with total votes as parameter from ElectionUtils and handle the exception with suitable message
    e. Iterate the above steps until user wants to exit

1. Create a class Course with the following:
    a. Instance variable: id, name, code, activated
    b. Parameterized constructor with id, name and code as parameters
        i. Assign the value of id, name and code in instance variable
        ii. Initialize the activated to true
    c. Getter and setter methods for all the variables
    d. display():
        i. Print all the values

2. Create a class JavaCourse inheriting the Course class with the following:
    a. Instance variable: tutorName, duration
    b. Parameterized constructor with id, name and code as parameters
        i. Call super constructor with id, name and code as parameters
    c. Getter and setter methods for all the variables
    d. display():
        i. Call super class display method
        ii. Print the value of tutorName and duration
    e. assignTutor() method with tutorName as parameter
        i. Assign the value of tutorName in instance variable if activated is true
        ii. Throw exception if tutorName is blank or activated is false
    f. courseCompleted():
        i. Assign the value of tutorName to blank and duration to zero
        ii. Change the value of activated to false
        iii. Print the appropriate message

3. Create a class EnrollCourse with the following:
    a. Instance variable: ArrayList of type Course
    b. getCourse(id):
        i. If id exists return the particular Course
        ii. Else throw exception

    c. Main method:
        i. Create an object of JavaCourse
        ii. Add the object in the array list

iii. Ask user to input the id to perform action

iv. Call getCourse(id) and perform the following if id exists

v. Ask user to input option (E.g 1 – Assign tutor, 2- display, etc)

vi. Call assignTutor(), courseCompleted(), setDuration() and display() method as per the selected choice

vii. Handle all the exceptions