Rajarata University of Sri Lanka

Faculty of Applied Sciences

B.Sc in Information and Communication Technology

ICT 1306 (Object Oriented Programming)
Practical 04: Constructors

Outline

- Constructors
- Constructor overloading

Outcome

At the end of this session students should be able to:

- Get knowledge about the Constructors.

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1. Define a class to represent a bank account. It contains:
   - Data Members – Name of the account holder, Account Number, Balance

   - Member Functions – Set the name, account number and balance, withdraw (balance>withdraw), deposit and display data.

Allow user to enter their name, account number, and give an option between deposit and withdrawal.

1.1 Set the account balance to Rs. 20 000 by calling setBalance() function.
1.2 Set the account balance to Rs. 20 000 by creating default constructor.
1.3 Set the account balance to Rs. 20 000 and account number to 123 by passing arguments to the constructor.

2. Get the following output by only creating objects.
   "My name is *Saman* and I am *21* years old"

Note: Allow user to enter his/her name and his/her age.

3. Different employees are working in a company. According to their positions, data stored in company database management system.
   Ex: Manager – Name

   Assistant Manager – Name and Position Branch
   Manager – Name, Position and Branch Employees
   – Name, Position, Branch and Section

3.1 Create a class for this company system.
3.2 Introduce suitable constructors to set values.
3.3 Create a method to display the information.

Take Home Assignment

1. Define a class named 'Circle' to represent a circle. The class contains:

- A data field name radius that specifies the radius that specifies the radius of circle.(default 1.0)
- A default constructor that creates a default circle.
- A constructor that creates a circle with specified values of radius (take radius value as a user input)
- A method named area() that returns the area of the circle.

Next Practical: Inheritance