Introduction to OOPs

"Characteristics of Object Oriented Programming Languages"
Fundamentals of OOPs

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Agenda

1. Objects and Classes

2. Inheritance, Reusability and New Data Types

3. Polymorphism and Overloading

4. What's next?

5. Questions and Discussion

Objects

- Approaching a programming problem in object-oriented language, require how to divide it into objects rather than functions
- A close match between real word objects and the objects in the programming sense
- How to find these matches?
  - **Physical Objects**
  - **Elements in Computer Environment**
  - **Data-Structures**
  - **Human Entities**
  - **Simulation Components in Computer Games**
  - **Collections**

Classes

Limitations in earlier approaches (Procedural/Structure programming)

- Objects are instances of classes
- What does this mean?
- Thus a class serve as a plan, or template; specifying which data and functions should be included in instance of given class
- A class doesn't create any objects

Inheritance

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Reusability

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New Data Types

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Polymorphism and Overloading

What's next?

Your Turn: Time to hear from you!

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[1]https://fensafitters.files.wordpress.com/2013/07/3d095.jpg

References

Robert Lafore
Object-Oriented Programming in C++, 4th Edition .
2002.