

Universidad Autónoma del Estado de Hidalgo

Escuela Superior Huejutla





Área Académica: Licenciatura En Sistemas
Computacionales

Tema: Unified Modeling Language

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Keywords. UML





- Tema: Unified Modeling Language

Abstract

It is an abstraction of objects with similar characteristics.

For example: Ruth Martin Gonzalez and Jager have characteristics (attributes) and behavior (methods) similar, so it can be abstracted into a class called Person.

Keywords: UML





Analysis and object-oriented design





Contenido

1. A & D vs structured. A & DOO
2. Important concepts of A & DOO





1. A & D vs structured. A & DOO





Structured Analysis and Design

Structured Analysis

- ✓ Flowcharts
- ✓ E-R diagrams

Structured Design

- ✓ Modules
- ✓ Systems and subsystems
- ✓ Data Dictionary





Analysis and design objects

Analysis objects

Use cases (process or system functions)

Conceptual model (concepts, features, business rules, relationships between concepts)

Design objects

Object-code organization

Identification of relationships, properties, methods

Identify components of SW and HW





Modeling O.O

Structured modeling becomes increasingly difficult to maintain.

In object-oriented modeling, the basic building block is the object, which arises from the problem domain and associated with this is code reuse through classes.

For this type of modeling, you use C + +, Java, SmallTalk, Visual Basic, Visual FP, among others.





What happens if we Model





Models for:

- ✓ Understand the system to build
- ✓ View the system as you wish
- ✓ Specify the structure and behavior of the system
- ✓ Have a plan to guide the construction of the system
- ✓ Document the decisions regarding the system architecture





2. Important concepts of A & DOO





Important concepts of A & DOO

- ✓ Model
- ✓ Notation
- ✓ Object
- ✓ Class
- ✓ Life of objects
- ✓ UML





Model

It is a simplified representation of reality.

A model facilitates the understanding of a concept and each person requires a different view (users, developers, etc.).





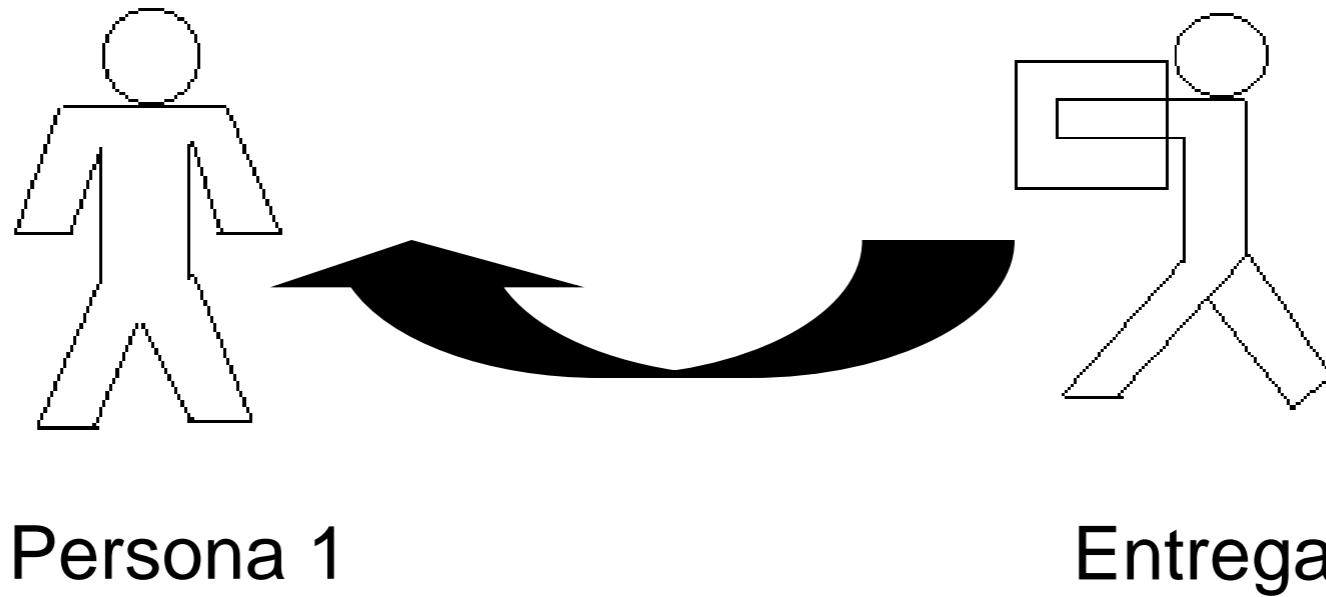
Notation

The set of symbols that represent something of the reality, they are used within these models to represent real objects.





Example of notation





Example of objects

Purpose: Martin Gonzalez

Attributes: 25 years, dark, black hair, Head of Programming, etc.

Methods: Program, dancing, studying, walking, etc..





Class

It is an abstraction of objects with similar characteristics.

For example: Ruth Martin Gonzalez and Jager have characteristics (attributes) and behavior (methods) similar, so it can be abstracted into a class called Person.





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