# COMP433: Software Engineering



Unified Modelling Language (UML)

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### **UML: Unified Modelling Language**

## **Objectives**

To explain unified modelling language as object modelling tools.

To describe

Different types of UML diagrams UML modelling techniques/tools and their applied use

# Covering...!!







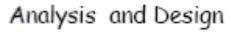
Requirements Elicitation

Requirements Specification



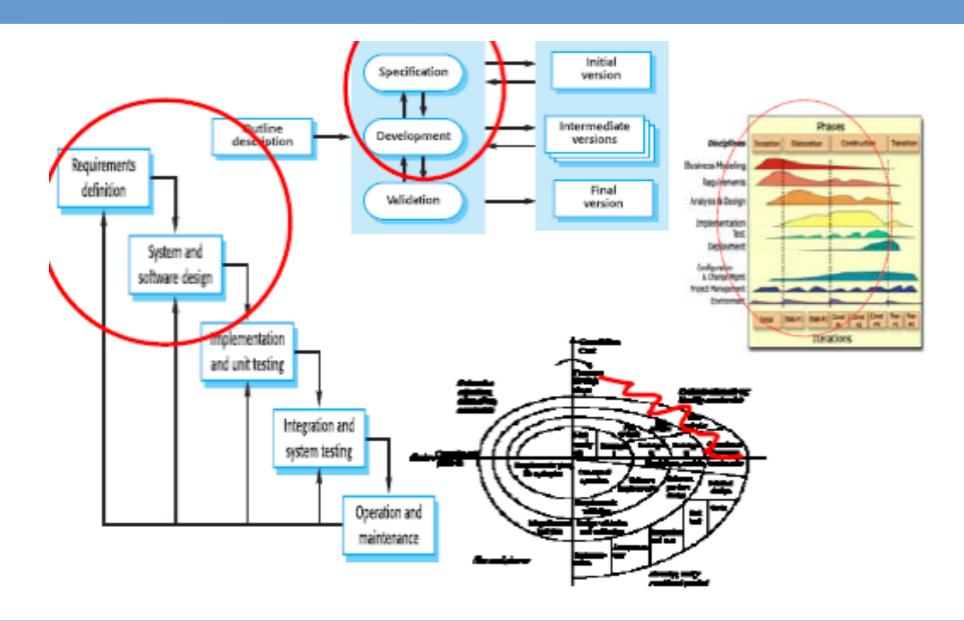








## A 'tool' for...



## The Unified Modelling Language

Several different notations for describing object oriented designs were proposed in the 1980s and 1990s.

The Unified Modelling Language is an integration of these notations.

It describes notations for a number of different models that may be produced during OO analysis and design.

It is now a de facto standard for OO modelling.

### **UML**

## **Unified Modelling Language**

# Visualising and documenting analysis and design effort.



#### Unified because it ...

Combines main preceding OO methods (Booch by *Grady Booch*, *OMT by Jim Rumbaugh and OOSE by Ivar Jacobson*)

## Modelling because it is ...

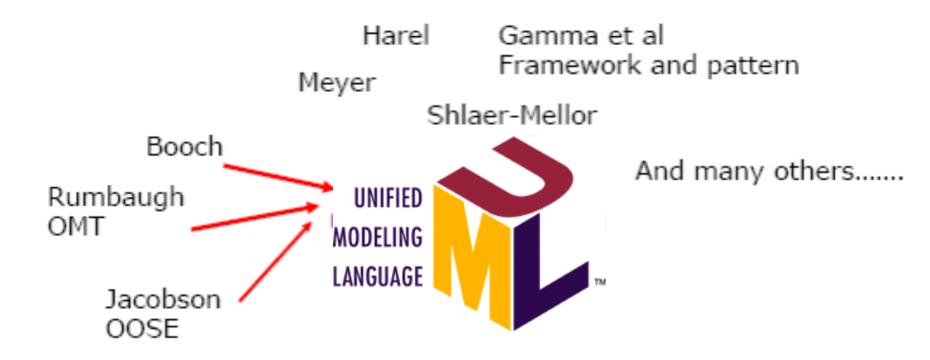
Primarily used for visually modelling systems. Many system views are supported by different appropriate models

### Language because ...

It offers a syntax through which to express modelled knowledge

### **UML Contributors**

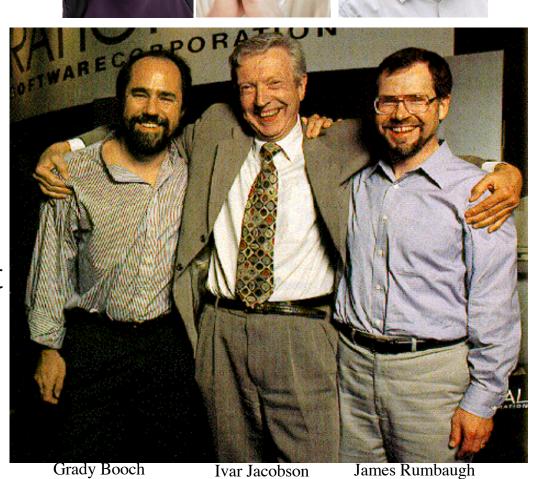
http://www.uml.org/



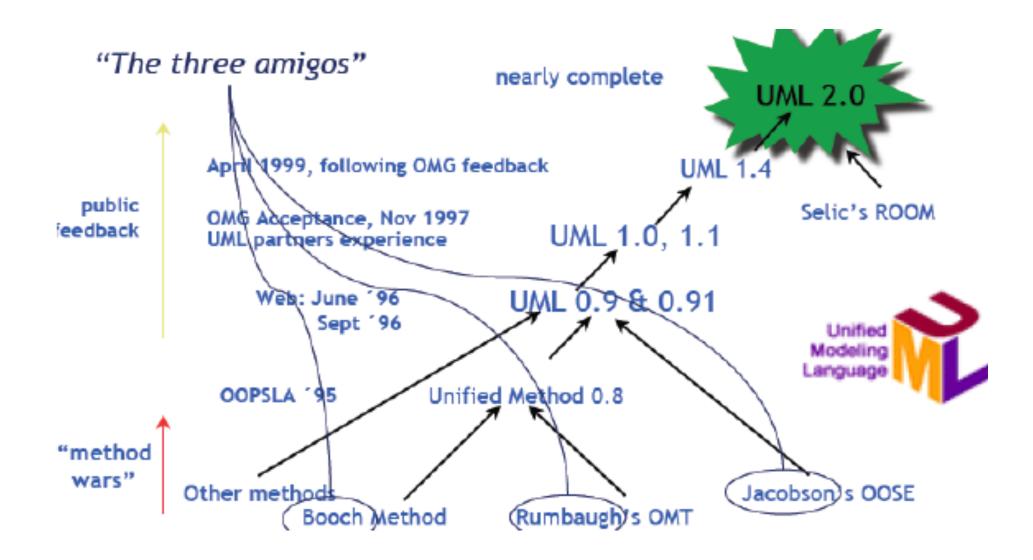
Major three (submission to OMG Jan 97, Acceptance Nov 97...)
<a href="http://www.omg.org/">http://www.omg.org/</a>

## The Three Amigos!

Grady Booch,
Ivar Jacobson,
and Jim Rumbaugh —
historically and fondly
known in the UML
community as *The Three*Amigos — are often
credited with the dominant
contribution to the Unified
Modeling Language



## **UML** History



## **UML Diagrams**

