

Class Diagram



Español



Entries

- Use Case Diagram (using UML)
 - ◆ Can it be used configuration management?: **Yes**
- Requirements Specification Document
 - ◆ Can it be used configuration management?: **Yes**



Exit

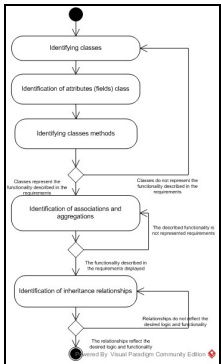
- Class Diagram (using UML)
 - ◆ Can it be used configuration management?: **Yes**



Solution



Process



Development time

- ◆ To acquire the necessary knowledge to develop the software product:
- ◆ To create the Product Pattern:
- ◆ To apply the Product Pattern:



Explanatory video

- ◆ Not applicable



Related Patterns

- Use Case Diagram
- Collaboration Diagram
- Sequence Diagram
- Requirements Specification



Quality Controllers

- None



Templates

- Class Diagram Format
- Class Diagram Template



Examples

- Example of a class diagram.



Support Tools

- Argo UML (Open Source Project)
- Dia (GNOME)
- Rational Software Modeler (IBM)
- StarUML (Open Source Project)
- Visual Paradigm for UML (Visual Paradigm)



Initial Context

It has the description of the system from the user perspective (eg in a use cases diagram) and it is desired to create a diagram that describes the structure of a software system, showing the components or pieces of software that is responsible for the operation of the system.



Result Contextt

A diagram, that shows through classes, the logical components that are responsible for the operation of the system, is obtained.



Problem

It is needed to create a representation of components (classes and objects) that implement the system operation. This representation should show what the system can do and how to be built.



Restrictions (*Forces*)

- **Type of Organization:** SMEs, Large Companies.
- **System Type:** It applies to all types of systems.
- **Programming Paradigm:** OO (Object Oriented).



Roles

- Analyst
- Project Manager



Lessons Learned

- Benefits of using this pattern
 - ◆ The static view of the software you get when you use this pattern system is based on UML, which facilitates the description of objects or real world entities that interact with the system.



Capability Level

- Not applicable



Basic Knowledge and Skills



Knowledge

- Intermediate knowledge of UML.
- Interpretation of use case diagrams.



Abilities

- Capacity of abstraction.
- Capacity of Analysis.
- Holistic or systemic view of problems.



Information Resources

- Amescua A., et al. (2003). *Análisis y Diseño Estructurado y Orientado a Objetos del Sistema Informáticos*. McGraw Hill/Interamericana de España, S.A.U.
 - Ferré Grau, X & Sanchez-Segura, M. (2004). *Desarrollo Orientado a Objetos con UML*. Recuperado el 2009-11-26 de <http://www.clikear.com/manuales/uml/index.aspx>.
 - Fowler, M. (2004). *UML distilled: a brief guide to the standard object modelling language*. Addison-Wesley.
 - Jacobson, I. & Booch, G.(1999). *The unified software development process*. Addison-Wesley.
 - Rumbaugh, J. & Jacobson, I. (2005). *The unified modeling language reference manual*. Addison-Wesley.
 - Rumbaugh, J. (2005). *Object-Oriented Modelling and Design*. Prentice Hall.
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