




UML-II



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UML Sequence diagram

- To model object interaction
- Object interaction modelling (OIM)

:Car

An unnamed instance of the Car class

car:

A named instance of an unnamed class

car:Car

A named instance of the Car class

:Car

A collection of instances of the Car class

<<JSP>>
Login Page

A stereotyped object

Stereotyped object

- such as constraints, documentation, or implementation details
- Stereotypes are typically used to model domain-specific concepts or to add additional information that is not part of the core UML metamodel
- Enclosed within double-angle brackets (<<>>)
- <<Database>>
- <<File>>
- <<Request>>
- <<JSP>>
- etc.

Symbols in sequence diagram



Synchronous message



Asynchronous message



Method execution: The object is executing one of its methods



Return message



Lifeline : Indicating that the object exists in the system but it is not executing a method



A combined fragment expresses repetition or conditional execution of a portion of a sequence diagram (like loop, if-then, if-then-else)

Example

- A login page, where the client want to login to a page:
 - 1. Web user submits uid and password to LoginPage
 - 2. LoginPage verify uid and password with LoginController
 - 3. LoginController gets user(object) from database manager (DBMgr) using uid.
 - 4. DBMgr returns user (object) to LoginController
 - 5. LoginController verifies password with user (object)
 - 6. User (object) returns result to LoginController
 - 7. LoginController returns results to LoginPage
 - 8. If result is true, LoginPage shows the welcomePage
 - 9. Else, LoginPage shows an error message