TECHNISCHE UNIVERSITÄT DRESDEN

DRESDEN concept

Fakultät Informatik

Professur Softwaretechnologie

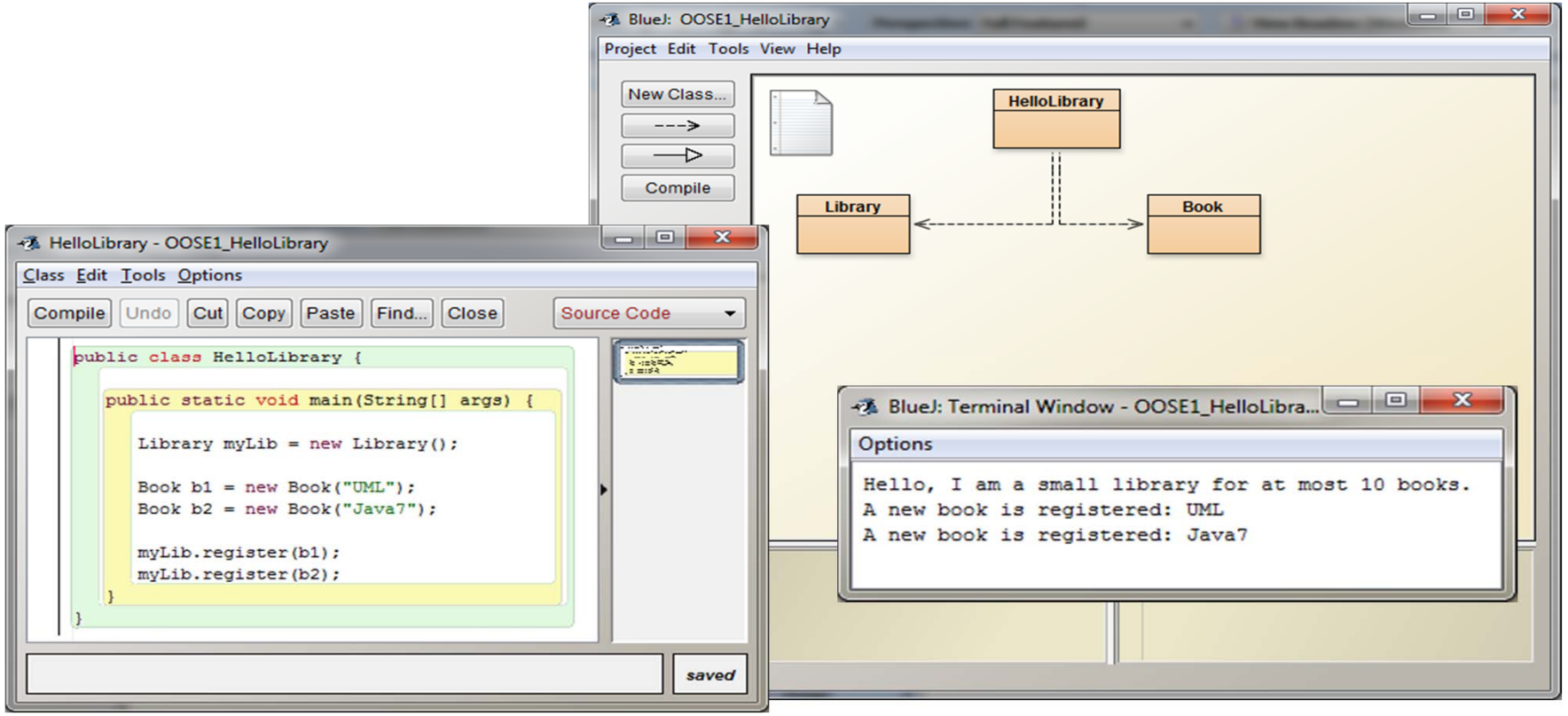
OOSE 01

JAVA MIT BLUEJ UND UML-BY-EXAMPLE

Dr.-Ing. Birgit Demuth

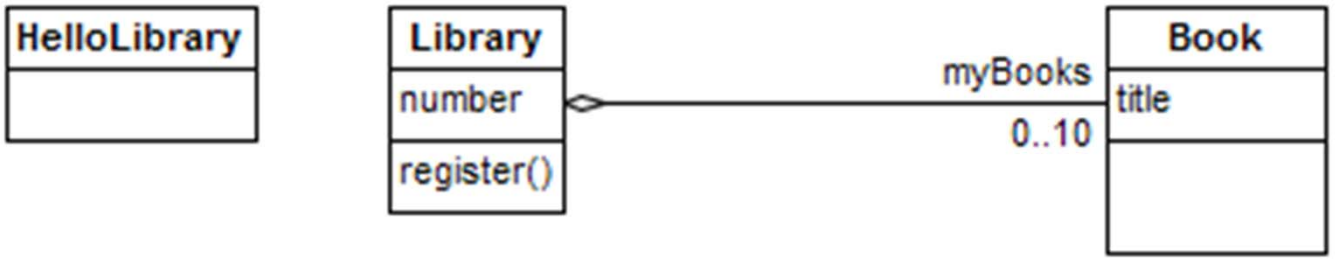
Sommersemester 2018

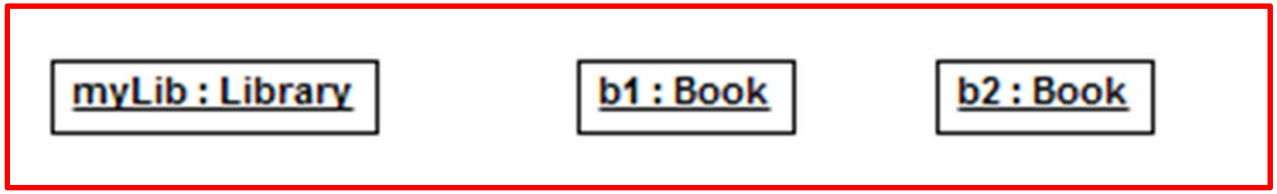
Arbeit mit BlueJ (version 3.7.1) – Demo (1)



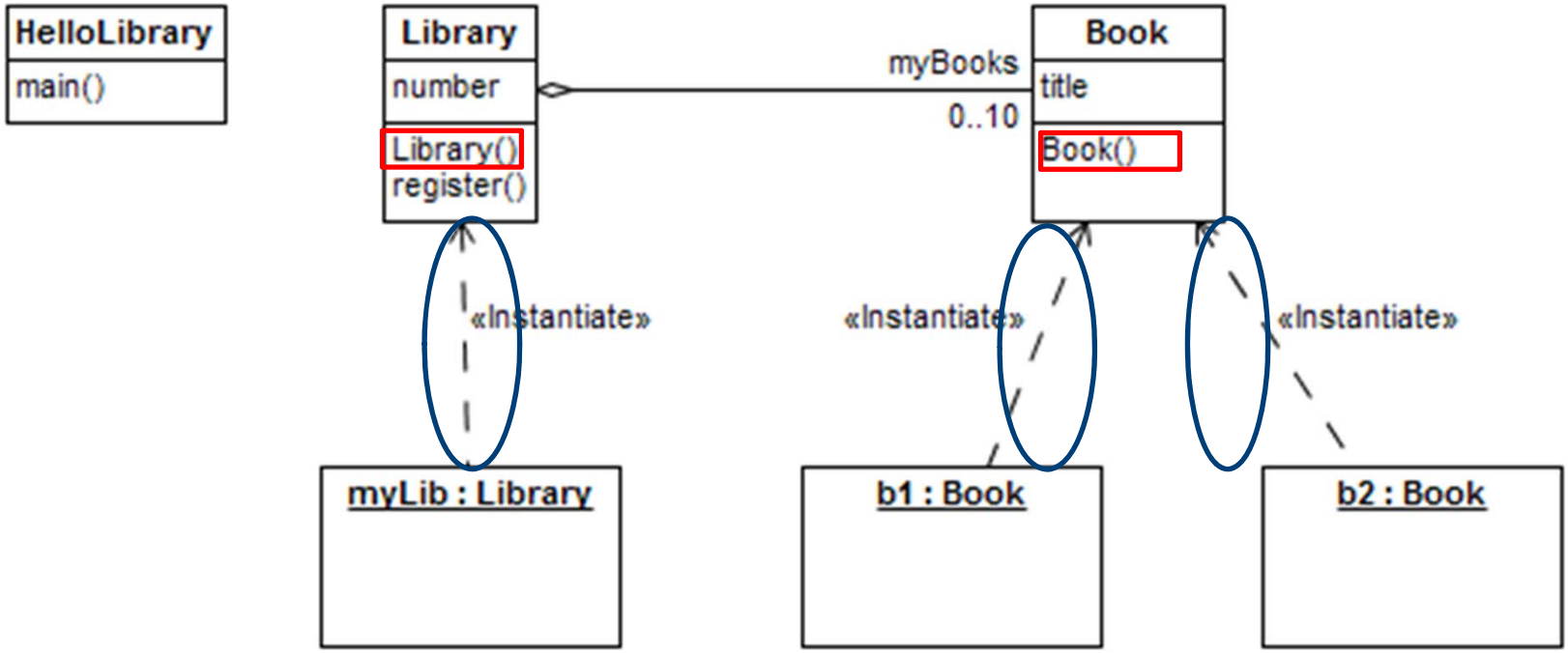
Unser erstes UML-Analyseklassendiagramm (HelloLibrary Anwendung)

Klassen und Objekte

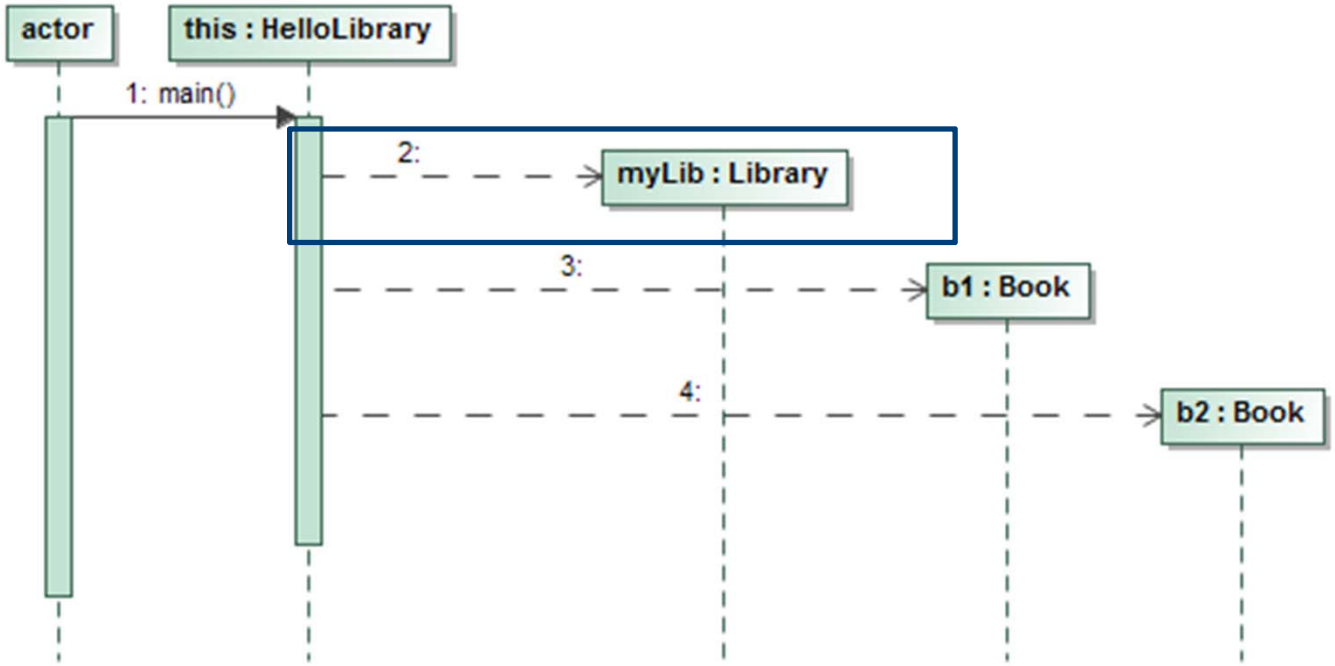




Konstruktoren und Instanziierung von Objekten

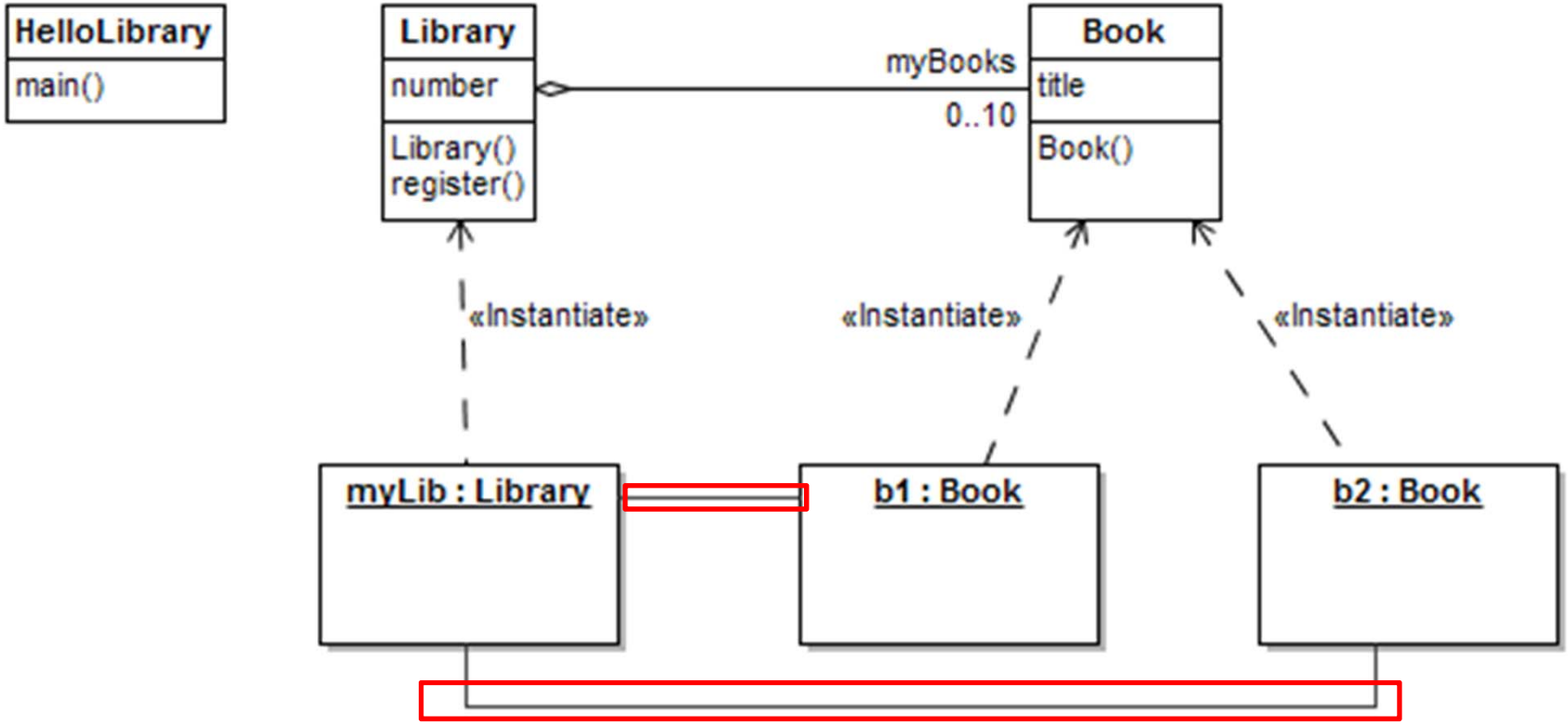


Instanziierung von Objekten
Darstellung im Sequenzdiagramm

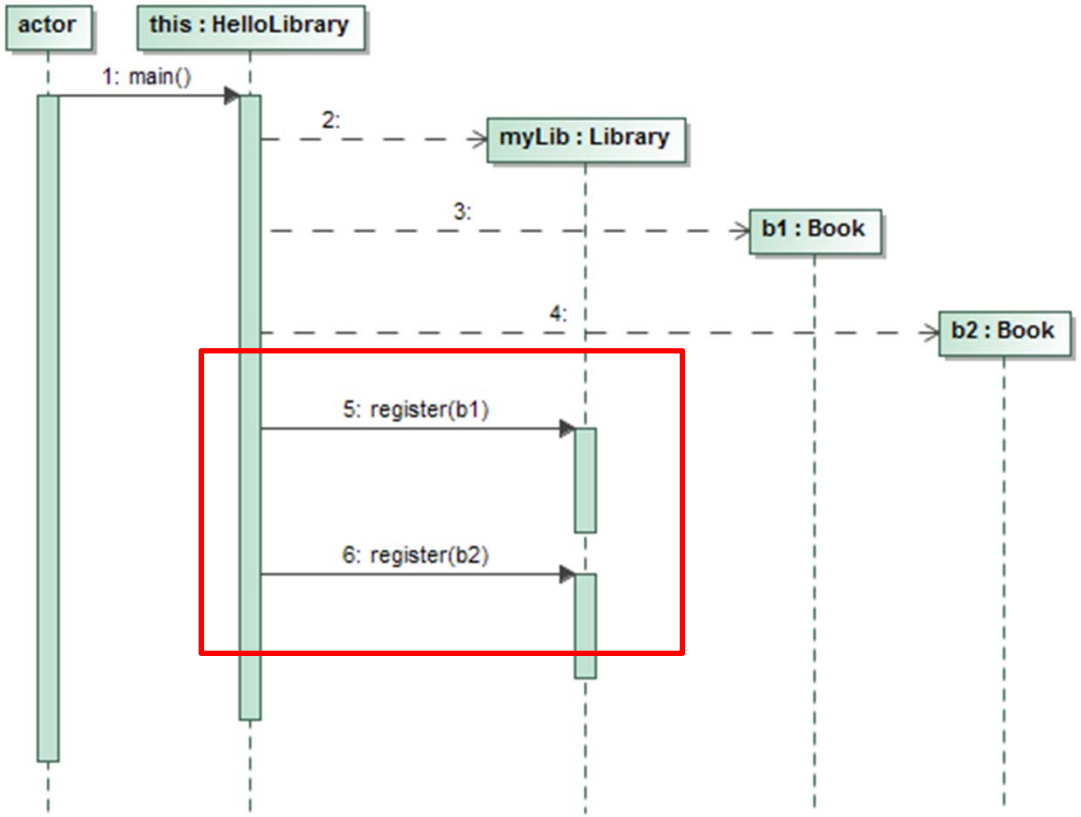


Registrierung von Objekten / Darstellung im Objektdiagramm

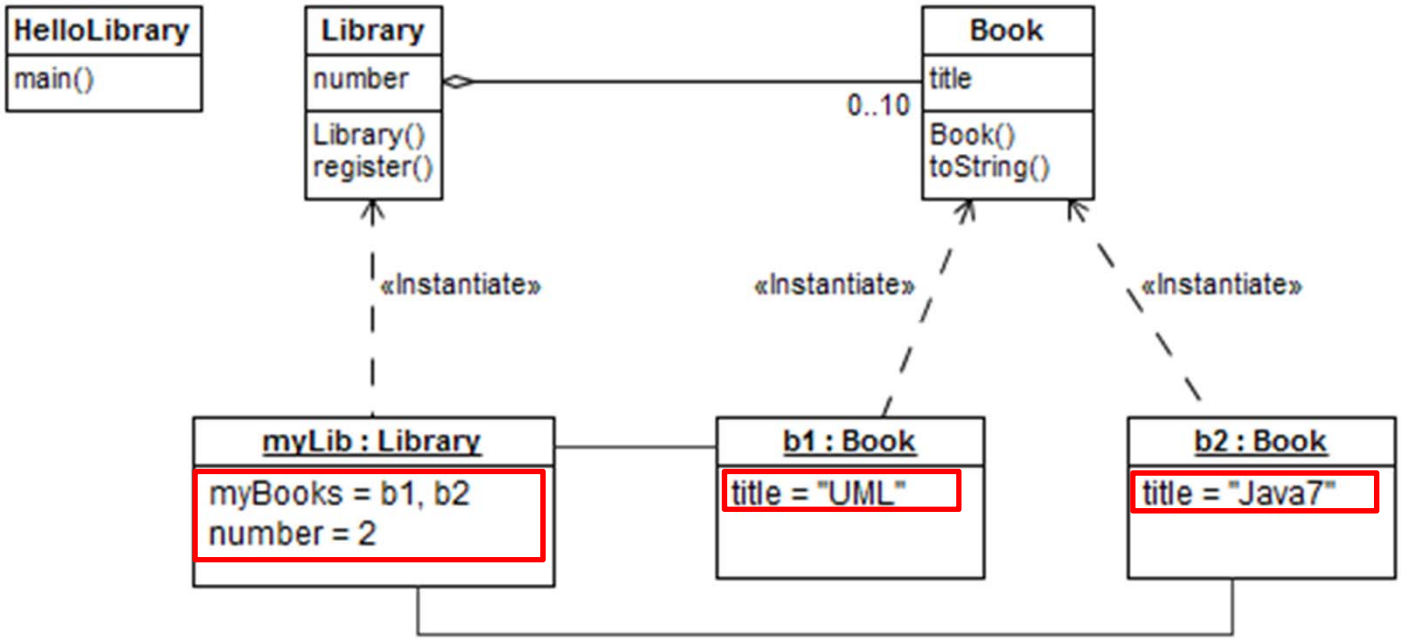
(Erzeugung von Links durch Aufruf der Methode register())



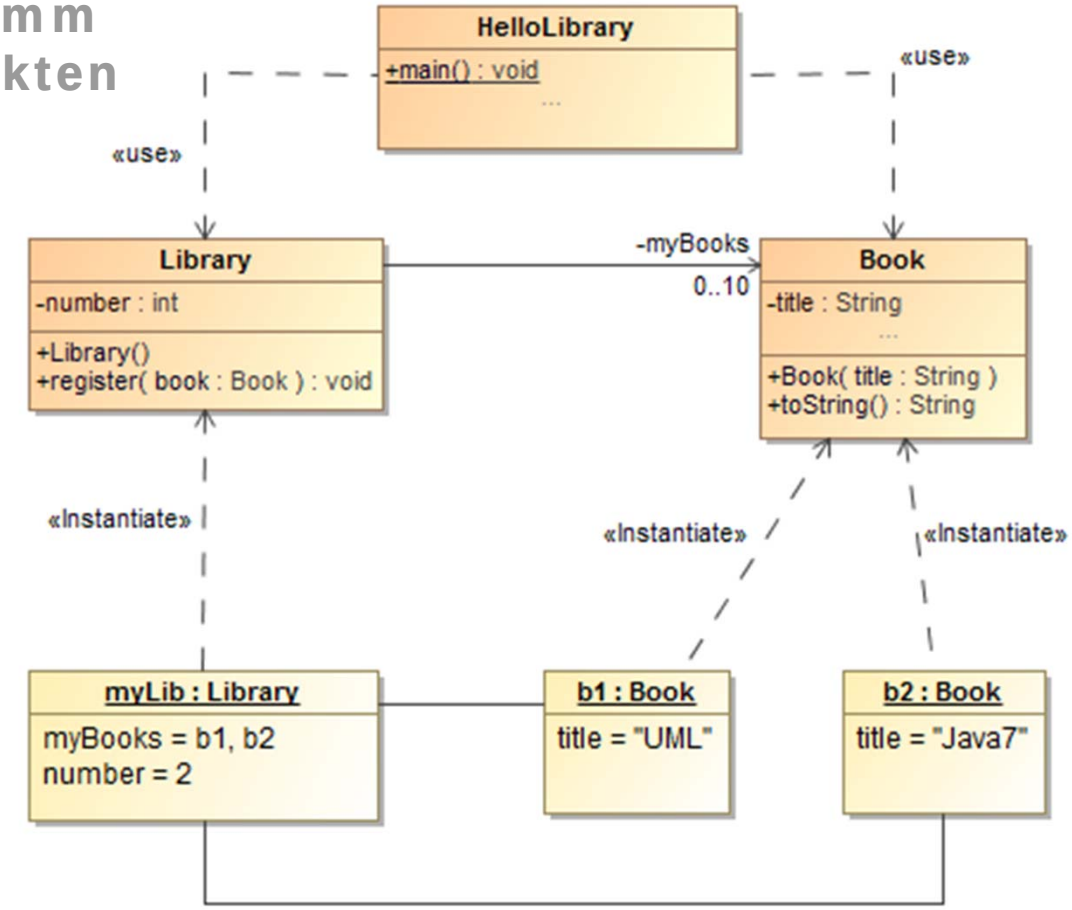
Registrierung von Objekten / Darstellung im Sequenzdiagramm



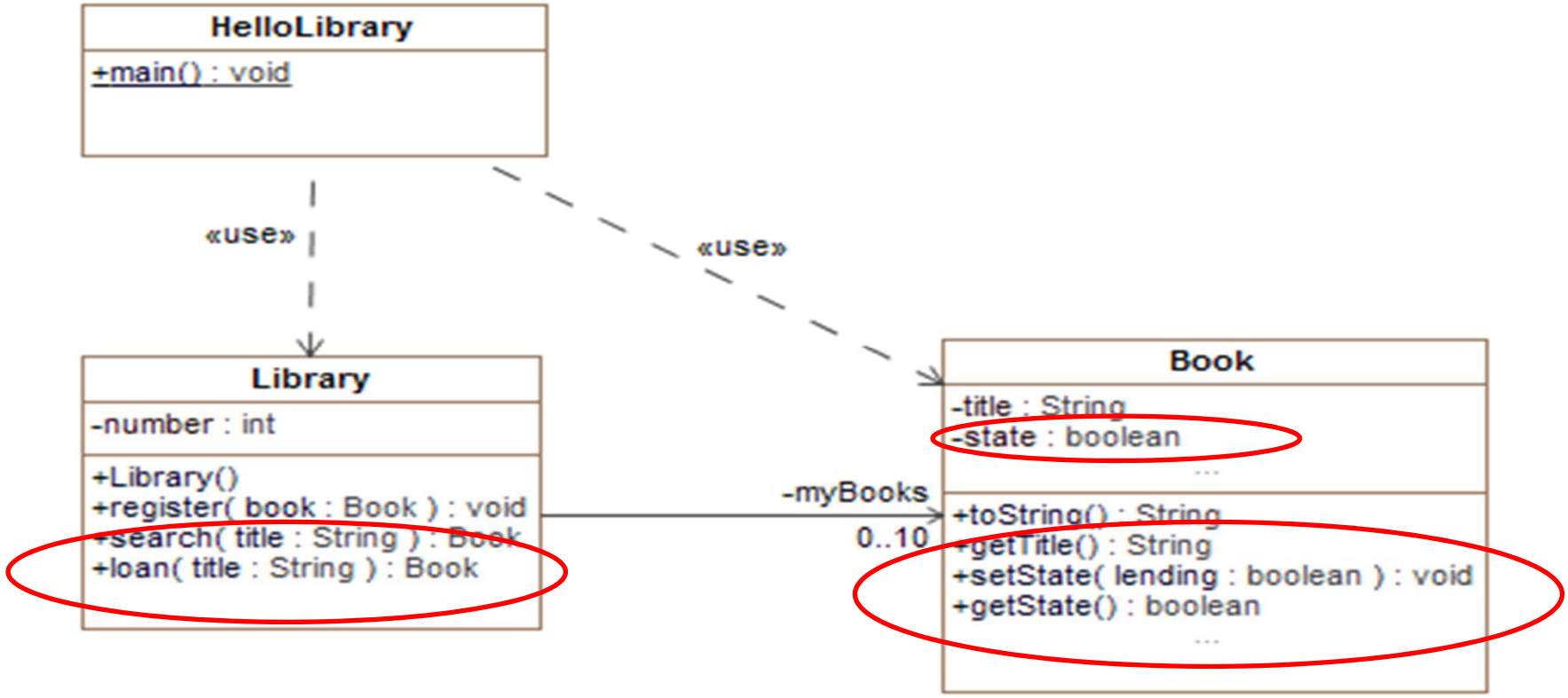
Objektdiagramm mit Slots (Attribut = Wert)



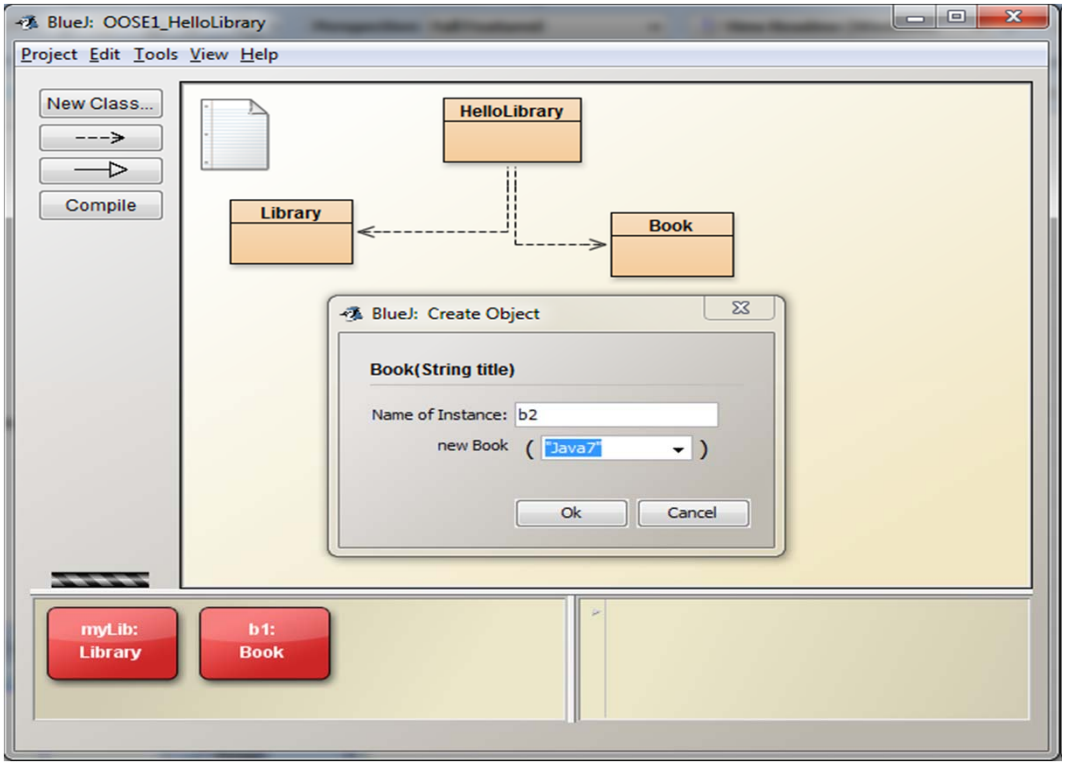
Entwurfsklassendiagramm mit instanziierten Objekten



Entwurfsklassendiagramm
HelloLibrary extended (Vorschau Übung U02)

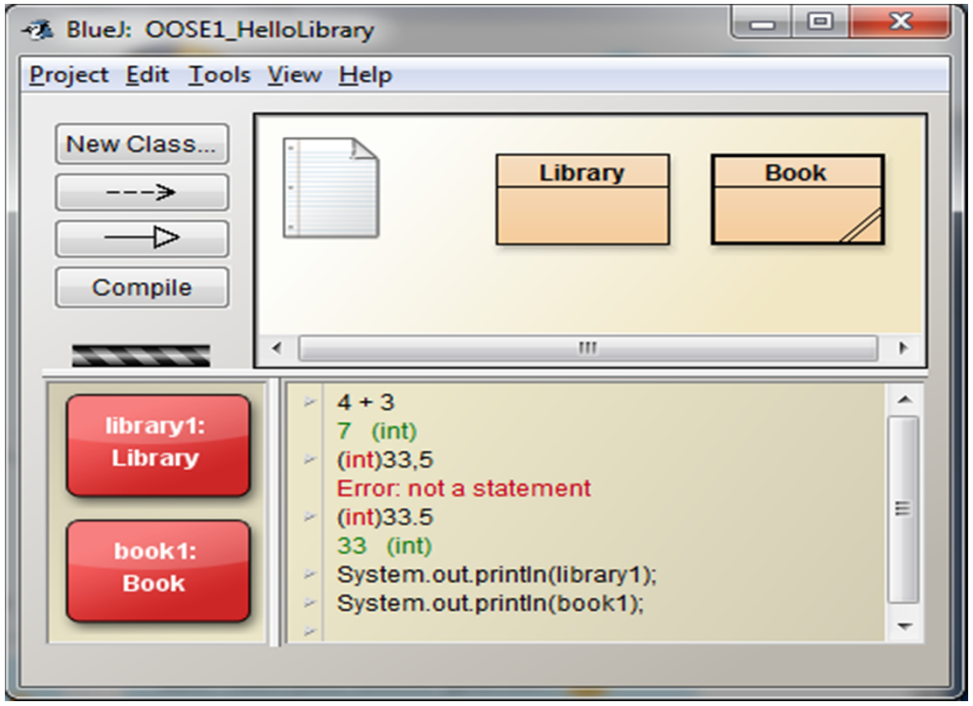


Arbeit mit BlueJ (version 3.7.1) – Demo (Object Bench)



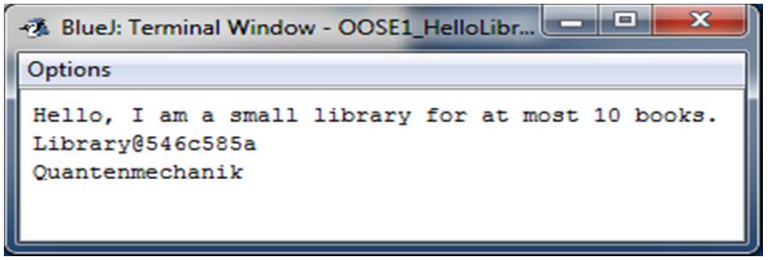
Object Bench:
„Spielen“ mit Objekten

Arbeit mit BlueJ (version 3.7.1) – Demo (Code Pad)

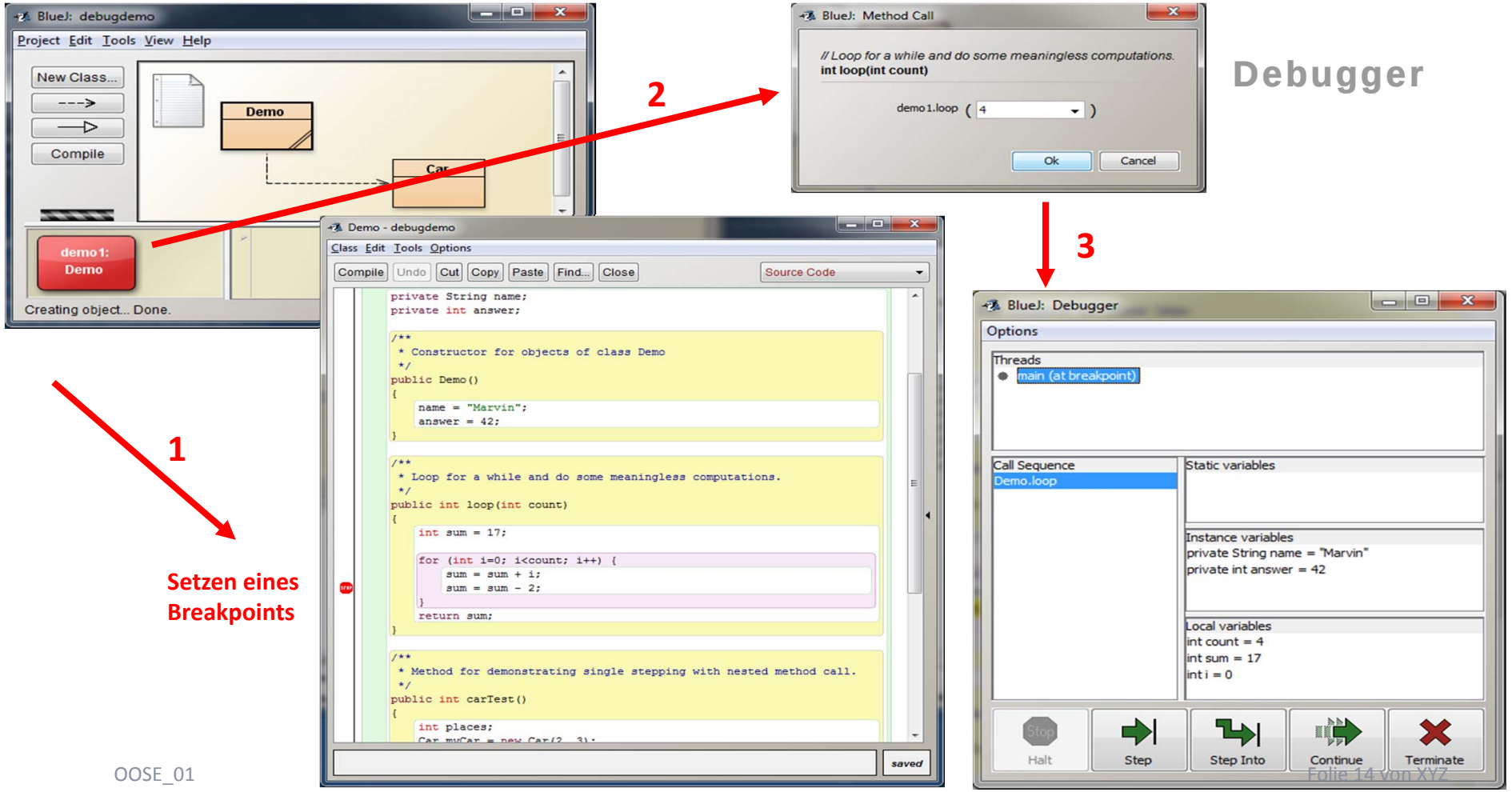


Code Pad:

- Berechnung von Java-Ausdrücken
- Ausführen von Java-Statements
- Eingabe von mehrzeiligen Anweisungen (durch Drücken von Shift Enter) und Ausführen (Enter)



Debugger


BlueJ: debugdemo
Project Edit Tools View Help
New Class...
Compile
Demo
Car
demo1: Demo
Creating object... Done.
2
BlueJ: Method Call
// Loop for a while and do some meaningless computations.
int loop(int count)
demo1.loop (4)
Ok
Cancel
3
Demo - debugdemo
Class Edit Tools Options
Compile Undo Cut Copy Paste Find... Close
Source Code
private String name;
private int answer;
/**
* Constructor for objects of class Demo
*/
public Demo()
{
name = "Marvin";
answer = 42;
}
/**
* Loop for a while and do some meaningless computations.
*/
public int loop(int count)
{
int sum = 17;
for (int i=0; i<count; i++) {
sum = sum + i;
sum = sum - 2;
}
return sum;
}
/**
* Method for demonstrating single stepping with nested method call.
*/
public int carTest()
{
int places;
saved
BlueJ: Debugger
Options
Threads
main (at breakpoint)
Call Sequence
Demo.loop
Static variables
Instance variables
private String name = "Marvin"
private int answer = 42
Local variables
int count = 4
int sum = 17
int i = 0
Halt
Step
Step Into
Continue
Terminate
1
Setzen eines Breakpoints

Ich höre und ich vergesse.
Ich sehe und ich erinnere mich.
Ich handle und ich verstehe.

Xun Zi (chinesischer Philosoph)

Vor mehr als 2000 Jahren