

COM102

Object Oriented Programming Lab



LAB-0 : INTRODUCTION

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General Information

- ▶ **Lab Instructor:** Res.Asst. Arzum Karataş
- ▶ **Office:** D-227
- ▶ **Office hours:** **Monday** : 10.00-11.00 and 11.00-12.00
Tuesday : 17.00 - 17.30
- ▶ **Email:** arzum.karatas@gediz.edu.tr
- ▶ **Lab Website:** http://arzumkaratas.weebly.com/com102_2016.html
- ▶ For any general questions about the course, **use my Office Hours** or send me an email for having **an appointment** beyond office hours!

General Information (cont.)

- ▶ **Lab Assistant:** Res.Asst. Feyza GALİP
- ▶ **Office:** D-227
- ▶ **Office hours:** Friday 14.00-15.00
Friday 15.00 - 16.00
- ▶ **Email:** feyza.galip@gediz.edu.tr

Outline

- ▶ Your Opinions / expectations ?
- ▶ Introduction to OOP World!
- ▶ Introduction to Java World?
- ▶ What is the aim of this lab?
- ▶ Lab Logistics
- ▶ Q&A
- ▶ Wet your feet !

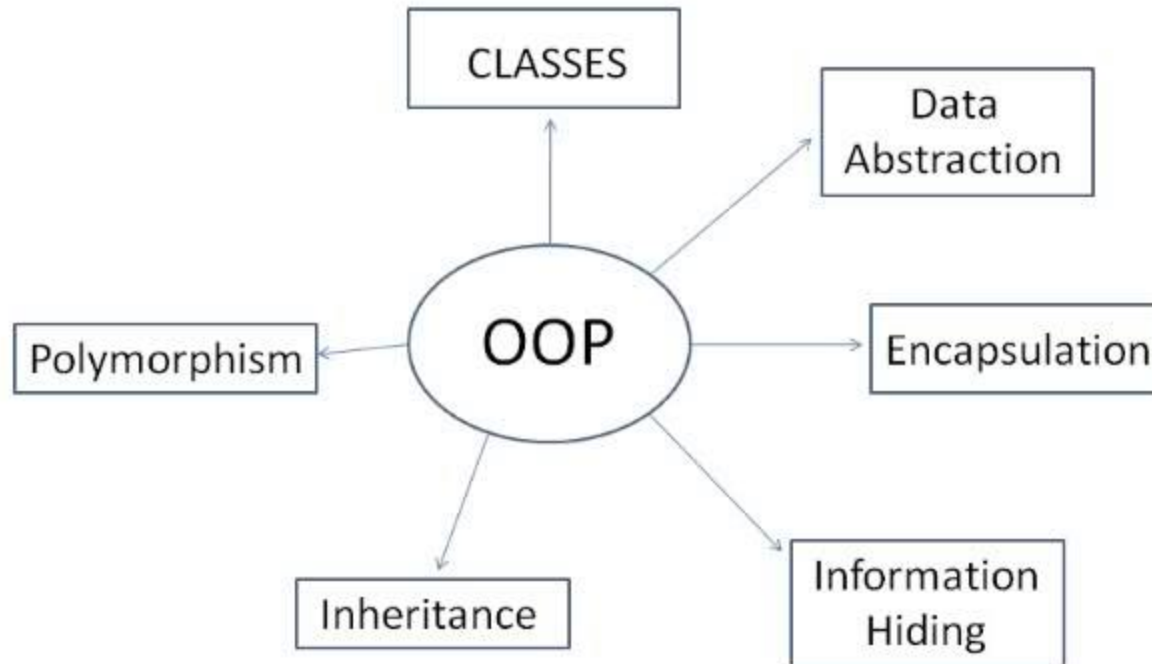
Your Opinions / expectations ?



Introduction to OOP World!

- ▶ The basis for OOP started in the early 1960s at MIT Simula 67 project.
- ▶ **Alan Kay** is one of the fathers of the idea of object-oriented programming.
- ▶ The term "object oriented programming " was first used by Xerox PARC in their Smalltalk programming language.
- ▶ The term was used to refer to the process of using objects as the foundation for computation.
- ▶ Significant object-oriented languages include **Common Lisp, Python, C++, Objective-C, Smalltalk, Delphi, Java, Swift, C#, Perl, Ruby, and PHP.**

Introduction to OOP World! (cont.)



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Introduction to Java World!

- ▶ Designed by **James Gosling** in 1995 at Sun Microsystem
- ▶ It is acquired by Oracle Corporation.
- ▶ It is a **high level language**
- ▶ Motto : Write Once, Run Everywhere
- ▶ It is free with GNU General Public License.
- ▶ file extension is **.java**
- ▶ Java name is coming from ..



Introduction to Java World!(cont.)

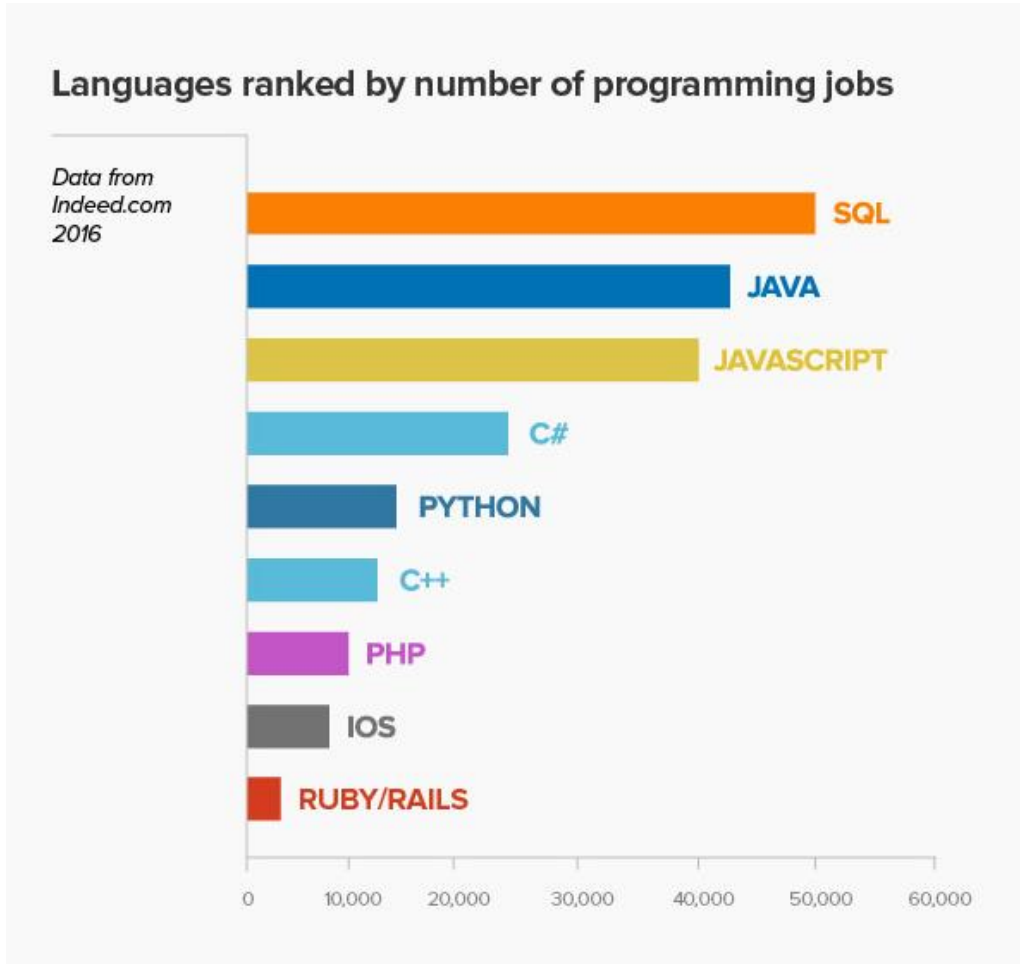
Java SDKs

- ▶ **Java SE (we will use it!)**
- ▶ Java EE
- ▶ Java ME
- ▶ Java Embedded
- ▶ Java DB
- ▶ Web Tier
- ▶ Java Card
- ▶ Java TV

For details : <http://www.oracle.com/technetwork/java/javase/downloads/index.html>

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Introduction to Java World!(cont.)



Aol.com
Netflix
LinkedIn
Amazon
Accenture
Oracle

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Introduction to Java World!(cont.)

- ▶ Java is the language of **business applications**, used at basically **every single financial services institution for back end systems, portals, trading systems, market engines, online banking**, etc. It's the primary language of development for **ecommerce** (eBay, Amazon, etc.), **insurance applications**, etc.

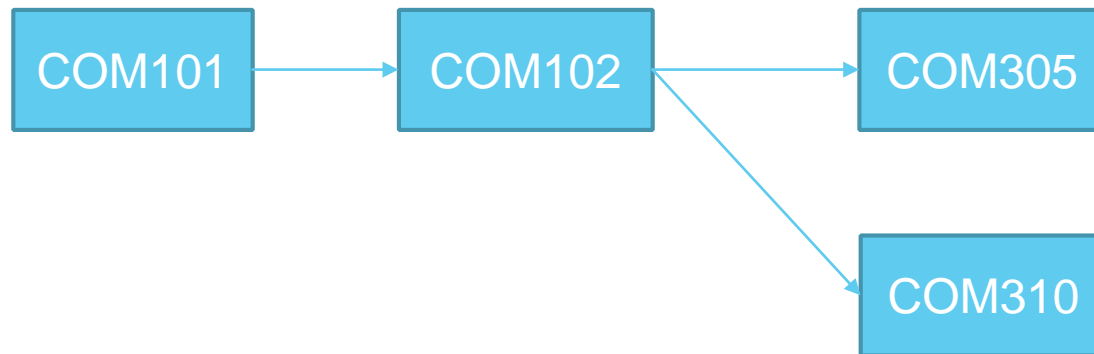
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What is the aim of this lab?

- ▶ Practising OOP concepts by using Java language !

Lab Logistics

Course Chaining



COM 305 : Object Oriented Analysis and Design

COM 310 : Web Programming

Lab Logistics(cont.)

Tentative Schedule

Lab	Lab Experiments
LAB #0	Java Eclipse IDE Installation + “Hello World” Example
LAB #1	Introduction to Classes and Objects Coding Practices
LAB #2	Control Statements Coding Practices
LAB #3	Methods Coding Practices
LAB #4	Arrays and ArrayLists Coding Practices
LAB #5	Classes and Objects Coding Practices
	MidTerm + Lab Midterm
LAB #6	OOP: Inheritance Coding Practices
LAB #7	OOP: Polymorphism Coding Practices
LAB #8	Exception Handling Coding Practices
LAB #9	GUI Components Coding Practices
LAB #10	Files and Streams Coding Practices
LAB #11	Strings, Characters and Regular Expressions Coding Practices

Lab Logistics(cont.)

Grading for Lab

	<u>Percent (%)</u>
<u>PostLabs</u>	10
<u>Lab Midterm</u>	10
<u>Lab Final</u>	15
<u>Term Project</u>	15
Total	50

2016/3/1



QUESTIONS And **Answers**

Wet Your Feet!

- ▶ Lab-0 Basic Setup ..