

# Object-Oriented Programming - OOP

# Why should you study Java?

- Top ten common programming languages:

Jul 2018	Jul 2017	Change	Programming Language	Ratings	Change
1	1		Java	16.139%	+2.37%
2	2		C	14.662%	+7.34%
3	3		C++	7.615%	+2.04%
4	4		Python	6.361%	+2.82%
5	7	⬆	Visual Basic .NET	4.247%	+1.20%
6	5	⬇	C#	3.795%	+0.28%
7	6	⬇	PHP	2.832%	-0.26%
8	8		JavaScript	2.831%	+0.22%
9	-	⬆	SQL	2.334%	+2.33%
10	18	⬆	Objective-C	1.453%	-0.44%

From <http://www.tiobe.com/index.php/content/paperinfo/tpci/index.html>

# Why Java?

- Java is Architecture Neutral (i.e. platform independent).
- Java Provides “One-Stop Shopping” (customers can get all they need in just "one stop" ).
- Java is Object-Oriented from the Ground Up.
- Java is an Open Standard.
- Java is Free!

# Instructor introduction

Name:

**Contacts:**

- Email:
- Mob:

**Group online:**

# Course Overview

- **Prerequisite:**
  - Programming Fundamentals Using C

# Contents

- Introduction to Java programming language
- Classes and Objects
- Arrays and Strings
- Exception Handling - Files and IO
- Encapsulation
- Inheritance and Polymorphism
- Generics và Collections
- Thread in Java
- GUI and Event handler programming

# Course Requirements

- Following lessons in classroom
- Reading textbook and documents at home (online)
- Doing all exercises at home
- should bring your laptop to class for short exercises

# Grading policy

- Must attend at class
- Evaluating
  - Attendance marks (AD, 10%)
  - workshops for L1 (20%) and L2 (20%) (online and at class)
  - Final Exam (FE, 50%)
  - Total score =  
 $10\%(AD) + 20\%(L1) + \mathbf{20\%(L2) + 50\%}$   
(FE)