C++ 프로그래밍:
Course Syllabus

2019년도 2학기

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Dept. of Computer Science & Engineering

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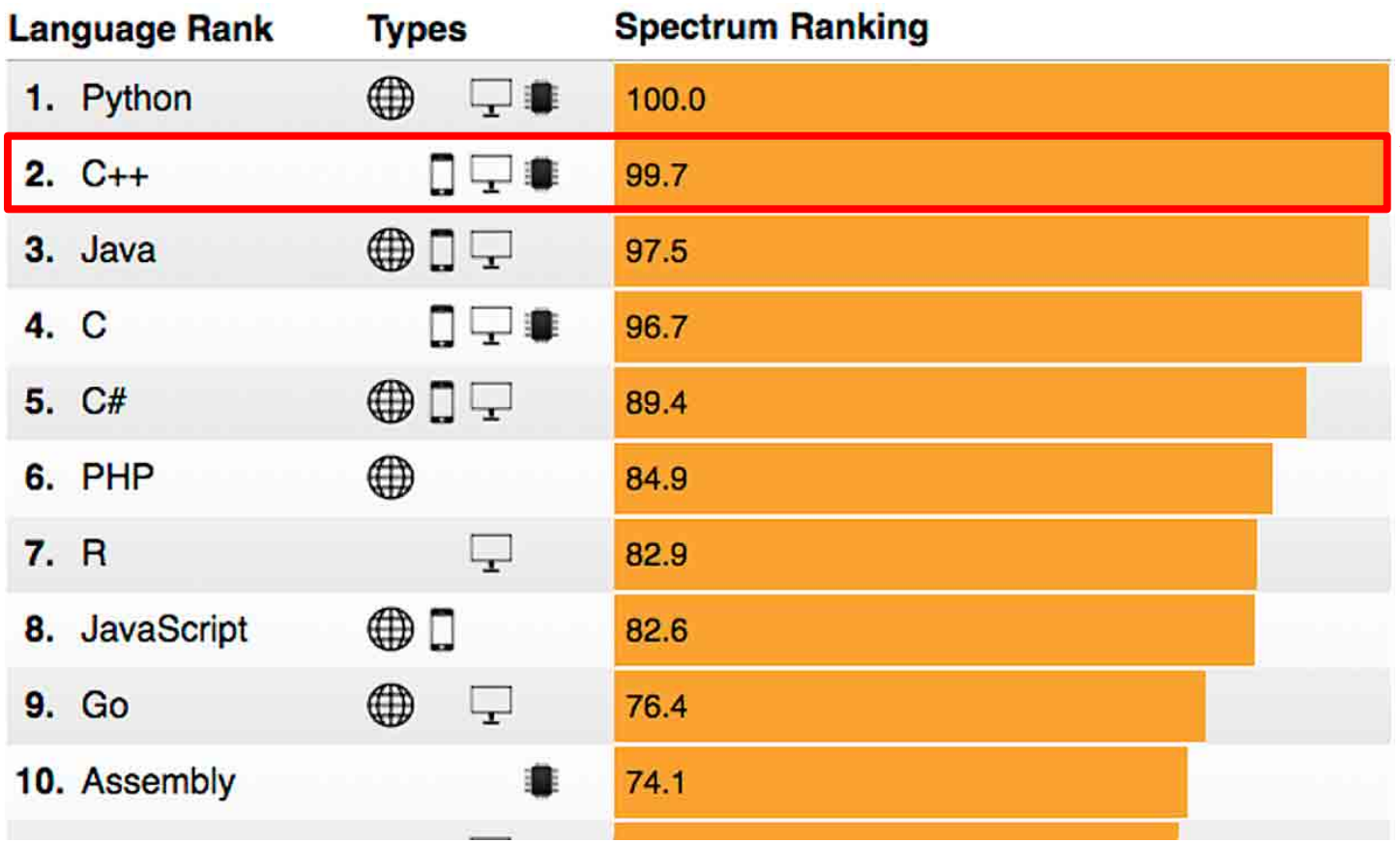
Introduction

- Course title
  - C++ 프로그래밍
- Objective
  - To learn syntax and programming skills for ***C++ Language*** necessary to implement computer systems
    - Focused on ***Object-Oriented Programming*** (***OOP***)
  - To practice and solve actual problems in C++

❖ Note that C language basics and syntax (pointers, arrays, operators, …) which are already covered in the previous class will **NOT** be covered in this course

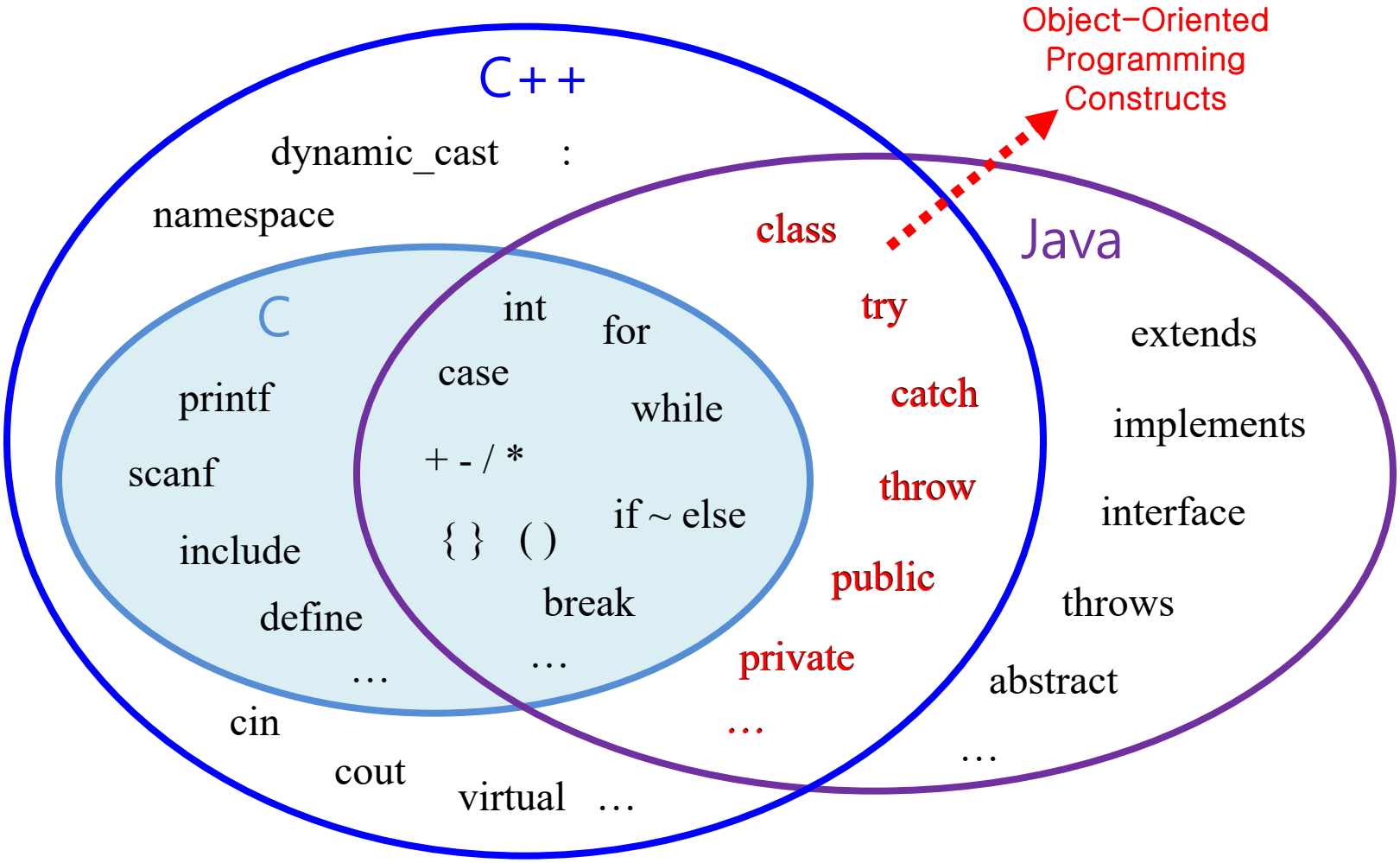
2018 Programming Language Ranking by IEEE Spectrum



Major Programming Languages and Application Area

Language	Type				Note
	Web	Mobile	Enterprise	Embedded	
Java	✓	✓	✓	✓	Originally developed for embedded devices
C		✓	✓	✓	
C++		✓	✓	✓	
Python	✓		✓		For AI programming (Pytorch, TensorFlow, Keras, …)
C#	✓	✓	✓		
R			✓		Statistics Big Data Analysis
PHP	✓				
JavaScript	✓	✓			
Ruby	✓		✓		
Matlab			✓		Numeric Analysis

C, C++, and Java


Object-Oriented
Programming
Constructs
C++
dynamic_cast :
namespace
class
Java
C
int
for
try
extends
case
printf
while
catch
implements
+ - / *
scanf
throw
if ~ else
interface
{ } ( )
include
public
break
throws
define
…
…
private
abstract
cin
…
cout
virtual …

Class Information

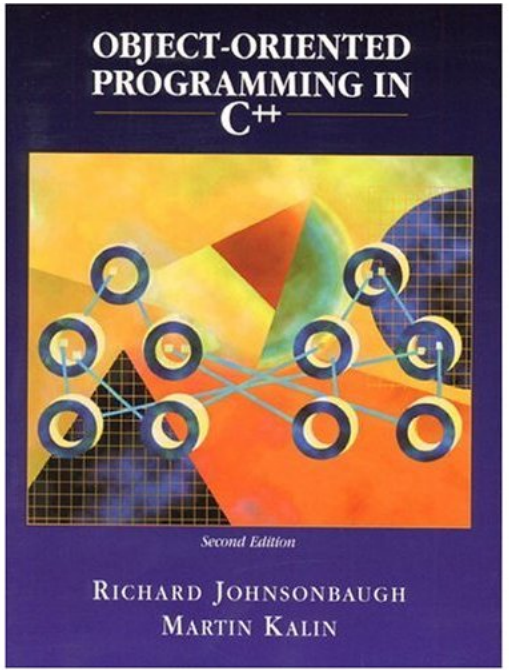
- Time and location
  - Time
    - 수요일 오후 5시 ~ 오후 7시
    - 목요일 오후 4시 ~ 오후 6시
  - Location
    - 공학관B 165호

- Class content
  - C++ 이론 강의
  - C++ 프로그래밍 실습
  - C++ 프로그래밍 과제
  - C++ 프로그래밍 시험

Textbook

- Main textbook
  - "***Object-Oriented Programming in C++***"
  - Authors: Richard Johnsonbaugh and Martin Kalin
  - Publisher: Prentice Hall

- References
  - "C++ program design: an introduction to programming and object-oriented design" by J. Cohoon
  - "C++ from the ground up" by H. Schildt
  - "Introduction to Programming with C++" by Y. D. Liang
  - 기타



Topics and Schedule

Weeks	Major Topics
Week 1	Introduction to course syllabus and programming environment
Week 2	Basic concepts of OO programming and C++
Week 3	C++ programming basics (new features of C++)
Week 4	Classes and objects 1
Week 5	Classes and objects 2
Week 6	Inheritance 1
Week 7	Inheritance 2
Week 8	**Midterm exam (Programming exam)**
Week 9	Polymorphism 1
Week 10	Polymorphism 2
Week 11	Operator overloading 1
Week 12	Operator overloading 2
Week 13	Template classes 1
Week 14	Template classes 2
Week 15	C++ I/O classes
Week 16	**Final exam (Programming exam)**

Lectures and Practices

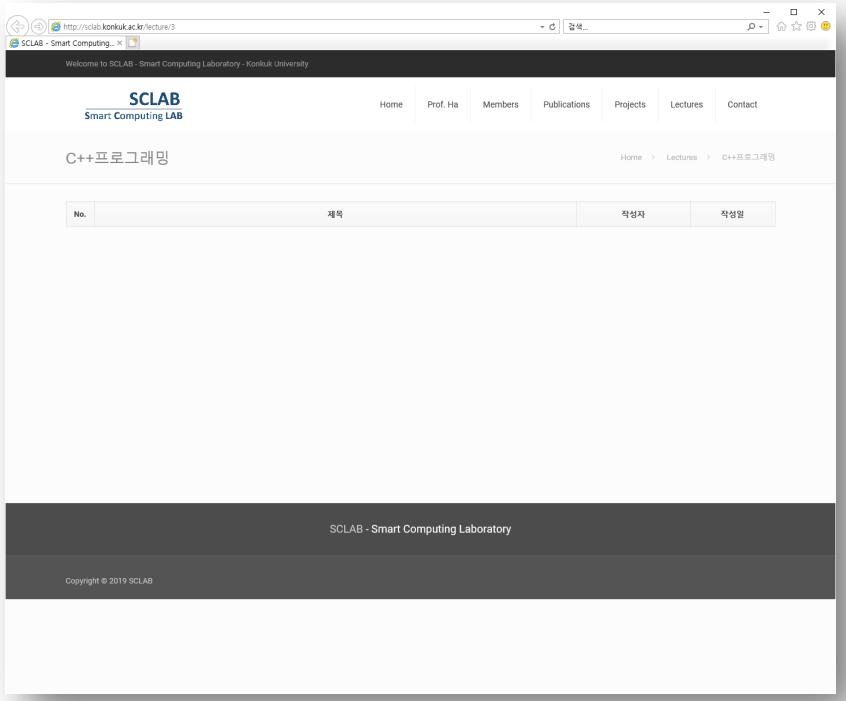
- Lectures on the major topics will be given with Power Point (PPT) presentations
  - Presentation files (including syllabus) can be downloaded from the course homepage before the corresponding class
- Programming practices related to the previously given lectures
  - Programming environment: MS Visual Studio
  - Writing, compiling and running some program examples from the textbook or the lecture note
  - Solving some programming problems with C++

Grading Policy

- Midterm exam: 30%
  - 프로그래밍 시험
- Final exam: 40%
  - 프로그래밍 시험
- Assignment: 20%
  - 과제 제출 기한 경과후 24시간 이내에 제출하는 경우 1/2 점수 부여
  - 이후에는 0점 처리
- Class participation: 10%
  - 2 지각 = 1 결석
  - 5 결석 = 출석점수 0점 처리

Course Homepage

- How to access
  - http://sclab.konkuk.ac.kr/lecture/3
- Downloading class material
  - Students can download syllabus and lecture notes in PDF format
- Class announcement
  - About homework and project
  - Exam schedule and result
  - And so on



Contact Information

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