Advanced Java Programming
Boston University

MET CS 422 D1, Spring 2018

Day: Thursday, 6:00-8:45 PM
Location: Boston Campus, Building: STH, Room: 113
Instructor: Mike Tizio
E-mail: mtizio@bu.edu
Office Hours: Before class (Thursday 5:00 PM to 6:00 PM)
BU Blackboard: https://learn.bu.edu/webapps/portal/frameset.jsp

COURSE DESCRIPTION

Comprehensive coverage of object-oriented programming with cooperating classes. Implementation of polymorphism with inheritance and interfaces and in Java library containers. Programming with exceptions, stream input/output and graphical AWT, Swing, and Java FX. Threads, sockets, datagrams and database connectivity are also covered in this course. Laboratory course. 4 cr.

PREREQUISITE

Basic Java or MET CS 342 or equivalent knowledge of C++.

LEARNING OBJECTIVES

* To master the Java programming language

TEXT

Required:
Java How to Program (10th Edition), by Deitel and Deitel, published by Pearson, 2015, ISBN-13: 978-0-13-380780-6 (ISBN-10: 0-13-380780-0)

GRADING

Programming assignments/Homework	40%
Class Participation and Attendance	10%
Midterm	25%
Final	25%

PROGRAM EVALUATION CRITERIA

Program correctness
Documentation
Readability

SCHEDULE

DATE	TOPIC	READING (TEXT CHAPTER)
01/18	Introduction, Before You Start	1 thru 7
01/25	Classes, Methods, Objects	8
02/01	Inheritance, Polymorphism, Exception Handling	9, 10, 11
02/08	GUI, Graphics	12, 13
02/15*	Regular Expressions	14
02/22	Files, Streams, and Object Serialization	15
03/01	Generic Collections	16
03/08	Spring Break	
03/15	Midterm	
03/22	Lambdas and Streams	17
03/29*	Generic Classes and Methods, GUI2 – JavaFX	20, 22
04/05	JavaFX, Android Dev: listView/gridView/Etc.	23, 25, 28
04/12	Fragment	
04/19	Intent/Extra	
04/26*	Final Presentation	
05/03	No Class	
05/10	Final Presentation	

IMPORTANT NOTES
- Assignments will not be accepted past their due date.
- Reading the relevant material in the textbook is essential for gaining a thorough understanding of the topics covered in the course.
- Not all of the material in each chapter will be covered during lecture/discussion, but the material should be read in any case.
- Your programs must be done in Java. All programming assignments must include the source code, pseudo code (program outline) including test plan, as well as the UML class diagrams. Programming assignments will not be accepted later than the end of the class the day it is due. Students will not receive credit for late homework.
- Be sure to get a copy of 2018 Spring Schedule. It contains lots of useful data such as radio stations announcing class cancellations, important dates, etc.
- Inclement weather: BU will announce University closures via the BU website www.bu.edu. As a last resort for information, call the University operators at (617) 353-2000.

ACADEMIC HONESTY
The course is governed by the Academic Conduct Committee policies regarding plagiarism (any attempt to represent the work of another person as one's own). This includes copying (even with modifications) of a program or a segment of code. You can discuss general ideas with other people, but the work you submit must be your own. Collaboration is not permitted.

ELECTRONIC MAIL
To be sure you *can* communicate with the instructor electronically and to add your email to the class distribution list, please send a test message with the subject line *CS422 TEST* to the instructor's email address – include your name in the body of the message.

HOW TO APPLY FOR A BU ACS ACCOUNT
You need an ACS account to access the course's website. If you do not have an ACS account, you can apply for one by following the directions at this site:
http://www.bu.edu/computing/accounts/acsaccounts/