

CMSC 132: Object-Oriented Programming II

Introduction

Course Description

- ▶ Introduction to use of computers to solve problems
- ▶ Design and implement abstract data types: **List, Stack, Queue, Tree, Graph**
- ▶ Use **object-oriented** methods to create effective and efficient problem solutions
- ▶ Use and implement application programming interfaces (APIs)
- ▶ Programming done in Java

Course Is Not Just About Java

- ▶ May seem to focus on Java
 - All programming in Java
 - Many interesting Java language features

- ▶ Lessons intended to be general
 - Principles should apply to all languages
 - Ways of thinking about design
 - General ideas about software
 - Can translate skills to other languages

Assume You Already Know

- ▶ Coding
 - Variables, operators, loops, arrays
- ▶ Basic object-oriented programming
 - Classes, methods
- ▶ Java
 - Class libraries, exceptions
- ▶ Tools
 - Eclipse IDE, debugger

Organization

- ▶ Class Web Page

- <http://www.cs.umd.edu/class/summer2020/cmssc132/>

- ▶ Class Times:

- Lectures: M/W/F 9:30-10:50am
- Labs: Tu/Th 9:30-10:50am

Class Schedule

- ▶ The class schedule is available at:
<http://www.cs.umd.edu/class/summer2020/cmsc132/schedule.shtml>
- ▶ Midterms: June 23, July 16 (Online)
- ▶ The final exam: August 07 (Online)
- ▶ Regarding make-ups for quizzes and midterms
 - Excused absence

Projects

- ▶ Around 7-8 projects
 - Evaluate design, coding, testing skills
 - Tries to involve interesting application areas
- ▶ Late policy
 - Projects due at **11:59 pm**
 - Late submission with **10%** penalty if submitted by 11:59pm of next day
 - **Last submission** before deadline will be graded.
 - No project accepted afterwards
 - Plan to complete all projects on time

Projects (cont.)

- ▶ Environment
 - Eclipse IDE
 - <http://www.cs.umd.edu/eclipse/>
 - Do not use your cmsc131 workspace (Create a new one)
 - In Eclipse select “File” → “Switch Workspace”
 - We are using a new repository (information will be provided later on)
 - Regarding Java version to use
- ▶ Automated submission & testing
 - Submit server
 - Maintains record of submissions
 - git repository
 - Release testing
 - Can evaluate project using real test cases

Grading

- ▶ Based on
 - Projects, quizzes/lab exercises, midterms, final
- ▶ Point distribution (roughly)
 - 40% Projects (8)
 - 8% Lab Exercises / Group projects
 - 6% Clicker Quizzes
 - 26% Midterms (2)
 - 20% Final Exam
 - Meet the Professor: 1% extra
- ▶ Available on-line
 - <https://grades.cs.umd.edu>

Clickers

- Register and link your turning point clicker app.
- <https://it.umd.edu/news/2017/clickers>

Academic Honesty

- ▶ All individual assignments & exams must be done individually (except "open" assignments)
- ▶ Do not copy (or allow others to copy) your work in any way
- ▶ Submissions will be compared to submissions from current and previous semesters
- ▶ Cases of academic dishonesty will be referred to the University's Office of Judicial Programs
- ▶ Visit Student Honor Council website for more detailed explanation of academic dishonesty

Excused Absences

- ▶ Excused absence does not typically translate into project extensions
- ▶ Students requesting reasonable academic accommodations due to a disability must provide a letter from the Office of Disability Support Services. Scan and email the letter to me.
- ▶ Please see the syllabus for additional information

Course Advice

- ▶ Read the syllabus
- ▶ Start projects **early**
 - **Make use of release testing if offered**
- ▶ Ask questions
- ▶ Read book
- ▶ Attend lectures
- ▶ Attend discussions
- ▶ Attend office hours
- ▶ Pay attention to re-grade deadlines

Online Coding Exercises

- ▶ LeetCode
 - Solve at least one problem every day at www.leetcode.com
- ▶ Crack Interview Questions
- ▶ Next summer: internship at google, microsoft, facebook, amazon...

Miscellaneous

- ▶ Regarding deadline to address grading concerns
 - It will be strictly enforced
 - At the end of the semester we will not address grading concerns for assignments/material already graded
- ▶ Regarding Email/piazza
- ▶ Regarding Electronic Devices

Miscellaneous

- ▶ If you are experiencing any problems that affect your performance in this class, please contact us immediately. Usually students wait until the end of the semester when probably nothing could be done
- ▶ If for some reason you are considering dropping this course, see us first before making this decision
- ▶ Work hard from the beginning of the semester in order to avoid the following type of messages at the end of the semester:
 - Is there any extra credit so I can boost my grade?
 - I am 0.1 from an A; can something be done?