

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, Hash, 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/summer2021/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/summer2021/cmsc132/schedule.shtml>
- ▶ Midterms: June 24, July 15 (Online)
- ▶ The final exam: August 06 (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
 - Gradescope
 - Can evaluate project using real test cases
 - Maintains record of submissions
 - git repository

Grading

- ▶ Based on
 - Projects, quizzes/lab exercises, midterms, final
- ▶ Point distribution (roughly)
 - 40% Projects (8)
 - 8% Lab Exercises / Group projects (20 leetcode problems)
 - 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.
- Register a TurningPoint Account for New Students:
https://umd.service-now.com/itsupport?id=kb_article&article=KB0012748&sys_kb_id=d6317b83db8f10504cb035623996198a
- <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?