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

- Class Times:
  - Lectures: M/W/F 9:30-10:50am
  - Labs:  Tu/Th  9:30-10:50am
The class schedule is available at:

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
  - 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?