CS310 - Advanced Data Structures and Algorithms

Introduction

September, 2020
Contact Information

- Instructor: Prof. Betty O'Neil, Elizabeth.oneil at umb.edu
- Office hours – MWF 3:00–3:45 and Tu 5:00-5:45 or by appointment (might change, check on class web page).
- Course schedule: MW 7:00-8:15 online by Zoom
  See id and passcode in your UMB email.
• Methods for structuring and manipulating data in computing.
• Application program interface (API), data abstraction and encapsulation.
• Design and analysis of algorithms, including theoretical background.
• Algorithmic techniques – greedy algorithms, dynamic programming etc.
• Graph theory and applications.
• Throughout the entire course, we will study advanced techniques for program development and organization, including use of interfaces and inheritance.
• Course website:
  www.cs.umb.edu/cs310.
• Syllabus:
  www.cs.umb.edu/cs310/syllabus.html
• Let’s look at that now...
Apply for an account with the class ASAP, as described in the syllabus. This is needed even if you took cs210 or are repeating cs310.

You will get a subdirectory ~/cs310 where assignments can be submitted. Don’t create this directory yourself: that will prevent the script from doing its job to set you up.

You own area ~/cs310, including its subdirectories, is accessible only by the instructor and the graders, not other students.
Communication

• Read your UMB email regularly! Forward it to another account if you wish.
• There will be a Piazza group and you will be added with your UMB email accounts
• Post questions or comments to Piazza you think may be of interest to the class.
• If you want to include a code snippet, make it a private message on Piazza or send the email directly to me.
• Or visit the office hours where you can share your screen with your code.
• Announcements will be posted on Piazza. Make sure to follow it
Class Attendance

- Attendance is not required (but highly encouraged). You are responsible for keeping yourselves up to date if you miss a class.
- All slides and video snippets are posted on the class website.
- If you miss classes regularly I will treat you fairly but won’t go out of my way to help you make up the missing material.
• The homework and programming assignments are strictly individual. So are the exams
• For programming assignments I may use the MOSS plagiarism detection software.
• See the syllabus for more information.