Final Exam

Date/Time/Coverage posted on class web site
Question Formats

- True/ false
- Fill-in-the-blank
  - Short answers expected
- Multiple choice
- Analyze complexity
- Apply algorithms
- Write code
CMSC 132 Summary

- We covered
  - Object-oriented software development
  - Algorithms & data structures

- Provided brief glimpse of CS applications
  - Human computer interfaces (GUIs)
  - High performance computing (Multithreading)
  - Networking, databases

- Hope you improved
  - Programming skills (coding, testing, debugging)
What Comes Next?

- **CMSC 216** – Low level programming
  - Treating references as memory addresses (in C)
- **CMSC 250** – Discrete structures
  - Simple discrete math & proofs
- **CMSC 311** – Computer Organization
  - How computers work
- **CMSC 330** – Programming Languages
  - Different programming languages & paradigms
- **CMSC 351** – Algorithms
  - Analyze & prove complexity of algorithms
What Comes Next?

Building computer systems
- 411 architecture, 412 operating system, 414 security, 417 networking, 430 compilers

Building software
- 433 programming technologies, 434 human-computer interfaces, 435 software engineering

Theory of computing
- 420 data structures, 451 advanced algorithms, 452 computation theory, 456 cryptology

Applications
- 421 artificial intelligence, 423 bioinformatics, 424 databases, 426 image processing, 427 graphics
Computer Science

- Very interesting
  - Once you get beyond basic programming
  - Improvements in software tools make it increasingly easy to provide a lot of functionality with little code

- Useful in many fields
  - Engineering, physical sciences, biological sciences
  - Information management for businesses ($$)

- In high demand
  - Always in top 10 in # of open job positions
  - Skilled software professionals always in demand
Reminders

- Fill in class evaluations. The link to visit is: https://www.courseevalum.umd.edu/portal
  - Help us improve the course…

- Save your projects; you may need them in the future.

- Verify all your grades in grades.cs.umd.edu are correct.
Finally…

Good luck on Exam!