Preliminaries

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Agenda

- Roadmap
- Syllabus
- Academic integrity
- Homework expectations
- Visual Studio
- Wrap-up
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Syllabus

• Instructor: Dmitri Loguinov
  – Office hours: TR 6-7pm in Zoom

• Main text:

• Website: http://irl.cse.tamu.edu/courses/463
  – Slides and future test dates
  – Homework assignments
  – Links to useful material

• Piazza: http://piazza.com/tamu/fall2020/csce463
Syllabus 2

- Must use Visual Studio 2019 + Win 10.0.19041 SDK
  - Download Community Edition for free from Microsoft
    https://visualstudio.microsoft.com/vs/
  - When installing, only need “Desktop Development with C++” in the set of options
  - Can use Microsoft APIs or C++11 threads/synchronization

- Prerequisites:
  - Competent C/C++ and debugging skills
  - CSCE 313: Computer Systems
    - Multi-threading and synchronization
  - CSCE 221: Data Structures and Algorithms
    - Queues, sets, hash tables, trees

- Expect heavy coding
Syllabus 3

• Homework (40% of final grade):
  – 4 programming assignments
  – Each explores a different aspect of computer networks

• Exams (60% of final grade):
  – Closed-book, no cheat-sheets
  – 3 quizzes (15% of final grade):
    • Problems from each chapter
  – 3 midterms (45% of final grade):
    • Lecture/homework topics
Syllabus 4

- Grade distribution
  - 90-100% (A), 80-89% (B), 70-79% (C), 60-69% (D), 0-59% (F)
- You cannot pass the class without doing homework
- **Student type A**: emails for every simple issue
  - How to create a project, start a program, linker errors
  - Instructor ends up googling and sending results back
- **Student type B**: never asks for help
  - Spends hours or days being stuck on the same problem
- Best route lies somewhere in between
  - Others might have experienced similar problems, asked about them on stackoverflow
  - Perform initial investigation, obtain insight into the issue
Syllabus 5

• If nothing useful emerges, ask for help
  – Through piazza (general concepts) or email (code-specific)
  – During class, office hours (bring a laptop)
• If problem is solved, answer your own question
  – Help others with their questions on piazza
• If emailing
  – Provide a clear description of the problem, where it occurs, and what you have done to debug it
• Read my tutorial on pointers, debugging, APIs
  – Call stack, breakpoints, immediate/watch/thread window, common debugging techniques, stepping thru code
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Academic Integrity

• No teamwork
  – Discussion with other students is fine, but all submissions must be original and yours

• Cannot use external sources unless explicitly cleared with the instructor
  – If such usage is allowed, acknowledge where the code came from; MSDN examples and 463 sample code are automatically allowed and do not require acknowledgment

• For more details, see Academic Rules, Section 20

• All parties involved in cheating will be penalized equally
  – F* in the class or expulsion from university
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**Homework**

- **Homework:**
  - Due at **10am**, 20% penalty per day (no points after 5 days)
  - Delays for personal reasons must be requested **in advance**

- **Soft copy:**
  - Add a comment to the top of each cpp/h file with your full name, class, and semester
  - Create a zip containing only *.sln, *.cpp, *.h, *.lib, *.vc*proj*, delete everything else
  - *Preserve the original directory structure inside the zip*
  - Upload to canvas.tamu.edu
  - Submitted code should compile as is, release & debug
Homework 2

• Windows machines for this class
  – You can use your laptop/desktop for most tasks
  – But on some of the benchmarks, Suddenlink and dorms are likely to block your connections

• Alternatives
  – Use Azure for students ($100 credit per year)
  – Visit https://azure.microsoft.com/en-us/free/students/
  – Allows you to spin up a virtual machine (Server 2016 or 2019) in the cloud, run your code over Remote Desktop

• Department Windows servers
  – These are no longer available for the whole class, but we might be able to use them in isolated cases; talk to the instructor if Azure is not a suitable solution for you
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Wrap-up

• Homework #1 is due in three parts:
  – Part 1 (8/27 next Thursday!): load a single page
  – Part 2 (9/3): crawl a list of pages with one thread
  – Part 3 (9/17): multi-threaded crawler

• Suggestions:
  – Read my programming tutorial and hw1p1
  – Formulate questions about them
  – Experiment with VS 2019