Tuesday, August 28, 2018

CECS 444 Compiler Constructions

Seminar Notes

August 28, 2018

Syllabus

Things to cover:

- Treewalking (binary)

Textbook:

Fisher, Cytron, Leblanc

- Crafting a Compiler (2009 ~720pg)

Grading:

Cumulative Exams

20% Exams I

20% Exams II

33% Final

20% Projects (Will build on each other)

7% Quiz, Paper, Participation

MGR Types: (Manager Types)

Good: 10% - Super people

Bad: 80% - Need people to do the job

- They buy programmers “By the Yard”

Ugly: 10% - Backstab

Mini- SWE (Software Engineering) Rules

** Reasonable Person STD (Standard)

- Due Diligence (Everybody has their own view)

- Pace yourself

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- AIO: (Adapt, Improvise, and Overcome)

** “Smart” Person STD

- Always be ready to show your work (Show your progress)

★ Most Important Things in SW(Software): **MORALE**

Rules:

0. Get to working Software Fast!

(Go ugly early)

Why!

1. You can see it work

* 2. Users can see it & tell you it sucks

- Get users feedback faster

(MVP = Minimum Viable Product)

1. Never Pre-Optimize (Usually 1% of code is too slow)

- Change this 1% and program increases more in speed

*** Optimize ONLY when proven needed

2. No “BUG HUNTS”

I. Compile-Time Errors ≤ 5 mins to fix

II. Usually 90% of DEV Time spend on Run-Time Bugs

- How to get rid of it?

• Force all bugs into small box (look there!)

★ Use “Add-A-Trick”

- Add 1-N Lines, Compile, then Test

3. EIO (Expected Input/Output)

*** Build Before Coding (Slice it into Itty-Bitty Stepping Stones)

- It focus design on what is important

*** Avoid “Gold-Platting”

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- Making things look nice with nothing to functionality

August 30, 2018

September 4, 2018

September 6, 2018