# Welcome to COMP122

Dr. Steven Fitzgerald

"Steve"

# Attendance and Feedback System

- For the first two weeks of class, attendance will be taken for administrative purposes.

- Students who do not attended classes during the first two weeks are subject to administrative withdrawal.

- You are responsibility to for using the feedback system to record your attendance during the first two weeks of class you have attended class via the following link:
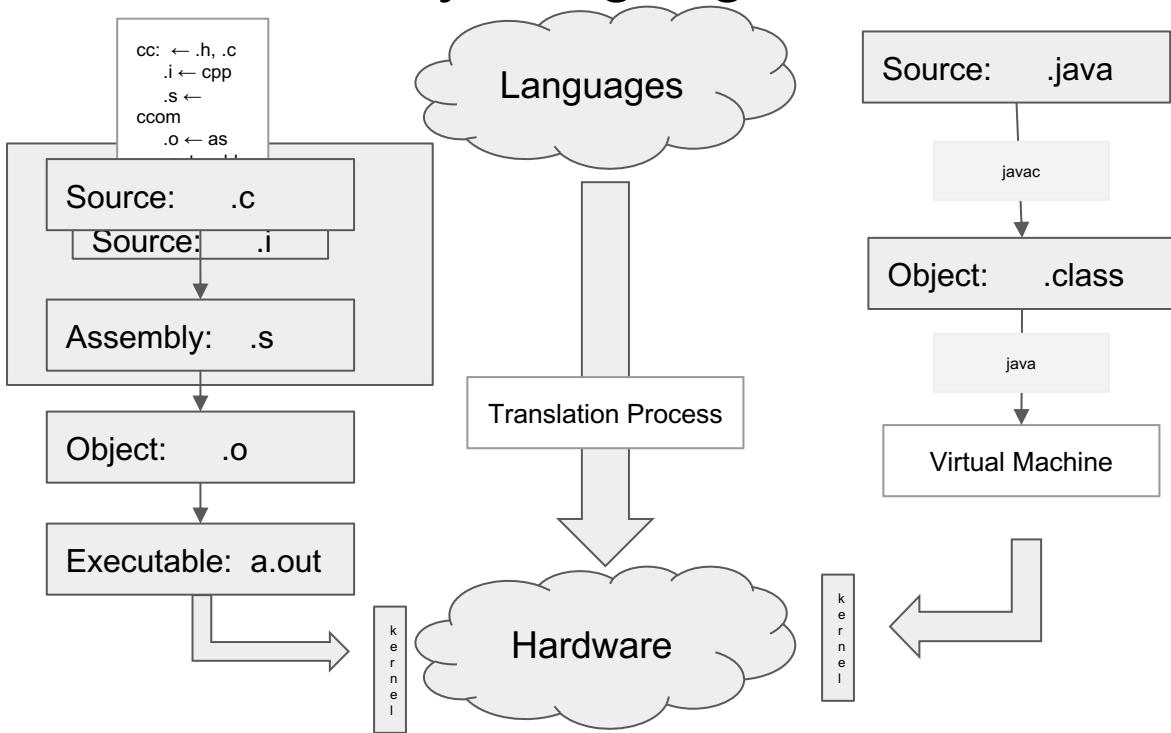
[Feedback System](#)

https://catalog.csun.edu/policies/attendance-class-attendance/

# Class Notes:

- Today's notes:  ~/classes/comp122/administrative/notes_08_28.md
- These are my notes, but I share!
- I make mistakes – all the time – but I take steps to fix them
  - "~~Perfection~~ Continual Improvement is the Goal."
  - "Release Early and Release Often"
  - Be Coachable: that is to say "embrace feedback".
- Use of Markdown
  - Why?
  - Where?
  - Practice!
  - Markdown Viewer!

# Computer Architecture and Assembly Language

- Languages
  - Domain Specific

- Compilers & Interpreters
  - Analysis
    - lexicographic
    - syntax
    - semantic
  - Language Optimization
  - Machine Optimization
  - Translation:  TAC → MIPS

- Hardware
  - General Types: Registers / Stack
  - Specific CPU Controls

- CLI: compilation exercise

```
cc:  ← .h, .c
  .i ← cpp
  .s ←
ccom
  .o ← as
```

Source:      .c

Source:      .i

Assembly:    .s

Object:      .o

Executable:  a.out

kernel

Languages

Translation Process

Hardware

kernel

Source:      .java

javac

Object:      .class

java

Virtual Machine

kernel

In the context of: Languages, Compilers, and Hardware

# Now What?                    (see administrative/notes_08_26.md)

- Classroom Management

- Purpose of this course
    - Not just about assembly language programming nor computer architecture .

- Philosophy
    - On my emphasis in teaching this class

# Quick Overview of Tools used in COMP122

- The missing semester: https://missing.csail.mit.edu/
  - The shell, shell tools and scripting, and the command line environment
  - Editors (subl) [Sublime Text]
  - Version Control (git)
- Command Line Interface (CLI) via bash shell
- Sublime Text
- One Markdown
- Git with the GitHub Product:  (https://github.com/COMP122)
- Make

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- STH (simple testing harness): (https://github.com/smf-steve/sth)
- MARS: (http://courses.missouristate.edu/KenVollmar/MARS/index.htm)
- mips_subroutine: https://github.com/smf-steve/mips_subroutine

# Slack: https://slack.com

- General Description:
- Purpose: Our primary off-line communication tool.

- Team: comp122-csun.slack.com
- Channel: #fitzgerald-f24

- Walk Through and Usage:
  - Review previous messages before posting a new message
  - Create a **Thread** for each topic/issue
  - Create Actionable messages verses "Thanks for sharing" messages
  - Write a message from the point of view of the receiver!
  - Images versus **Text Snippets**
  - Pin important information
  - Edit messages (we all make mistakes… but fix them.)
  - Markdown

# Administrivia

- Syllabus and Class Material
  - https://github.com/COMP122/comp122-f24/blob/main/syllabus.md
  - ~/classes/comp122/syllabus.md

- The Setup Process (i.e., Assignment #1)
  - https://github.com/COMP122/comp122-f24/blob/main/setup.md
  - ~/classes/comp122/setup.md

- Assignments:
  - https://github.com/COMP122/comp122-f24/blob/main/assignments.md
  - ~/classes/comp122/deliverables/assignments.md
  - Assignment #2:
    - See ~/classes/comp122/deliverables/assignments.md