Learning Objectives in this Lesson

• Understand the course topics & logistics
  • Course philosophy
  • Course contents
  • Structure of the lecture material
• Overview of the assignments & assessments
Overview of Assignments & Assessments
Overview of Assignments & Assessments

- Programming assignments are written in modern Java using IntelliJ

You can use any IDE, but your final submission must build & run with the latest IntelliJ & Java 19
Overview of Assignments & Assessments

- Programming assignments are written in modern Java using IntelliJ
- The Java 19 runtime environment (JRE) can be downloaded via IntelliJ

See github.com/douglascraigschmidt/CS891/wiki/Installing-Software
Overview of Assignments & Assessments

- All source code for assignments & examples available at GitHub

Go to GitHub at github.com/douglascraigschmidt/CS891
Overview of Assignments & Assessments

• All source code for assignments & examples available at GitHub
• You will need to learn how to use GitLab et al.

Open source software to collaborate on code

GitLab offers git repository management, code reviews, issue tracking, activity feeds and wikis. Enterprises install GitLab on-premise and connect it with LDAP and Active Directory servers for secure authentication and authorization. A single GitLab server can handle more than 25,000 users but it is also possible to create a high availability setup with multiple active servers.

Do you want more from your GitLab installation? A subscription bundles the Enterprise Edition with support from the GitLab team. The Enterprise Edition allows you to sync LDAP groups, control pushes via git hooks, integrate better with Jenkins and Jira, and to run MySQL and forward logs when using our Omnibus package. Our service engineers will help you keep your server running smoothly.

GitLab Community Edition
Get a subscription

We’ll discuss how to setup GitLab shortly
Overview of Assignments & Assessments

- All source code for assignments & examples available at GitHub
- You will need to learn how to use GitLab et al.
- Be prepared to update your repositories occasionally

“If you don’t like change, you’re going to like irrelevance even less.”
Overview of Assignments & Assessments

- Assignments will provide a range of experience with modern Java concurrent & parallel microservices

Go to GitHub at [github.com/douglascraigschmidt/CS891](http://github.com/douglascraigschmidt/CS891)
Overview of Assignments & Assessments

- Assignments will provide a range of experience with modern Java concurrent & parallel microservices
- Implement a microservice-based movie recommendation system on Spring using modern Java features, e.g.
  - Java lambda expressions, method references, & functional interfaces
  - Java sequential streams
  - Java structured concurrency
  - Java reactive streams
  - Spring WebMVC & WebFlux

The topics covered by the assignments may change during the semester
Overview of Assignments & Assessments

- Assignment assessments will be done via reviews by course staff
Overview of Assignments & Assessments

- Assignment assessments will be done via reviews by course staff
- Assignments *must* be submitted on time or you’ll get a 0

See [github.com/douglasraigschmidt/CS891/wiki/CS-891-FAQ](https://github.com/douglasraigschmidt/CS891/wiki/CS-891-FAQ)
Overview of Assignments & Assessments

- Assignment assessments will be done via reviews by course staff
  - Assignments must be submitted on time or you’ll get a 0
- Your initial submission must compile & be largely complete or you won’t get a review or a final grade

See www.dre.vanderbilt.edu/~schmidt/cs891/assignments.html
Overview of Assignments & Assessments

- Assignment assessments will be done via reviews by course staff
  - Assignments *must* be submitted on time or you’ll get a 0
- Your initial submission must compile & be largely complete or you won’t get a review or a final grade
  - You *must* also run the regression tests & push a screenshot of the results to GitLab

See [www.dre.vanderbilt.edu/~schmidt/cs891/assignments.html](http://www.dre.vanderbilt.edu/~schmidt/cs891/assignments.html)
Overview of Assignments & Assessments

- Assignment assessments will be done via reviews by course staff
  - Assignments must be submitted on time or you’ll get a 0
  - Your initial submission must compile & be largely complete or you won’t get a review or a final grade
- Work must be your own
  - This applies for quizzes & programming assignments

www.vanderbilt.edu/student_handbook/the-honor-system#statement-of-the-honor-code
Overview of Assignments & Assessments

• The bulk of your grade is based on the results of the automated unit tests

See www.dre.vanderbilt.edu/~schmidt/cs891/assignments.html
Overview of Assignments & Assessments

- The bulk of your grade is based on the results of the automated unit tests

See item #16 at github.com/douglascraigschmidt/CS891/wiki/CS-891-FAQ
Overview of Assignments & Assessments

- The relative weighting of each portion of the course is:
  - 45% Quizzes
  - 40% Programming projects
  - 10% Final exam
  - 05% Participation

These weightings may change, depending on various factors
Overview of Assignments & Assessments

• The relative weighting of each portion of the course is:
  • 45% Quizzes
  • 40% Programming projects
  • 10% Final exam
  • 05% Participation
    • Participation includes attendance, involvement, & “following directions”
Overview of Assignments & Assessments

- The relative weighting of each portion of the course is:
  - 45% Quizzes
  - 40% Programming projects
  - 10% Final exam
  - 05% Participation

- Participation includes attendance, involvement, & “following directions”

See [www.dre.vanderbilt.edu/~schmidt/cs891/work-summary.html#quizzes](http://www.dre.vanderbilt.edu/~schmidt/cs891/work-summary.html#quizzes) & [www.dre.vanderbilt.edu/~schmidt/cs891/assignments.html](http://www.dre.vanderbilt.edu/~schmidt/cs891/assignments.html)
Overview of Assignments & Assessments

- The relative weighting of each portion of the course is:
  - 45% Quizzes
  - 40% Programming projects
  - 10% Final exam
  - 05% Participation

  Participation includes attendance, involvement, & “following directions”

Don’t expect to get an A in this class if you do not actively participate!!!!
CS 891: Scalable Microservices: Overview (Part 2)