CS 395: Scalable Microservices: Overview (Part 2)

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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
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• 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

Overview of Assignments & Assessments

- All source code for assignments & examples available at GitHub

Go to GitHub at github.com/douglascairschmidt/CS395

Contains assignments for my CS 8395 course at Vanderbilt University, which can be access via http://www.dre.vanderbilt.edu/~Schmidt/cs395.
Overview of Assignments & Assessments

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

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/douglasraigschmidt/CS395](https://github.com/douglasraigschmidt/CS395)
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
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- 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/cs395/assignments.html](http://www.dre.vanderbilt.edu/~schmidt/cs395/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/cs395/assignments.html](http://www.dre.vanderbilt.edu/~schmidt/cs395/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 exams & 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/cs395/assignments.html
Overview of Assignments & Assessments

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

It’s also important that any given assignment also passes all unit tests for previous assignments!

See item #16 at github.com/douglasraigschmidt/CS395/wiki/CS-395-FAQ
Overview of Assignments & Assessments

- The relative weighting of each portion of the course is:
  - 45% Monthly exams
  - 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% Monthly Exams
  • 40% Programming projects
  • 10% Final exam
  • 05% Participation
    • Participation includes attendance, involvement, & “following directions”
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