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# SOFTWARE ENTERPRISE: CONSTRUCTION AND TRANSITION SER 316

This Course

Course content & Organization

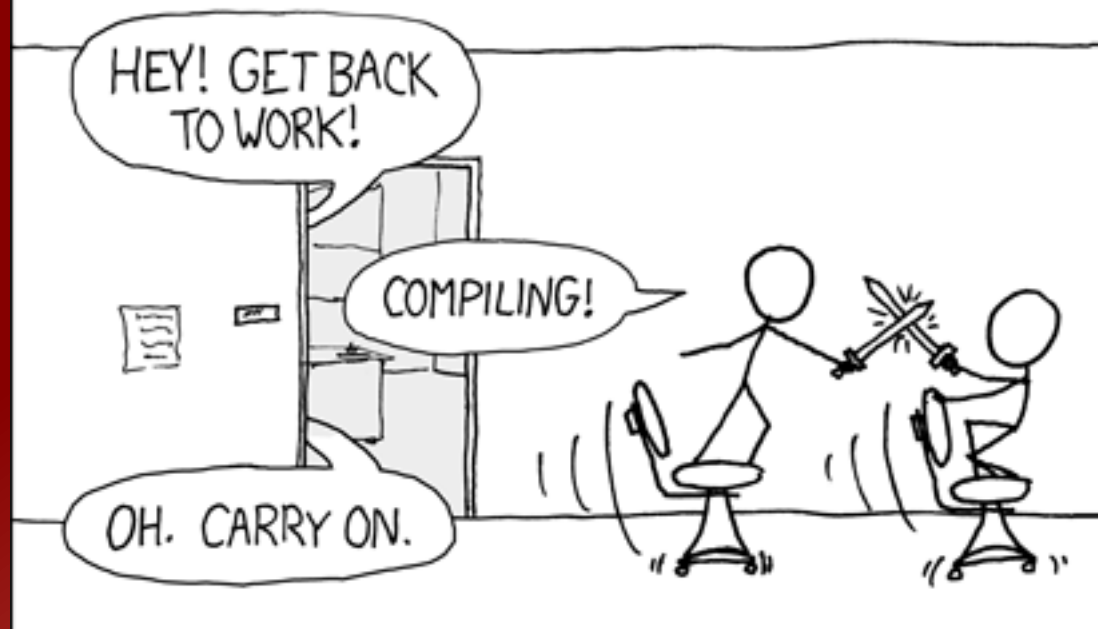
What do I expect

Material & Slack

THIS COURSE

# SOFTWARE DEVELOPMENT

THE #1 PROGRAMMER EXCUSE  
FOR LEGITIMATELY SLACKING OFF:  
"MY CODE'S COMPILING."

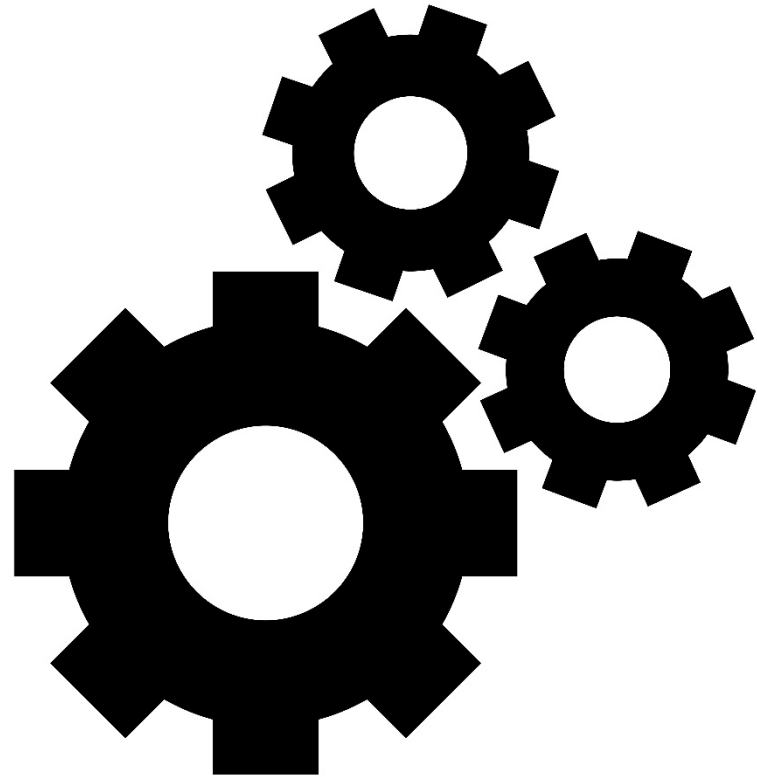


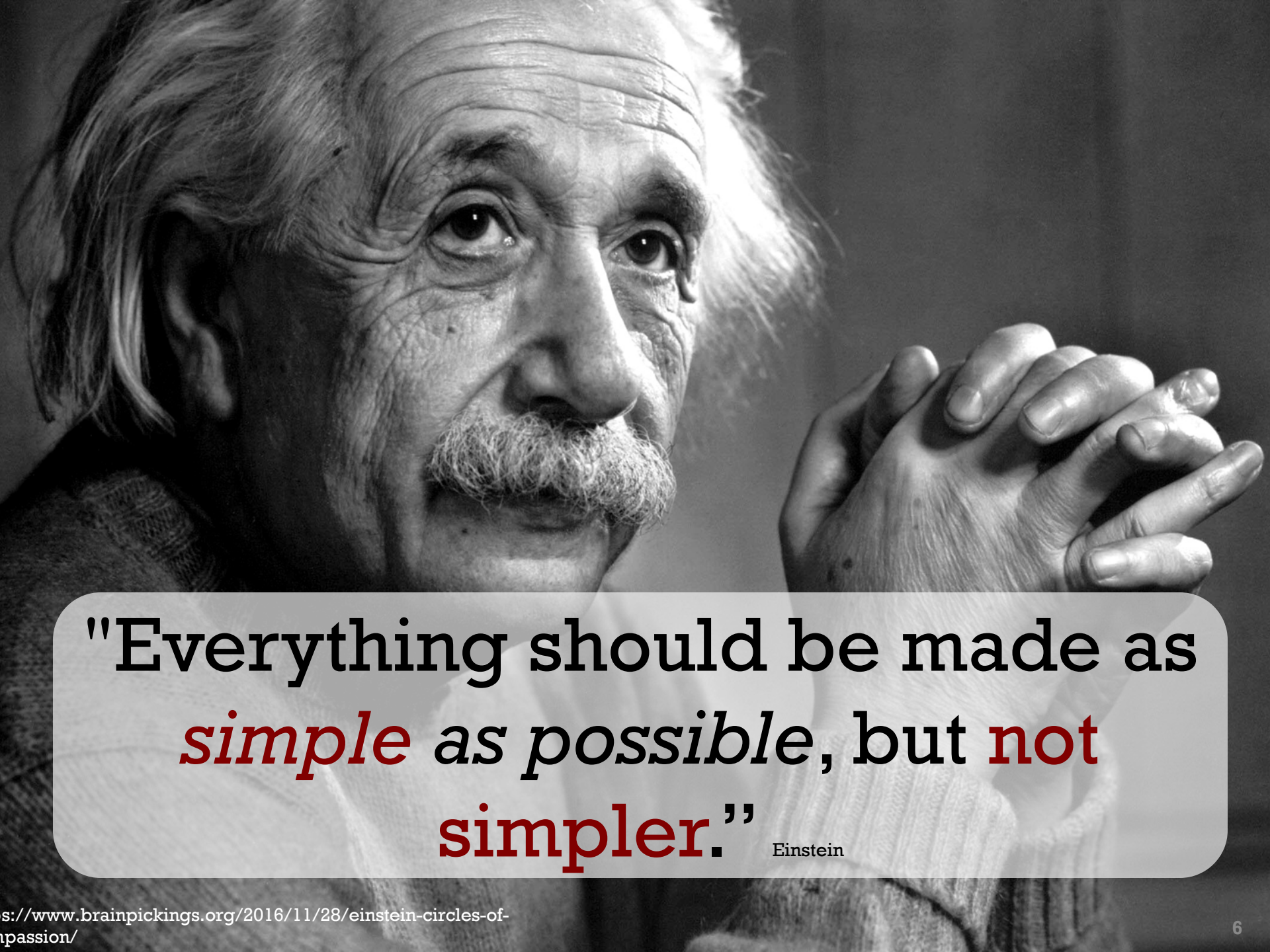
# MAINTAINING CODE



# QUALITY CODE

- Reliability
- Efficiency
- Security
- Maintainability
- Size





"Everything should be made as  
*simple* as possible, but **not**  
*simpler.*"

Einstein

# CONTENT & ORGANIZATION

# COURSE CONTENT

## Modules

1. Working Environments
    - IDEs, *Eclipse*, and Gradle
    - Source Code Control and Git
  2. Unit Testing
  3. Software Quality Reviews
  4. Static Analysis
  5. Design Patterns and Architectural Styles
  6. Refactoring
  7. Measures and Metrics
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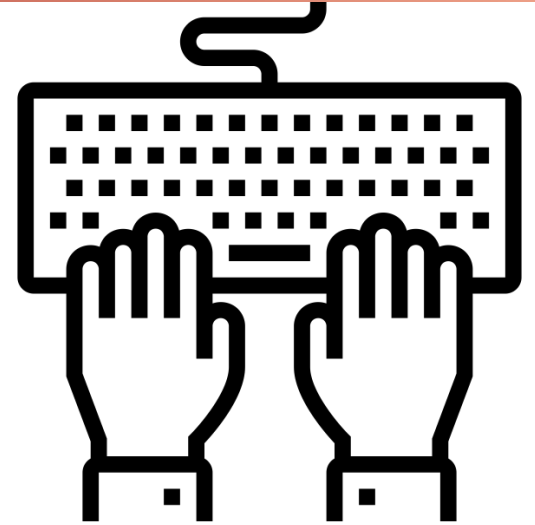
## Project

- Agile & Scrum



# ASSIGNMENTS TOPICS

- Git/GitHub
- Unit Testing
- Code Review
- Static Analysis
- Design Pattern
- Refactoring
- Measurement and Metrics



# LATE POLICY & APPEALS

## Late Submissions

- Submissions later than 24 will not be graded
- Late submissions will lead to 10% deductions per day
- One late pass, see Course Policy document, see Syllabus
- For medical emergencies contact instructor with doctors note

## Appeals

- One week after grades are posted via email to instructor
- If you have any general questions about grading/assignment ask on **Slack** or contact instructor or TA during office hours!

PROJECT

# SEMESTER PROJECT

## **Groups of 4-6 students (depends on course size)**

- fill out the group survey (link is on Canvas)
- we will form the groups
- group is fixed for the time of project

## **You will get a legacy software to work with**

- You will use Scrum (3-4 Sprints, depends on length of course)
- You will need to meet 3 times a week for a Daily Scrum (stay tuned)
- You will need to code a lot
- First ideas on what to implement will be provided soon
- You will get a general idea on where the project needs to go when we kickoff

## **Practice Module concepts**

# SUMMARY

- **Each module topic will be part of an assignment**
- **1 Project with Sprints**
  - Final-presentation of results at the end of session
  - Implement a lot
  - Work in a Scrum team
  - Have **three** meetings during the week (SCRUM standup meetings) – post meeting notes
  - Spend at least 10 hours for the 7 week course on project (5 hours for 15 weeks course)
- **Exam at the end of semester**

WHAT DO I EXPECT

# I EXPECT

- You to take this course seriously (do not underestimate)
- You to watch the lecture videos, read the provided material
- You to ask when you have any questions/problems/hesitations etc.
  - But I also expect you to figure out technical difficulties yourself
- Check Slack and your ASU email at least once a day
- You to work hard on your project and **be a good team member**
- You to code a lot (quality code)
- You to participate in class (on Slack)
- You to put in a lot of effort into this class
- You to spend at least 10 hours a week on your project (5 hours for 15 week class)
- You to do your own work and not cheat

# COMMUNICATION IS KEY



## **Communicate**

- with your team members
- on Slack with your peers
- with the teaching team



# MATERIAL & SLACK

# MATERIAL

- You will find all important material on Canvas in due course
- Please provide feedback about the course layout so we can adjust things
- Please make sure to read the Syllabus and the Course Policy document
  - Late Policy
  - Academic Integrity
- Weekly calendar

# SLACK

- Main communication is via Slack
  - Only Grade appeals are via email
- Please introduce yourself on Slack
- You will get private channels for your project (we will set this up)
- Communicate, communicate, communicate...



# TODO RIGHT

- Go through Canvas and check the todos
  - Read the Course Syllabus
    - Take the Syllabus Quiz
    - Take the Academic Integrity Quiz
  - Read the Course Policy document
  - Fill out the Team forming survey
- Install the Slack app
  - Find your way around Slack
  - Introduce yourself
- Continue to Agile and Scrum intro video

