Introduction to ISPW 2019-20

Davide Falessi

Agenda

- Myself
- Introduction to Software Engineering
- Rules
- Grading
- Project

My Self: General

- Dr. Davide Falessi (falessi@ing.uniroma2.it)
- Office: A3-06
- You got lucky:
  - Taught it several years.
  - This is what I like and what I know.

My Self: Vitae

- General
  - Associate Professor at CalPoly from January 2015
  - Worked in 5 different countries as a researcher and teacher
- Services
  - 2017 IEEE Computer Society Integrity Chair
  - NSF panelist and NSERC external reviewer
  - IEEE Software, Associate Editor of Software Engineering Economics and Multimedia Editor
  - Member at large of the 2016 IEEE CS Publications Board
  - Guest Editor of the Special Issue of Technical Debt in the Journal of Systems and Software – Elsevier. Software Analytics at IEEE Software.
  - First author of several papers in the most important software engineering journals including TSE, TOSEM, EMSE, and IEEE Software.
  - PC member of more than 50 international software engineering conferences (~8 per year).
- Publications:
  - Journals: 23
  - Conferences: 34
  - Number of citations: ~1200
  - H-index: 21
- Very good at many sports…

Course Objectives

- To understand principles, concepts, methods, and techniques of the software engineering approach to producing quality software (particularly for large, complex systems).
- To organize and manage a medium-sized software development project, including project plans and documentation, schedule and cost estimates, and quality assurance activities.

ISPW

- Schedule:
  - M: Room 3: 11.30- 13.00, 14.00 – 15.30
  - W: Room 1: 11.30- 13.00
  - F: Room C11: 11.30- 13.00
- Mailing list:
  - **ispw2019-20@lists.uniroma2.it**
  - **https://lists.uniroma2.it/index.html/info/ispw2019-20**
- Office Hours:
  - MWF: 9.30-11.
- Registrations of any type are not permitted.

Engineering vs Science

Grading

- Two professors, one exam consisting of two sections, two sets of topics, two grades (to be averaged).
- See schedule.

STRUCTURE

- My two-hour class can have:
  - Lecture
  - Project development
  - Homework
  - Workshop: revision of a homework

Bonuses and incentive based learning

- This class aims to mimic a **professional** environment.
  - All of us must perform as professionals
    - No eating, no sleeping, no social media, etc.
  - Lecture time must be considered as a business meeting
- Unprofessional behaviors will not be tolerated.
- Your failure is my failure.
- Lecture time is small
- Lots of interaction

Bonuses and incentive based learning

- The 3 most interactive students will receive a +5 on my grade. Criteria:
  - Number of intelligent questions
    - I like been challenged.
  - Leadership in the group
  - Professional behavior
  - All HMW provided in time

Your should prove your ability in

- Collaborating
- Asking intelligent questions
- Fixing my mistakes
- Troubleshooting alone (e.g., SonarQube installation)

Homework

- Homework is:
  - Meant to to be an opportunity to learn.
  - Not meant to be perfect.
- Will be fixed and discussed by you all.

Project

- Each student is in charge of a specific item in each type of deliverables.
  - See external file for the list of deliverables.
- Code quality will be checked by an automated analyzer (SonarCloud).
- Code functionality will be checked via a recorded video and during the oral exam.

Projects

- Think about a new system you want to develop.
- It has to be:
  - New
  - Attractive
  - Feasible
  - Based on Java
  - About 4K LOC
  - To be developed by a gropu of 3 people.

- Future goals:
  - Definition of:
    - The game rules.
    - The winning factors.
    - Title + Acronym