

# Software Testing Introduction

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# Outline

- ▶ Lectures.
- ▶ Lab on Test driven development. Groups of 2.
- ▶ Project, groups of 4. Test case development for a python library of your choice.
- ▶ Exam

# Grading

- ▶ The Exam is U,3,4,5
- ▶ Project work and the lab is pass/fail.

# Lab

- ▶ Test driven development exercise. Using author name parsing in BibTex.

# Project

- ▶ White box and Black box testing for a python library of your choice.
- ▶ Presentation 30/11.
- ▶ Written report deadline 2018-01-08.
- ▶ You must document what your tests are designed to do.

## Lecture slides and revision

- ▶ My lecture slides are rather sparse. You will not be able to pass the exam by simply looking at the slides. You will need to read the relevant sections of the book. I will put up chapter links on <http://user.it.uu.se/~justin/Teaching/Testing/index.html>. Please note that the chapter links are for the 2nd edition of the book. This is much improved over the first edition of the book.
- ▶ Some of the lab and project work will also prepare you for the exam. From your work on test design and documentation you will prepare yourself to answer some more reflective questions on the exam.

# What will you learn?

- ▶ Software testing is an interesting mix of art and theory.
  - ▶ Theory tells you that testing is impossible.
  - ▶ But testing does improve software quality.
- ▶ I will give you the tools to develop tests in a more principled way. You will be given the theoretical tools to think about questions such as
  - ▶ What do my tests cover?
  - ▶ What does coverage actually mean?