

## 02161: Software Engineering 1

### 3.1 Acceptance Tests

- Provide acceptance tests in JUnit for one or more of the detailed use cases, you have created for last week's exercise
- It is sufficient to just write the code for the test classes without implementing the production code
- Submit the detailed use case description on which the test is based and the source of the test code as a PDF file to <mailto:huba@dtu.dk>

### 3.2 Test Driven Development

- Implement a converter from numbers to roman numeral using test-driven development.
- For example, 10 should yield X, 2013 should yield MMXIII, etc. You can find more information on roman numerals on Wikipedia [http://en.wikipedia.org/wiki/Roman\\_numerals](http://en.wikipedia.org/wiki/Roman_numerals)
- You don't have to convert numbers over 3000
- Start with the simple test cases first, e.g. 1, 5, 10, ..., then use the more complex cases like 2, 20, ..., 4, 40, ..., and then 11, 14, 19, ...
- If you know the algorithm, don't implement the algorithm at once, but create it through TDD and refactoring
- Please submit the resulting Eclipse project as a ZIP file to <mailto:huba@dtu.dk>.
- You can look at <http://youtu.be/nt2KKUSSJsY> for a video by Jason Gorman on developing a fibonacci number generator test-driven
  - You can use Infinitest (<https://infinitest.github.io>) instead of JUnit-Max which is used in the video.

### Programming exercises

- Don't forget to work on the programming exercises. Programming exercise 3 fits to this weeks lecture.