# TEACHING AND LEARNING SOFTWARE DEVELOPMENT

Reflections on TDD and mob programming in the classroom

Andreas Pettersson

# BACKGROUND

ME:

- Student until "recently"

- Former Teacher's Assistant (TA)

- Enjoy teaching and sharing things I've learned

# CHALLENGES IN THE CLASSROOM

- Students may be reluctant to ask for help or have trouble getting started

- Students may become uninvolved or disinterested

- Programming is hard to learn, and code is hard to read

# HOW CAN TDD HELP STUDENTS?

- Tests have a clear intention and test a single behavior each

- Segregating passing tests and refactoring

- Natural language is easier for everyone to understand than code

- Learn useful tools that you may not pick up during university (Version Control, Intellisense, etc)

# HOW CAN MOB PROGRAMMING HELP STUDENTS?

- Imperative thinking! Declarative communication?

- Discussions and passing on information are great ways to learn

- Every student has ownership of the same code and learn good practices together

- A social experience that involves everyone

# POTENTIAL NEGATIVES

- May not be suited to larger groups of students

- Does TDD assume too much knowledge ahead of time?

- Students may have different concerns and priorities

- Other problems?

# CONCLUSION