

# Advice from previous years – Revision of goals

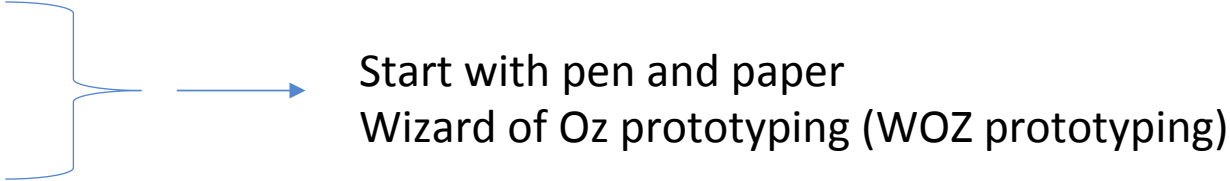
- Apply her/his technical expertise to a multi-person project where an electronic product (FPGA / ASIC) is specified, designed, implemented, and verified.
- Proficiently use modern EDA tools for FPGAs / ASICs.
- Contribute, in several team roles, to a multi-person project where an industry-like project model is used. This includes planning, follow-up and trade offs under resource constraints.
- Reflect on the group process in an international team.
- Write an academic report, with several authors, describing a product development project, with correct handling of references and including relevant ethical aspects.
- Document an electronic product technically, including testing and verification documentation.

# Advice from previous years – issues

- Issues to address
  - your technical task
  - how to handle yourself and the others\*
  - your writing and your documentation

\*others = the team as a whole and individual team members

# Advice from previous years – Technical Task

- Technical ask
  - Make sure you know what you have been taught (electronic design, tools, software)
    - Review DAT093, DAT110 exercises during the preparatory/planning stage
  - Clarify your task
    - What
    - How

Start with pen and paper  
Wizard of Oz prototyping (WOZ prototyping)
  - Clarify your test process

# Advice from previous years – Teamwork

- Handling yourself and the others
  - Use the team to force yourself to work
    - work simultaneously with at least one more person
    - work not necessarily on the same thing but at the same time and place
  - Use the agreement as a way of dealing/  
cooperating with others
    - spend time with the agreement, discuss it in meetings and co-write it with the physical presence of everyone
    - define your cooperation tools early on – remove little issues that create friction when co-writing, file-sharing and code writing / sharing (GIT is the industry standard)
    - **update** the processes described in **the agreement** the same way you created the agreement in the first place

# Advice from previous years – Writing/ documentation

## • Writing

- make sure you know how to use LATEX and that all team members know how to use LATEX
- apply what you will be taught
- write your part, have others review and proof-read your part
- make sure people have time to review things
- try to have a homogenous text – define one person as ‘the editor’

## • Documentation

- use the step by step approach in your writing
- use meaningful names for your files ( vivado project files, matlab files)
- do a practical experiment and document each tool and process

# Some practical advice

- Set up HW/SW environment asap.
  - Time saved
  - Faster workflow
  - Recommended to follow a coding standard
- Work at least in one area you are not comfortable with
  - Learning new things
  - Its very rewarding if these things work
- Regular meetings and common working hours recommended
  - Better team dynamics
  - Better collaboration
- Test HW as soon as you get it

# Some practical advice-cont'd

- Take help if stuck
  - Time saved
- Finish Agile stuff in the first two weeks
  - So you can start doing the fun things
- Safety is important!
  - Read datasheets before connecting anything to the FPGA
- Talk to other teams as well
  - Exchange of ideas
- Divide into smaller tasks
  - Thinking only about the big picture often never gets you started soon enough