Requirements in Agile Development, 2018

"…to provide practical knowledge in how one applies theories from human-computer interaction in agile software engineering processes to develop computerized systems and tools that correspond to intended users' needs."

- Teachers
  - Mats Lind; Rebecca Andreasson
- Guest lecturers
  - Davide Vega D'aurelio
  - Richard Whitehand

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Requirements in Agile Development, 2018

- Four main parts
  - Lectures
  - Seminars
  - A project
  - Individual report
- Examination
  - Project + individual report: pass/fail only
    - If passed you will be assigned grad "3"
  - Optional home exam to obtain a higher grade (if done well…)

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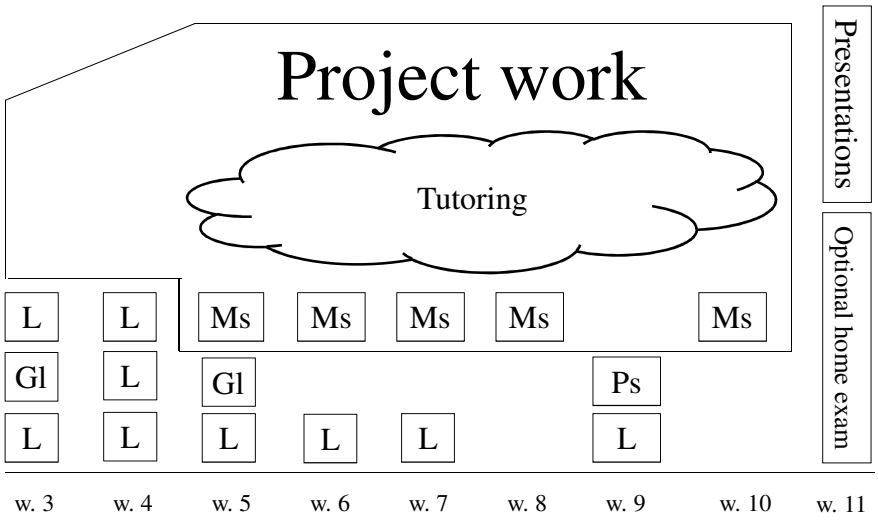
Requirements in Agile Development, 2018



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Examination and grading

- The project will be graded using a pass/fail decision only.
  - The criteria used will be the completeness and quality of each individual milestone and your critiquing as well as an overall judgment of the project work and the resulting prototype.
  - You will have to write and hand in a personal reflection on the project work as well as either attend the paper seminar or hand in a written report.
- This means that if you belong to a group whose project has passed, you have handed in a personal reflection and attended the seminars/handed in reports, you will be assigned the grade '3'.
- If you want a higher grade you are required to take the optional individual home exam and, of course, do well on that exam.

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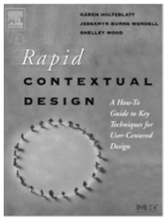
Course books

Hugh Beyer, *User Centered Agile Methods*:
http://www.morganclaypool.com/doi/pdf/10.2200/S00286ED1V01Y201002HCI010

Holzblatt et al, *Rapid Contextual Design*:
http://site.ebrary.com/lib/uppsala/docDetail.action?docID=10254657



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About the project

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Project (1)

- Groups of 4 to 5
- Purpose: To try a user centered method (Contextual Design) on an existing problem as an aid to produce both a backlog of user stories and an overall design sketch of the UI
- Prerequisite: Find a knowledgeable person who is willing to be interviewed
  - Examples:
    - A hair dresser (scheduling customers, billing etc)
    - A nation official
    - A fellow student interested in ….
  - Preferably NOT something you yourselves know a lot about!

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Project (2)

Five milestones:

- Milestone 1: A short written description of the work you have selected to analyze and a description of what models you will use in the project and motivations as to why these were selected.
- Milestone 2: Documentation of work and users your system supports
- Milestone 3: User stories based on your analysis
- Milestone 4: First sketch of the UI of your proposed system
- Milestone 5: 'Paper and pen' version of your prototype
- Final report and presentation: Revised version of your prototype after evaluation with your users

Please Note: There is also a paper seminar in week 9

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Project (3)

Forming groups:

- There are two seminar tracks with one meeting per week per track (see overview)
- Find people you want to work with and that all can attend the same track

When you have formed a group, register three things:

1. The members of the group
2. Which seminar track your group want to follow
3. Which presentation seminar your group want to attend

When you have ideas for a project, please discuss it with me!

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Delimitation

This course module concerns software intended to help people solve (real world) problems.

- Not computer games
  - Intended to entertain
- Not educational software
  - Intended to educate

(Although some of the reasoning and methods can be applied there, too!)

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Starting point: Statements

Most systems developed today:

- are inferior tools for business' and organizations, and their workers, compared to the potential promised by current IT-technology
- furthermore, they are not designed in the most efficient way

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Problems with systems development

- During the development
  - Delays
  - Restarts
  - Abandoned projects

But also:

- After the system has been launched
  - No increased productivity
  - Bad quality (bugs, interruptions etc)
  - Users dissatisfied (stress, health issues etc)

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Recent examples

- The New York City Automated Payroll (NYCAP) System started in 1999 and was declared completed in 2011. The budget and original estimate was $66 million. When the project was declared completed, the total cost was an astounding $360-plus million, or 5.5 times the original budget. The NYCAP project was one of many large troubled projects in the New York City government around this time.
- Another project was the CityTime project, which had a budget of $63 million over five years, but ultimately cost $700 million over 10 years. In reaction to these projects' challenges, the NYC Council passed an ordinance that any IT project that exceeded the budget by more than 10% must report to the City Council. *(CHAOS 2013, Standish Group)*

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Recent examples (Sweden)

- Nordic bank giant NORDEA recently abandoned a large IT-development project that had spent 5 billion SEK (app. $650 million) over seven years. *(SvD Oct 22, 2014)*
- Another Nordic bank, SEB, recently abandoned an IT-development project that had spent 1 billion SEK (app. $130 million over 7 years. *(Computer Sweden http://computersweden.idg.se/2.2683/1.449767/sebs-flopp-kostar-miljarder)*

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ISO 9241 part 11

- (*Usability is*) the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.

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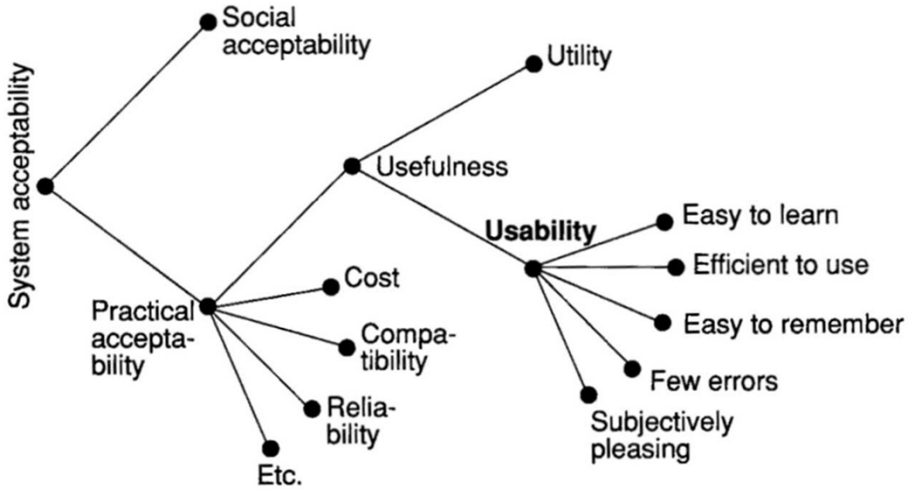

From Nielsen, 1993