



MASTER IN  
COMPUTER  
SCIENCE

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# Bringing Agile Artifacts Closer to the Implementation

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# Problem

- Dispersion of requirements among mediums
  - E-mails
  - Sticky notes
  - Tools
  - Artifacts
- Traceability and consistent documentation harder to achieve
- Agile practices require dynamic management of requirements

# RQ1

*What are the available requirements artifacts for software projects, and what are their characteristics?*

Steps:

1. Analyse a selection of RE-related literature for artifacts
2. Classify them along different dimensions
3. Conclude findings from classification analysis

# Classification dimensions

1. SDLC phase(s) of origin
2. SDLC phase(s) of use
3. Format
4. Model
5. Physical
6. Executable
7. Contains
8. Helps create
9. Convention of creation

# Classification

- The resulting table of artifacts was analysed
- Several findings discovered

# Findings

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3. *A small number of artifacts are used in the Deployment and Maintenance phase.*
4. *A small number of graphically enhanced artifacts are executable.*
5. *Most artifacts are used to create other artifacts.*

# Approach

- Model artifacts in the development environment
- Model requirements workflow inside IDE
  - Creation, updating, removing artifacts
  - Visualization
  - Navigation
- Using IDE for requirements management

Demo

# Future work

- Linking domain entities with requirements
- Modeling other artifacts and custom views for them

# Question Time