You should perform…

Requirements specification…
Requirements elicitation…
Requirements agreement…

... Requirements management
... Requirement validation
Your requirements (artefacts)...

• ... should be
  
  • Prioritised
  • Traceable
    • Pre-traceability
      • To the source or origin
    • Post-traceability
      • To other requirements
      • To other project documents
Your specification should...

- ... be organised and supported by the requirements specification template
- ... include

- Purpose of the Specification
- Scope (System context)
  - Subject facet, usage facet, IT system facet, Development facet
- Acronyms and definitions
  - Start and maintain the glossary!!!
- Overview of specification / structure

- ...


Your specification should...

• … include

  • Product perspective
  • Product functions (generic at this point)
  • User classes and characteristics
  • Assumptions and dependencies

• Functional requirements
  • Each requirement should...
    • Have a unique ID
    • Have a description – you must use criteria for good requirements

• Non-functional requirements
  • Performance
  • Reliability
  • Security
  • Maintainability
  • Portability
Your specification should…

• … include

  • Goal models
  • Scenarios
  • Solution-oriented requirements (expressed using)
    • Class diagrams
    • State diagrams
    • Sequence diagrams

See (evaluation) criteria for the models in the test tasks
Submission

• Group composition: **9.December**
  Send email to <rma@ut.ee>
  (being late – minus 2 points)

• Intermediate report: **15.December**
  Use course Website – Submit function
  (being late – minus 5 points)

• Final: **23.December**
  Use course Website – Submit function
  (being late – minus 5 points)
Guidelines

No need to follow – only ideas
Actor and their goal modelling

Create the actor/stakeholder dependency model
  • Illustrate how actors depend one on another for achieving their goals

Create another model where *software intensive system* is introduced
  • Illustrate how software intensive system helps achieving actor goals

• Use – *i* modelling language
  • Strategic dependency model
  • (you do not need to define *strategic rationale model*)
System goal modelling

• Narrow your scope - consider the prioritisation results:
  • Select the most important functional concerns (e.g., features, requirements, etc.).
  • Refine the selection to the goal model(s)

• Use – KAOS modelling language
  • Consider the following question
    • Why
    • How
    • How else
Scenario Modelling

• Create a use case diagram
  • What should your software intensive system do (what functions/features should it have) to satisfy dependencies?
  • Have you previously defined any functional requirements (e.g., features, groups of requirements) that satisfy the identified dependencies? Include these requirements in your use case diagram.

• Define explicit scenarios on how your software intensive system interacts with its actors (and/or other components)
  • Fill in 3-4 use case templates
Requirements Modelling

• Requirements Modelling
  • **SCOPE** the problem you analyse and select/agree about the most important concern for refinement

For the selected scope:
• Create a **class diagram**
• Create a **state models** (3-4, for different objects of different class)
• Create a **sequence diagram**
Requirements management

• Traceability management
  • Do not forget to maintain it during the whole workshop

• Do not forget that non-functional requirements, goals, use cases, and scenarios are requirements artefacts
  • Maintain their appropriate properties
Requirements Validation…

• … forms for requirements specification and requirements models will be used to evaluate validity (and to grade quality) of your specification