The interview instrument

	Characterization
1.1	Tell us about the company (number of employees)
1.2	Tell us about the company's product(s)
1.3	Tell us about number of total requirements, number of NFR, and number of performance requirements in a typical project
	Non-Functional Requirements type
2.1	What non-functional aspects are most important? Rank top five aspects and give short motivation (see Appendix A)
2.2	For the most important NFR type (ranked first), give short motivation of why it is important and describe how you interpret the NFR type
	NFR Estimations in General
3.1	What is the procedure when performing cost estimations of non-functional requirements? (expert opinion, experience, previous projects, workshops/focus groups, model etc) Any difference between NFR types (for example, performance vs. usability)?
3.2	How accurate are cost estimations of NFR (in the beginning of the project)? Least _____% Probable_____% Most _____%
3.3	How do you improve/assure accuracy of cost estimations of non-functional requirements?
3.4	What is the procedure when performing value estimations of non-functional requirements? (expert opinion, experience, previous projects, workshops/focus groups, model etc) Any difference between NFR types (for example, performance vs. usability)?
3.5	How accurate are value estimations of NFR (in the beginning of the project)? Least _____% Probable_____% Most _____%
3.6	How do you improve/assure accuracy of value estimations of non-functional requirements? (previous projects, workshops/focus groups etc)
	NFR Dependencies in General
4.1	What kind of interdependencies between NFR-NFR, NFR-FR, and FR-FR have you come across? (Respondent gives examples, Appendix B to see if those are common), What kind of interdependency type is the most important and why?
4.2	In what way is dependency analysis for non-functional requirements handled? (how, when, by whom) Any difference between NFR types (for example, performance vs. usability)? Any difference between NFR and FR?
4.3	Are dependencies documented? (how, why, why not)
4.4	Are dependencies actively looked for? (how, why, why not)
4.5	How do dependencies (focus on performance requirements) affect product development?, How is it handled?

	Prioritization of Non-Functional Requirements
5.1	How are NFR in general prioritized? Any difference between NFR and FR?
5.2	What are the major challenges with prioritizing NFR? Any major differences between NFR types, for example, performance vs. usability requirements?
5.3	What information and attributes are considered/documented when prioritizing NFR?
	Fulfillment of Non-Functional Requirements
6.1	Are non-functional requirements measurable? How? What scale is used?
6.2	Are non-functional requirements dismissed? If yes, what is the most common reason for dismissal?
6.3	How often are non-functional requirements dismissed in projects? Any difference between different NFR, for example, performance vs. usability? (why)
6.4	How many of all non-functional requirements are dismissed? Least possible: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Most probable: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Largest possible: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Any difference between different NFR, for example, performance vs. usability? (why)
6.5	If requirements are dismissed, any consequence analysis? (Prioritization is performed again, Dependencies are updated, cost and value estimations are performed again?)
	General About Non-Functional Requirements
7.1	What challenges do you face when working with non-functional requirements? Any differences between NFR types, for example, usability and performance requirements? (why, why not)
7.2	What has been successful when working with non-functional requirements? (Pros and cons)
7.3	Can you think of any challenges/good things etc that we have not covered that you think we should have asked?

2.1 What non-functional aspects are most important?
Rank top five aspects and motivate your answer

>
> Accuracy
> Security/Integrity
> Safety
> Interoperability
> Suitability
> Compliance
> Reliability
> Maturity
> Fault tolerance
> Recoverability
> Usability
> Efficiency/Performance/Capacity
> Maintainability
> Testability
> Changeability/Flexibility
> Analyzability
> Stability
> Portability
> Adaptability
> Installability
> Conformance
> Replaceability
> Correctness
> Reusability
> Other:

Appendix B

*4.1 What kind of **interdependencies** between NFR-NFR, NFR-FR and FR-FR have you come across?*

NFR - NFR

R1 *OR* R2
R1 *AND* R2
R1 *REQUIRES* R2
R1 *TEMPORAL* R2
R1 *CVALUE* R2
R1 *ICOST* R2
Other, please specify:

NFR - Functional

R1 *OR* R2
R1 *AND* R2
R1 *REQUIRES* R2
R1 *TEMPORAL* R2
R1 *CVALUE* R2
R1 *ICOST* R2
Other, please specify:

FR - FR

R1 *OR* R2
R1 *AND* R2
R1 *REQUIRES* R2
R1 *TEMPORAL* R2
R1 *CVALUE* R2
R1 *ICOST* R2
Other, please specify:

Explanation

R1 *OR* R2   Only one of {R1, R2} needs to be implemented.
Example: In a word processor, the capability to create pictures in a document can either be provided as an integrated drawing module or by means of a link to an external drawing application

R1 *AND* R2   R1 requires R2 to function, and R2 requires R1 to function.
Example: A printer requires a driver to function, and the driver requires a printer to function

R1 *REQUIRES* R2   R1 requires R2 to function, but not vice versa.
Example: Sending an email requires a network connection, but not the opposite

R1 *TEMPORAL* R2   Either R1 has to be implemented before R2, or vice versa.
Example: The function add object should be implemented before delete object

R1 *CVALUE* R2   R1 affects the value of R2 for a customer. Value can be either positive or negative.
Example: A detailed on-line manual may decrease the customer value of a printed manual

R1 *ICOST* R2   R1 affects the cost of implementing R2. Value can be either positive or negative.
Example: A requirement stating that no response time should be longer than 1 second will typically increase the cost of implementing many other requirements