The DASISH Questionnaire Design Documentation Tool (QDDT)

Benjamin Beuster, Hilde Orten (NSD)

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Outline

- Why document questionnaires?
- The DASISH Questionnaire Design Documentation Tool (QDDT) – Current functionalities and examples from the ESS
- Further development

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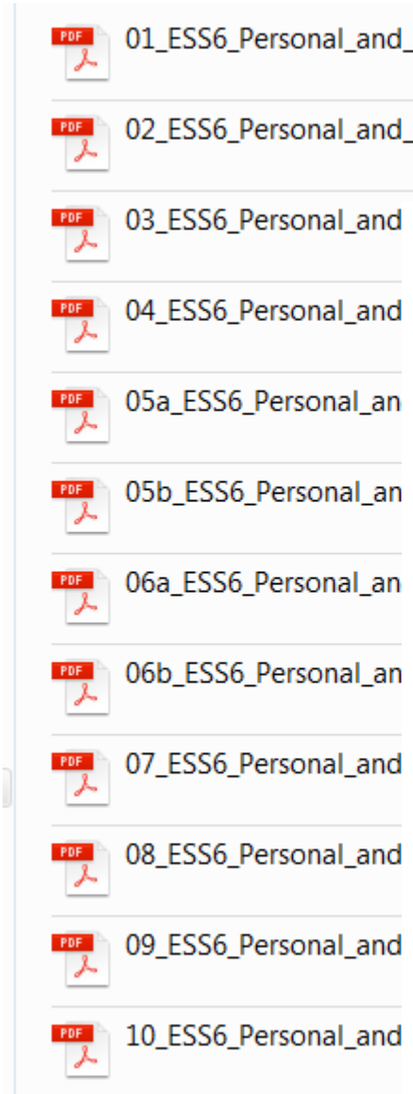
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Why document the Question and Questionnaire development?

- Relevant information surrounding the questionnaire development
- Preserve information for the future to answer any questions about the questionnaire once the research is complete
- Reuse questions (metadata elements) for other researches

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City comments:

Comment

Inclusion of the term 'challenging' caused difficulties for some respondents in cognitive interviewing. However, we feel that reducing the item to 'interesting' only means that it is no longer sufficiently distinct from 'Absorption' or 'Boredom'. We therefore propose dropping this item from the sub concept.

Question

20a **CARD X** How often do you do things that you find interesting? Please use this card.

None or almost none of the time	**01**
Some of the time	**02**
Most of the time	**03**
All or almost all of the time	**04**
(Don't know)	**88**

City comments:

Comment

This item was not pre-tested but we feel that it is not sufficiently distinct from 'Absorption' or 'Boredom'. We therefore propose dropping this item from the sub concept.

SUB CONCEPT NAME: Boredom

Describe the sub concept in detail outlining any further sub concepts or specifying that it can be measured directly
Feeling bored can be characterised as the opposite of feeling engaged in activities, hence low levels of boredoms should be associated with high levels of engagement.

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Data/Metadata Life Cycle

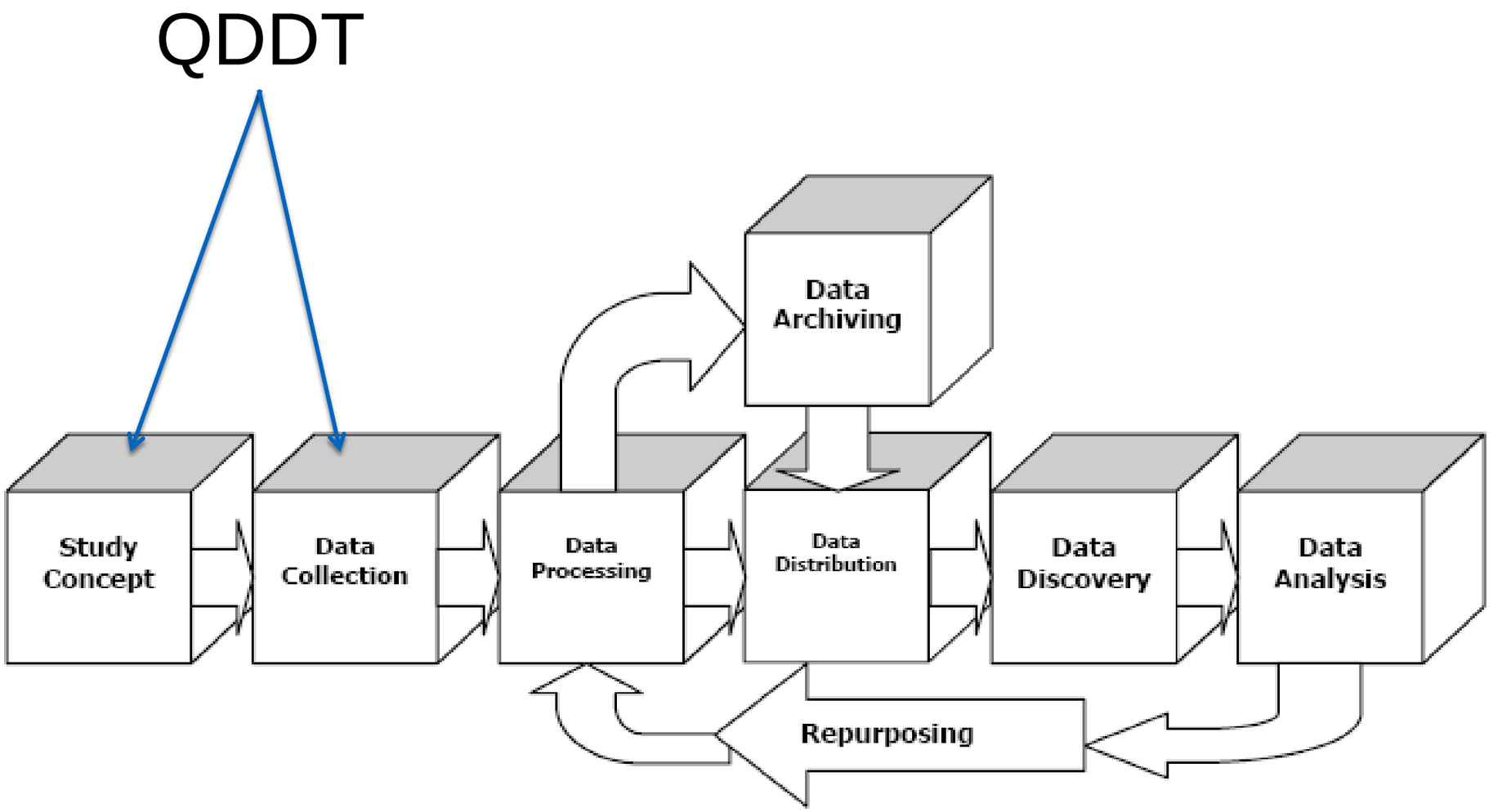


Figure: Combined Life Cycle Model

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The DASISH Questionnaire Design Documentation Tool (QDDT)

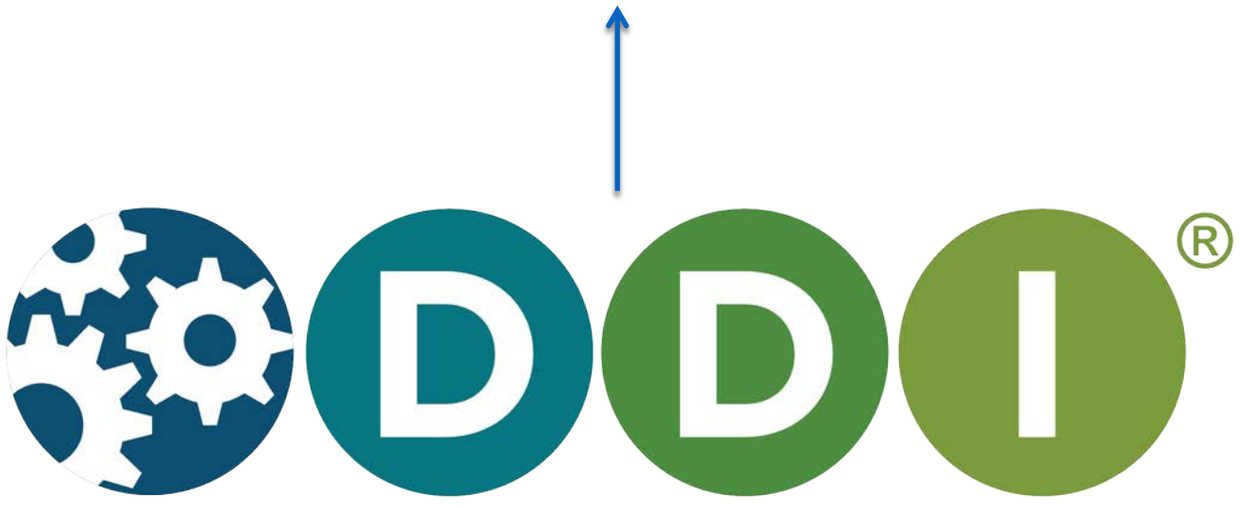
- QDDT documents the questionnaire design process from the first conceptualization to the final questionnaire
- Aim is to assist large-scale survey projects in their business processes related to questionnaire development

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Workflow in the European Social Survey (ESS)

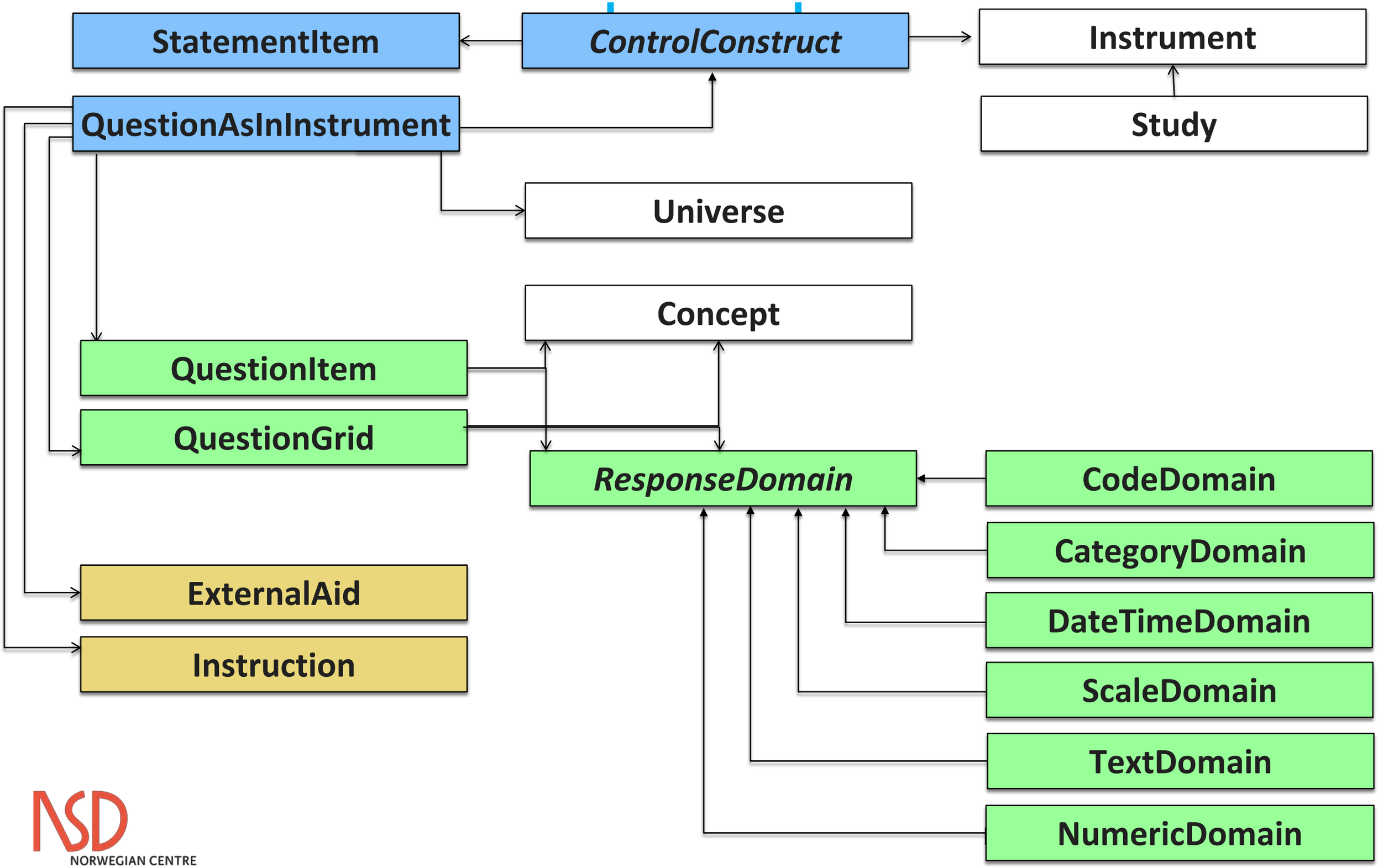
Questionnaire Module → **Concept** → **Question** → **Response Domain** → **Instrument**



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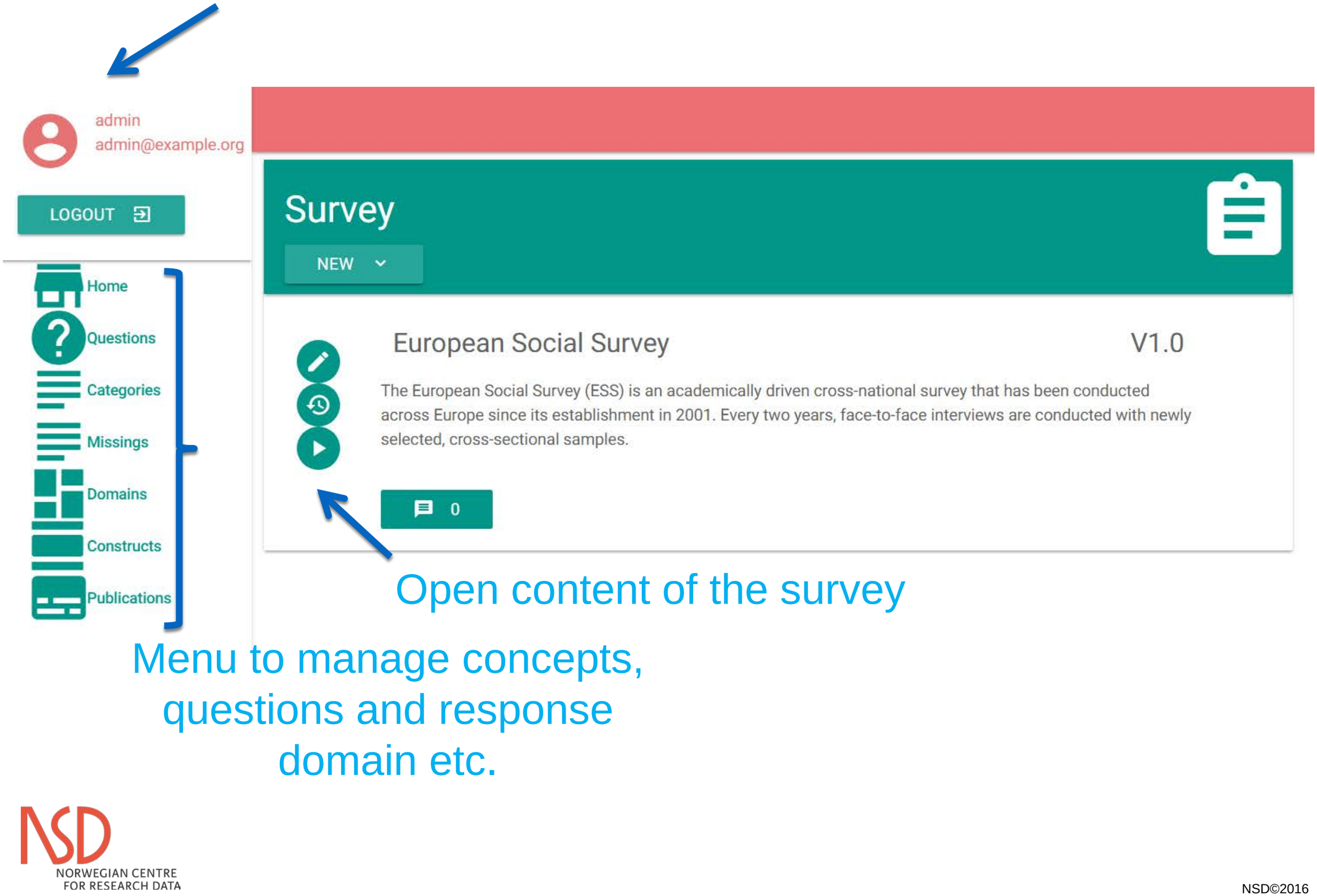
QDDT conceptual model, DDI 3.2



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Online tool



Open content of the survey

Menu to manage concepts, questions and response domain etc.

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admin
admin@example.org

LOGOUT

- Home
- Questions
- Categories
- Missings
- Domains
- Constructs
- Publications

SURVEY [European Social Survey]

Studies for European Social Survey

NEW

ESS Round 7 (2014) V1.0

Seventh round of the European Social Survey.

0

ESS Round 8 V1.0

Questionnaire design process for the 8th Round of the ESS - starts in 2014

0

Open content of the survey

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Publications

SURVEY [The European Social Survey (ESS)] > STUDY [ESS7]

Questionnaire modules for ESS7

NEW

Health Inequalities

V3.0

The module focusing on the social determinants of health and health inequalities was first fielded in 2014. Specific items included a range of health measurements (BMI, self-reported diagnoses and mental wellbeing); social determinants (childhood conditions, housing quality and working environment); behaviours (smoking, alcohol use, fruit and vegetable consumption and physical activity); and use of primary, secondary and alternative health care.

Prof AI Head ESS7_the_first_pan-european_sociological_health_inequalities_survey_of_the_general_population.pdf

0

Modules are research topics and consist of concepts and questions

Add description, information about author and upload documents

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Concept Hierarchy

Top level concept

Body Mass Index (BMI)

V1.0

Questions on weight and height will be included to obtain BMI. Obesity is associated with an increased risk of disease (e.g. diabetes, heart disease) and premature mortality (Robertson et al, 2006). A much less investigated but also less prevalent health problem in modern Western countries is underweight, which also has implications for health outcomes. BMI cannot be measured directly. Height and weight must be included as further sub concepts. The interviewers will not be required to calculate the respondent's BMI at the time of interview. A follow up question could be asked to those respondents who are unsure of their exact weight/height, to record their estimates (and reduce nonresponse). There may be within and between country variation in measurement units (kilos, stone, feet, metres, etc) – the questions allow for this.

0

Sub concepts

Weight

V1.0

Weight can be measured directly. No further sub concepts are necessary.

0

Height

V1.0

Height can be measured directly. No further sub concepts are necessary.

0

Concept Toc

To the top

Activity and participation limitations

Alcohol consumption

- Frequency of alcohol consumption
- Binge drinking
- Quantity of alcohol consumption

Body Mass Index (BMI)

- Weight
- Height

Childhood conditions

- Friction in family while growing up
- Economic hardship in family while growing up

Dimensions of mental wellbeing

- Sleep Quality
- Depressive Feelings

Fruit and vegetable consumption

- Vegetable consumption
- Fruit consumption

Health care utilization

- Access to healthcare
- Consultation of medical specialist
- Consultation of general practitioner
- Use of alternative health care

Physical activity

Provision of unpaid care

Quality of housing

Self-reported conditions

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Question Items

NEW

Search in question name or question text

co

Find questions

X

Question Name	Question Text	ResponseDomain Name	Modified	Version	Agency
FCHOBED	Overall, how fair are the chances for people in [country] to obtain the level of education they want to obtain -- fair, or unfairly too low, or unfairly too high?	UnfairlyTooLow/High11	Thu Jul 06 2017	4.0	NSD-qddt
WRPWRCT	How worried are you that there may be power cuts in [country]?	Worried	Tue Jul 04 2017	1.0	NSD-qddt
cnfpplh	Using this card, please tell me how often there was serious conflict between the people living in your household when you were growing up?	Always5	Tue Jun 27 2017	1.1	NSD-qddt

«« « 1 » »»

Select questions

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Question Items

NEW

Using this card, please tell me how often there was serious conflict between the people living in your household when you were growing up?

Question text

Always5 Version: 1.0

Always	1
Often	2
Sometimes	3
Hardly ever	4
Never	5

Response domain

Used by

Study	Module	Concept names
ESS Round 7 (2014)	Social inequalities in health and their determinants	Friction in family while growing up

Check where question is used

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Concepts for Religion

NEW

Attitudes towards groups V1.0

Attitudes towards members of different religious groups

← Add Questions to concepts

0

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Concepts for Religion

NEW

Attitudes towards groups V1.0

Attitudes towards members of different religious groups

Question Items

In general, do you think the following religions bring more or less conflict to society? (Christians)

View question

0

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SURVEY [The International Social Survey Programme (ISSP)] > STUDY [ISSP 2008 Religion III] > QUESTIONNAIRE MODULE

Concepts f

NEW

Attitudes

Attitudes toward

Question Iter

0

Concept Toc

Version: 3.0

In general, do you think the following religions bring more or less conflict to society? (Christians)

category scheme for more / less conflict Version: .

Brings much more conflict	1
Brings somewhat more conflict	2
Brings neither more nor less conflict	3
Brings somewhat less conflict	4
Brings much less conflict	5

Missing

Can't Choose	8

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What else makes the QDDT special?

- Communication within the tool using nested comments
- Two level versioning system using RationaleCode
- Comparison of elements

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Concepts for Health Inequalities

NEW

Smoking

Tue Nov 22 2016 by **admin@NSD-qddt**

Tobacco is widely recognized as one of the most prominent causes of morbidity and premature mortality in Western Europe and North America. Each year, tobacco is responsible for approximately one fifth of all deaths (Danaei et al., 2009). Tobacco smoking is associated with an elevated risk of ischemic heart disease, hypertension, cardiovascular diseases, respiratory diseases, and multiple forms of cancer. Additionally, passive smoking (i.e., inhalation of smoke) is related to a heightened risk of lung cancer.

Question Items

Now thinking about smoking cigarettes. Which of the descriptions on this card best describes your smoking behaviour?

1

Add or view (nested) comments

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Smoking

Thu Nov 17 2016 by **admin@NSD-qddt**

Tobacco is widely recognized as one of the most prominent causes of morbidity and premature mortality in Western Europe and North America. Each year, tobacco is responsible for approximately one fifth of all deaths (Danaei et al., 2009). Tobacco smoking is associated with an elevated risk of ischemic heart disease, hypertension, cardiovascular diseases, respiratory diseases, and multiple forms of cancer. Additionally, passive smoking (i.e., inhalation of smoke) is related to a heightened risk of lung cancer.

1



admin@NSD-qddt - Tue Nov 22 2016

QDT1: oncept "Smoking" can be measure by question "Smoking behaviour".

1



admin@NSD-qddt - Tue Nov 22 2016

QDT2: I agree. Shouldn't we rather use question "smokezig" from ESS round 7?

1



admin@NSD-qddt - Tue Nov 22 2016

QDT3: Did you mean ESS round 8?

0

Write a new comment

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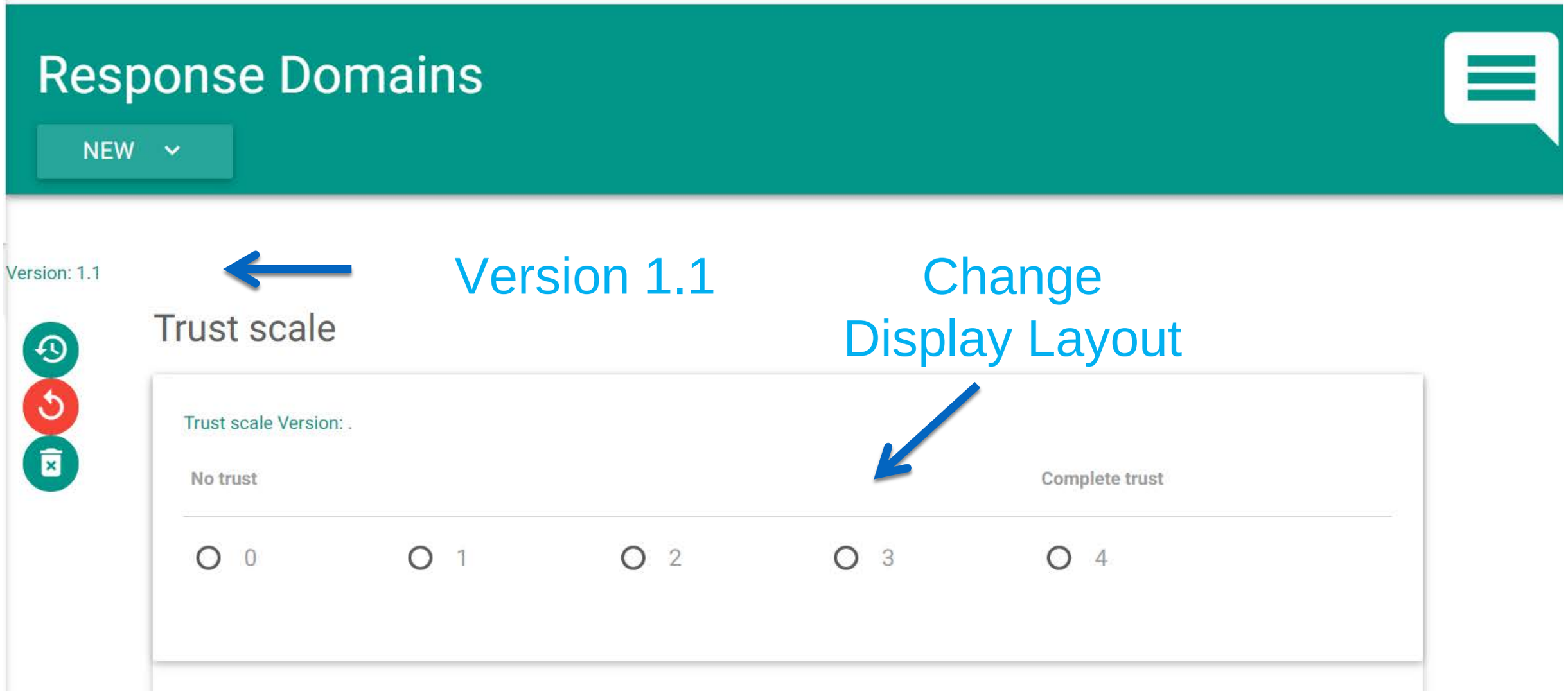
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Make versioning easy!



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Version 1.1

Change
Display Layout

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Response Domains

NEW

Version: 2.0

Trust scale

Trust scale Version: 2.0

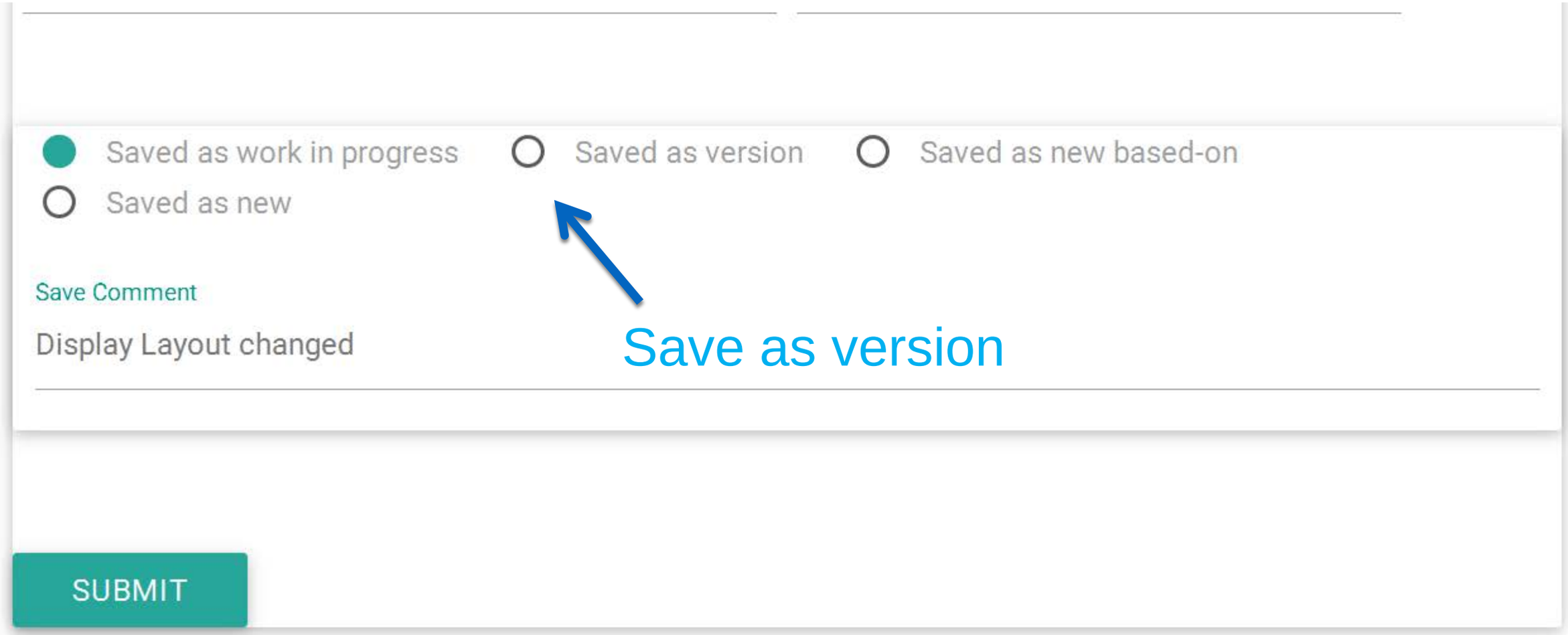
Version 2.0

No trust	0
	1
	2
	3
Complete trust	4

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Versioning in QDDT



Save as version

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Versioning in QDDT



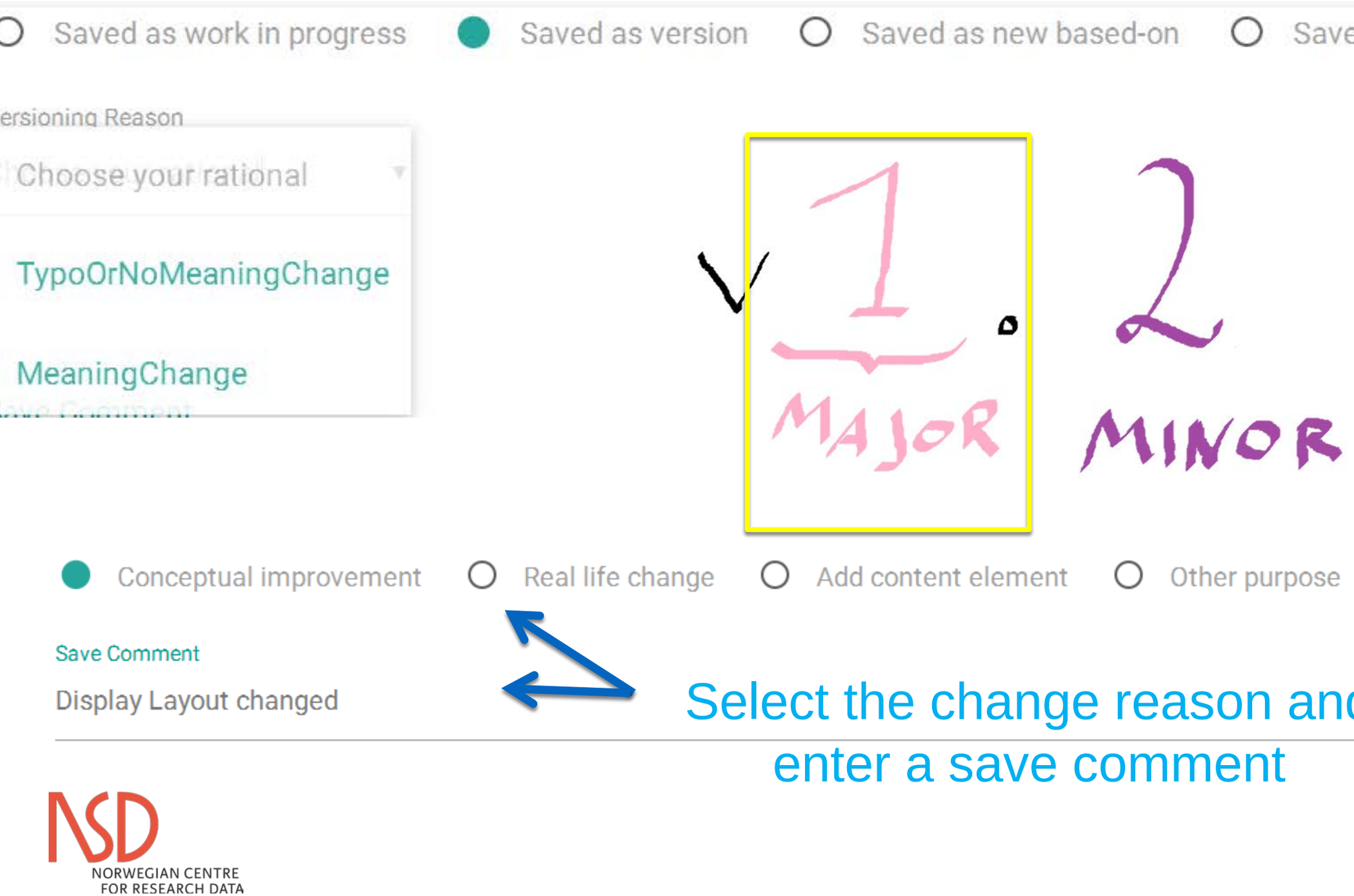
Select the change type

Save as new minor version

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Versioning in QDDT



Select the change reason and enter a save comment

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Compare to previous version

#	Version	Compare	Timestamp	Reason	modifiedBy	Comment
2573	1.0		28 11 2016 08:44	CREATED	admin	
2574	2.0		28 11 2016 08:46	ADDED_CONTENT	admin	Question intent added
2575	2.1		28 11 2016 08:47	TYPO	admin	Question intent: text corrected
2578	3.0		28 11 2016 08:49	ADDED_CONTENT	admin	Missing Value added

0

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Smoking Version 2.0 vs Current working version CHANGED

Version 2.0			Current working version		
Name	-	Smoking	Name	+	Smoking
Quest…	-	Now thinking about smoking cigarettes. Which of th	Quest…	+	Now thinking about smoking cigarettes. Which of th
Intent	-	Measuring the smokink behaviour	Intent	+	Measuring the smoking behaviour
respo…	-	Smoking	respo…	+	Mixed [Smoking- (DON'T KNOW)]
RespD	-	V1.0	RespD	+	V1.0

#	Version	Compare	Timestamp	Reason	modifiedBy	Comment
2573	1.0		28 11 2016 08:44	CREATED	admin	
2574	2.0		28 11 2016 08:46	ADDED_CONTENT	admin	Question intent added
2575	2.1		28 11 2016 08:47	TYPO	admin	Question intent: text corrected
2578	3.0		28 11 2016 08:49	ADDED_CONTENT	admin	Missing Value added

0

Publish metadata elements

- Create a publication package
- Select a publication status
- Find elements from data base
- Select version

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Name

ESS7 module health

← Package name

Purpose

Module test module II

← Select publication status

Publication status

PostEarlyTesting ▾ Elements reviewed on basis of the results from the early testing.

Add element +

Content list

Element type	Element name	Version	Delete
QuestionItem	Smoking	1.0	
QuestionItem	Smoking	4.0	

← Expand the element

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QuestionItem	Smoking	4.0

Now thinking about smoking cigarettes. Which of the descriptions on this card best describes your smoking behaviour? V4.0

Question Item

Version: 4. 0

Name: Smoking

Question Text: Now thinking about smoking cigarettes. Which of the descriptions on this card best describes your smoking behaviour?

Intent: We want to measure smoking consumption

category scheme for Smoking Version: .

○ I smoke daily	1
○ I smoke but not every day	2
○ I don't smoke now but I used to	3
○ I have only smoked a few times	4
○ I have never smoked	5

Missing

○ (Don't know)	88

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- Tool in production since June 17
- QDT develop questions for ESS9 (Sept. 17)
- Generate PDF and DDI 3.2 XML
- Add instrument option and question grid

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Thank you for your attention

Special thanks to:

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Joachim Wackerow

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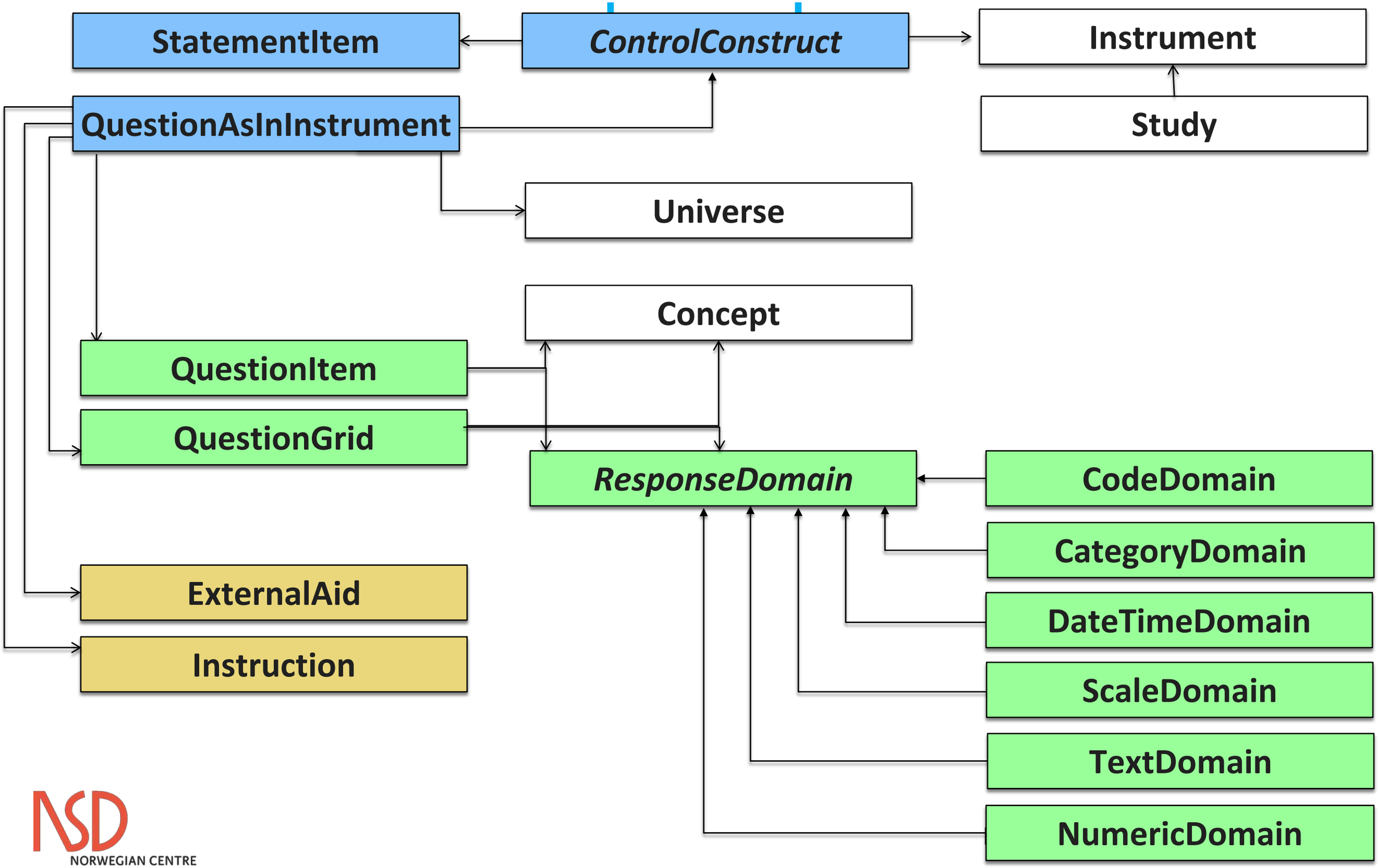
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The logo of DASISH:

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QDDT conceptual model, DDI 3.2



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QDDT Architecture

Angular 2 + Typescript

- No Javascript in dev tools, only in browser
- Typescript can transpile to ES3
- Supports «evergreen» browsers (Chrome, FireFox, Opera, Safari, and IE10/11)

Spring MVC API

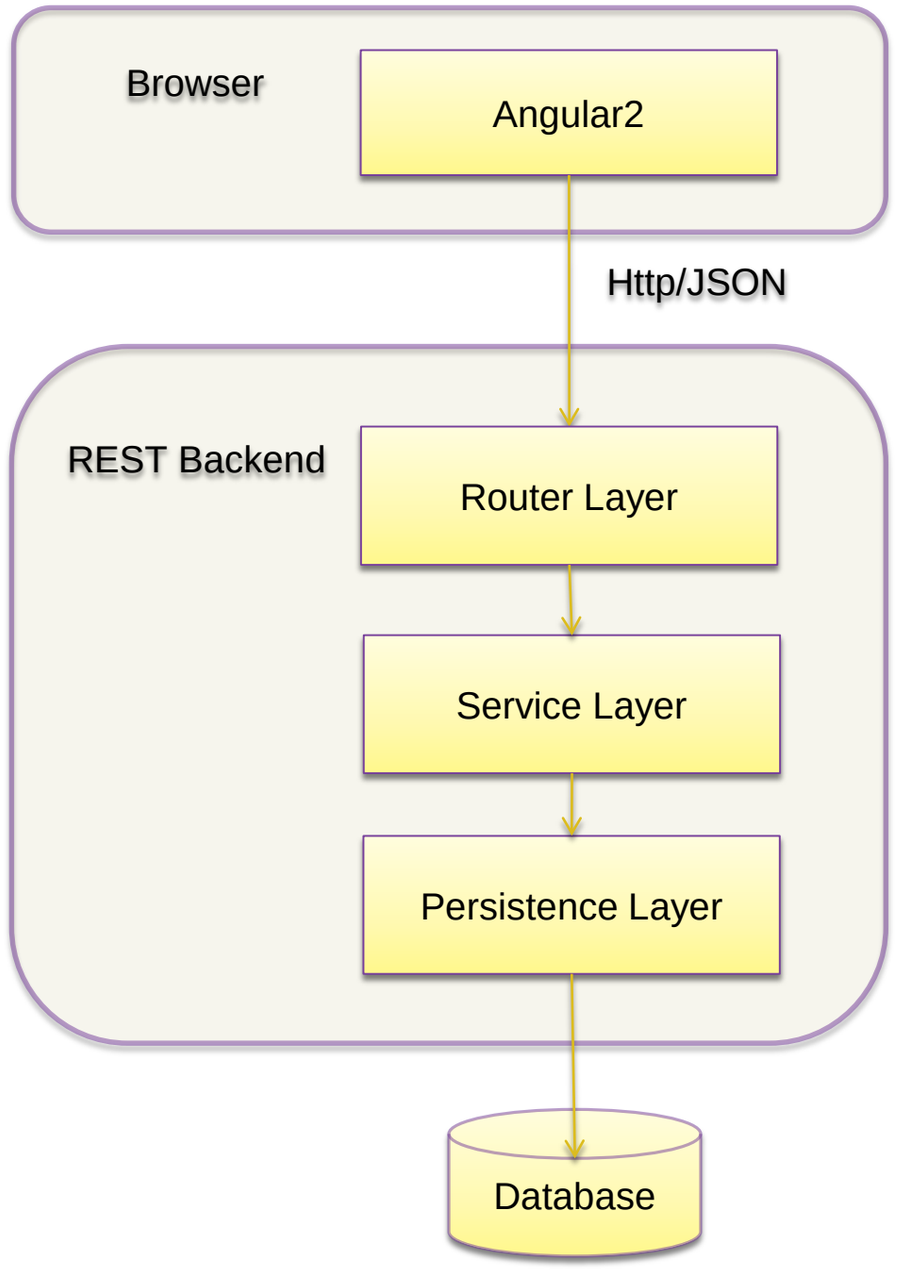
- RESTful API
- JSON for free
- no need for a SOAP service stack

Spring security (OAuth2)

- Tokenbased
- No state for requests

Persistence Layer implemented with Hibernate + Envers

- Revisions
- Database agnostic
- Since qddt is open source, we chose Postgres



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