RISK ANALYSIS MANGEMENT

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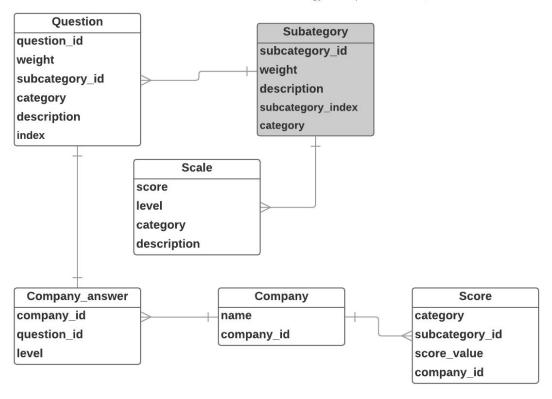


Table: Question

question_id primary key

index int #the order of a question e.g $1 \sim 75$

description varchar

weight float #weight of a question in its own subcategory

user #dummy for now

default

subcategory_id foreign key

category char #we are putting security and business trust in the same

table(security/business)

Table: Subcategory

subcategory_id primary key

subcategory_index varchar #because the index can be a serial of letters

weight float description varchar

?category char #we need category to locate the subcategory of a question

E.g

1) Mission and Security Requirements, Roles, Responsibilities and Policies [System Design] Weight 0.0556

An 'overall' subcategory?

A subcategory has many questions

Table: Scale

description varchar

score float #user defined value e.g 0.0 ~ 0.95 in scale format

definition

level int # 0 means insufficient, 6 means Not Applicable

subcategory char #(S for security/B for business)

The purpose of this table is to distinguish between two answer scales. Both Business and Security have an answer scale of 0-6. However, on Business questions, "5" means "Very High Level of Trust". On Security questions, "5" is labelled "Corporate Optimization".

For a question + its answers to appear, join on the "category" column.

This is a reference table, not an object table.

Table: Company_answer

company id foreign key #the company that's being assessed

question id foreign key

level int #as in Scale table

| Company 1 | Question 1 | 5 |
|-----------|------------|---|
| Company 1 | Question 2 | 4 |
| Company 1 | | |
| Company 1 | | |

Is there a way to avoid duplicating the "company 1" entry over and over? Or is it okay to duplicate it?

Let's say it's okay to duplicate it for now.

"How to store score?" Could be a question for the TA.

Table: Company #companies that answer the above questions, to be

improved

name varchar
company_id primary key
not needed if Score table is included

security_score float trust_score float

financial_score float#(maybe not necessary)

choose one to implement

Table: subcategory score #only subcategories

company_id subcategory_id score

Is it better to have this separate kind of table? Or should we calculate scores on-the-fly and have that code in our views/controllers?

Alternative to the "Table: subcategory score" idea:

Table: Score

category: Business or Security (because business, category will have different subcategories)

subcategory_id: "A", "B", "C", "D"....or "Overall", for the overall score (e.g. overall business, or overall security)

But, if subcategory_id is a foreign key, then overall must also be a foreign key. So overall must then be a distinct subcategory in the subcategory table?

Score_value: The actual score value (float, valued from 0 to 1)

Company id: Maybe?

The idea: to get a company's business scores, join on company_id and filter by category "B". This gives the join (the resulting view) the score for each subcategory of questioning. The overall score is calculated from the individual subcategory score (as a weighted average), and is also available to the join.