Database design for multiple language website

Asked 7 years, 6 months ago   Active 7 years, 6 months ago   Viewed 1k times

I need to create website that will support multiple languages, however I never done so and I need help with creating DB for my application.

Website will be commerce, so let's take ITEM table as an example. Only thing that I could quickly come up to is this model, but I don't think it's good since Language table is tied to Item table but I will have Company table as well and others maybe too.

```
Item
     ID
     Price

Language
     ID
     ItemID
     Language (example: en-US)
     Field (example: title)
     Value (example: Good Title)
```

Can someone help me design good database that will support multiple languages?

database   database-design   relational-database

asked Sep 6 '12 at 13:01

Stan
20.2k   38   136   217

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1   Why vote to close on "off-topic"? I think this is very normal and legit question. — Stan   Sep 6 '12 at 13:50

Language.ID - unnecessary. Use `LangCode, ItemId` as PK. — gavenkoa Jun 4 '14 at 7:49

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1 Answer

There are multiple ways on how to store multilanguage data in the database, I usually do it like this:

2

```
Item
  ID
  price
  title_translation_key_id (is a TranslationKey foreign key)
  desc_translation_key_id (is a TranslationKey foreign key)

TranslationKey
  ID
  key (string)

Translation
  ID
  translation_key_id (is a TranslationKey foreign key)
  content (string)
  language_id (is a Translation foreign key)

Language
  ID
  code
```

How to retrieve the data?

You can either work with sub-selects or if you database doesn't perform well, you can generate language specific tables out of it.

edited Sep 6 '12 at 13:11   answered Sep 6 '12 at 13:06

Andre Bossard
5,942 29 51

Shouldn't that be the other way round - Translation has a foreign key on Item? If I understand your schema correctly, if you add a new language, you have to insert new rows into your item table? – Frank Schmitt Sep 6 '12 at 13:11

@Frank Schmitt: Please read the original question, your suggestion is exactly what the original author wants to avoid. – Andre Bossard Sep 6 '12 at 13:14

I think I will use stackoverflow.com/a/929430/440611 approach after all, it seems to be a lot easier to make `ProductTranslation,` `CategoryTranslation etc..` thanks for answer – Stan Sep 6 '12 at 14:51

1 @AndreBossard Ok, I got it now - thanks. Although I'd rather split the Item table into two parts - one that is language independent and one that contains only translateable items (as suggested in the post mentioned by Qmal). – Frank Schmitt Sep 7 '12 at 9:08 ✏

@FrankSchmitt, that certainly reduces the query complexity at the expense of having a bit more tables. In my case, the frontend has the complete translation data already, and is only interested in the translation key. – Andre Bossard Sep 7 '12 at 10:48