COMP306 Database Management Systems   **Date: 24.03.2020**

Group Assignment - Term Project Phase 2 - Logical Design (Subject No: 30 - UNESCO Endangered Languages Program)

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Definition:

The database is aimed to organize the UNESCO offices with its volunteers to work mainly on researches related to endangered languages and other events. In this framework each research requires an ethical consent and a consent from government. All the dates are kept in the database. Languages are measured with different factors, given in UNESCO reports.

Business rules:
1. Five factors are used to measure the degree of language endangeredness: (i) Intergenerational Language Transmission (0-5 scale), (ii) Absolute Number of Speakers (real numbers), (iii) Proportion of Speakers within the Total Population (0-5 scale), (iv) Materials for Language Education and Literacy (0-5 scale), (v) Governmental and Institutional Language Attitudes and Policies, Including Official Status and Use (0-5 scale).
2. The absolute number of speakers of an endangered language should be lower than a certain number.
3. There has to be a threshold for the age of a language. It should be older than a certain number of years.
4. A language can have a cultural heritage, such as proverbs, songs, known people, and literature with relevant information in the database.
5. There has to be at most one office of UNESCO in each city.
6. Each office has acquired a unique ID in their grand opening.
7. Volunteers are required to get a unique ID's at the applications.
8. There has to be just 1 president and vice-president in an office, but the number of volunteers is not limited (but assumed it can't be zero).
9. Volunteers can work for more than one office of UNESCO.
10. Volunteers have to participate in at least one research each year.
11. Volunteers can also work on some events. The number of events they can work is optional.
12. A research can be related to at least one language, however there might be no research for a language.
13. There should be a calendar for research and languages' research dates are recorded.
14. Ethical consents should be taken before any kind of research. It is mandatory.
15. The level of research should be considered in line with the level of danger of a language. The research importance is calculated according to the factors mentioned in BR2.
16. A consent is needed from the government where the research will take place in. The period of consent should be recorded. It is mandatory.

Links:

Lucidchart access link for Conceptual Design:
https://www.lucidchart.com/invitations/accept/6827b61e-3e31-4e3d-9a7b-91a62f0700bc

Lucidchart access link for Logical Design (just PK & FK pairs):
https://www.lucidchart.com/invitations/accept/ba7dd8c5-2eb5-4911-b29f-bd2c5306c511

Lucidchart access link for Logical Design (with functional dependencies):
https://www.lucidchart.com/invitations/accept/18546beb-7c52-4b0f-9e95-363b70af2644