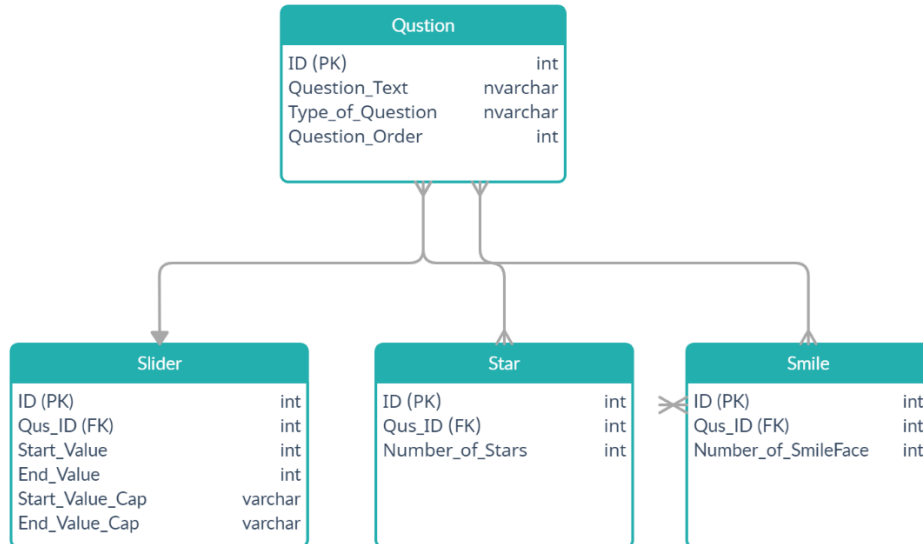


Developer manual

Data base:



Database contain four tables

1- Table Question

- It will contain variables for all questions for all types

2-Table Slider

- It will contain foreign key from Question table and his attributes

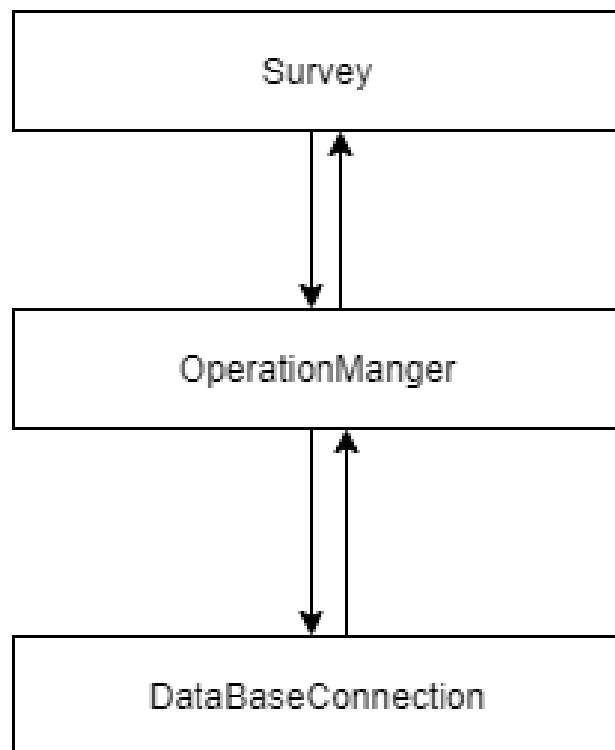
3-Table Smile

- It will contain foreign key from Question table and his attributes

4-Table Stars

- It will contain foreign key from table question and have his attributes

Layers for application:



1- Database layer:

The database layer contains several functions:

□ Add Question:

- 1.AddSlider
- 2.AddSmile
- 3.AddStar
- 4.AddQuestion

This functions for add question in any type in database, every type of question has function for add and all types call AddQuestion then call their own function return number for succeed or fail to operation manger delete question.

□ Edit Question:

- 1.EditSlider
- 2.EditSmile
- 3.EditStar
- 4.EditQuestion

This functions for edit question in any type from database every type of question has function for edit and all types call EditQuestion then call their own function and return number for succeed or fail to operation manger edit question.

□ **Delete Question:**

- 1.DeleteSlider
- 2.DeleteSmile
- 3.DeleteStar
- 4.DeleteQuestion

This functions for delete question in any type from database every type of question has function for delete and all types call DeleteQuestion then call their own function and return number for succeed or fail to operation manger delete question.

□ **GetQuestionFromDataBase:**

This function for get question from database to the list and return list to operation manger.

2. Operation Manger layer:

This section connects the database and (UI) layer get data from database and send data to UI and get data from UI and send the data to database and have thread for refresh data in period of time and resend new data to UI, and have several functions:

1. RefreshData
2. AddQuestion
3. EditQuestion
4. DeleteQuestion
5. GetQuestion

This functions will take the data from UI then the manger layer will send it to the database layer, and take data from database layer and send it to UI layer.

3. User interface layer:

This section is for interacting with the user and contains several buttons and a display screen, and this section takes data from operation manager and here also check the conditions of each variables for each question.

4. BaseLog layer:

This layer is cross layer for print errors for any layers in logfile using function Log() .

5. Question layer:

This layer is cross layer, that contain data for application, four classes:

1. Abstract class Question.
2. Class Slider.
3. Class Smile.
4. Class Star.

All these classes inherited from class Question.

