

Documentation of the program code

[Uni Compass]

Author: [Yana Najy]
Data: [13/12/2024]

History of technical documentation

Author

Fac. No	Name	E-mail
273222007	Yana Najy	ynazhi@tu-sofia.bg

Version History

Version	Data	Author	Description
1.0	05/12/2024	Yana	-Intro -class diagram
2.0	06/12/2024	Yana	-Sequence Diagram
3.0	07/12/2024	Yana	-testing
4.0	09/12/2024	Yana	-Sample user interface
4.1	10/12/2024	Yana	-Minor edits on all sections

Content

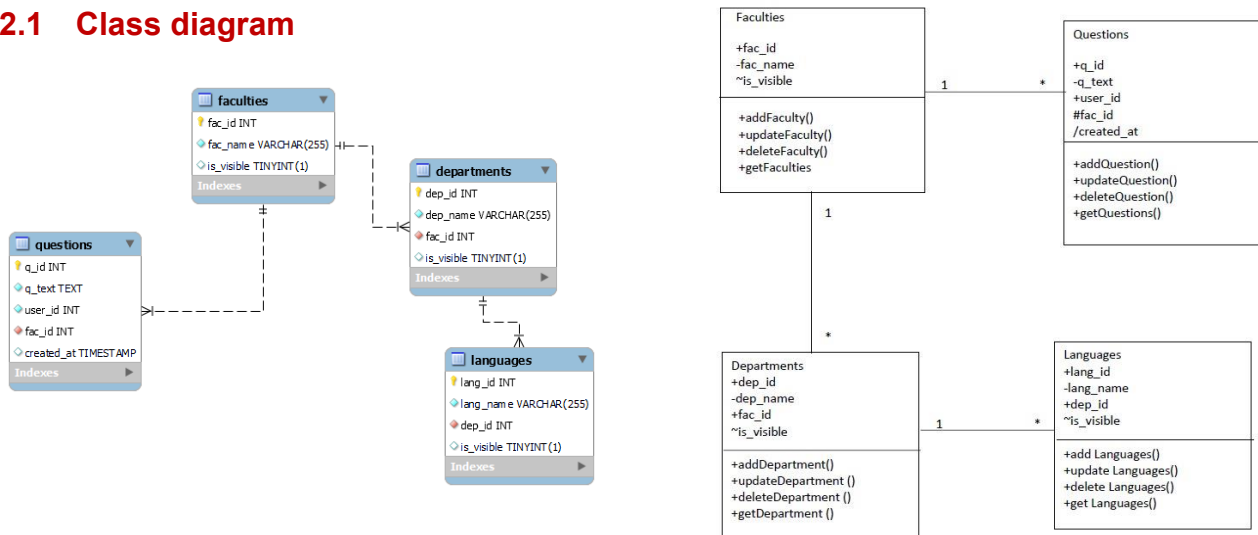
1	INTRODUCTION	ERROR! BOOKMARK NOT DEFINED.
2	DETAILED DESIGN	ERROR! BOOKMARK NOT DEFINED.
2.1	Class diagramm	Error! Bookmark not defined.
2.2	Sequence diagram.....	Error! Bookmark not defined.
2.3	Sample user interface	Error! Bookmark not defined.
3	TESTING	ERROR! BOOKMARK NOT DEFINED.

1 Introduction

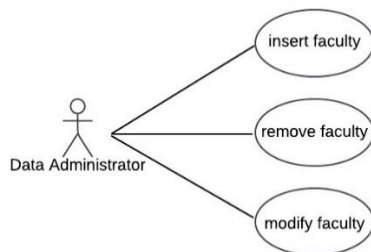
The queries I've chosen involve Adding, Removing, and Modifying information involving faculties.
The user stories I've chosen include **US4.11**, **US4.12**, **US4.13**

2 Detailed design

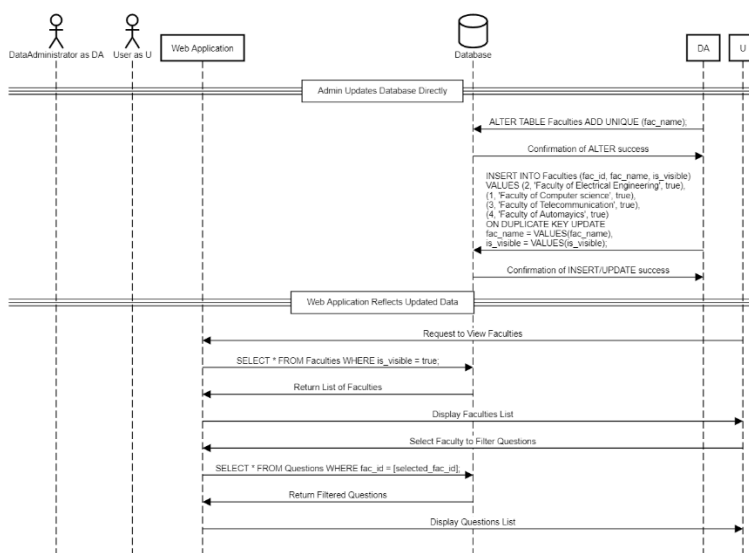
2.1 Class diagram



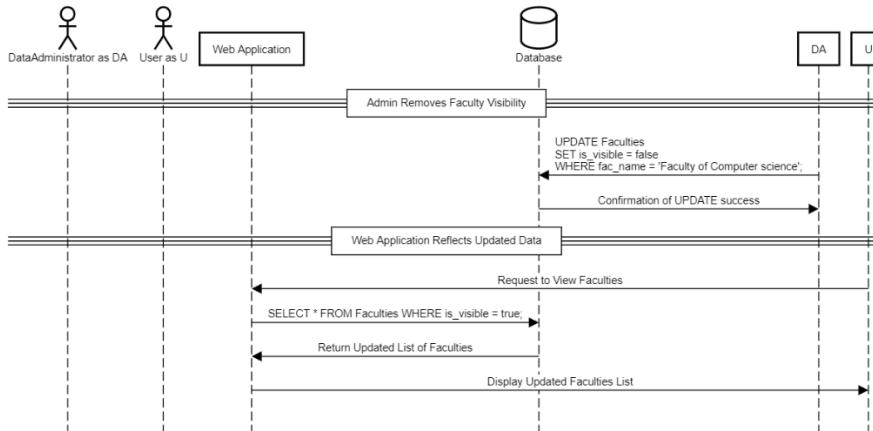
2.2 Sequence diagram



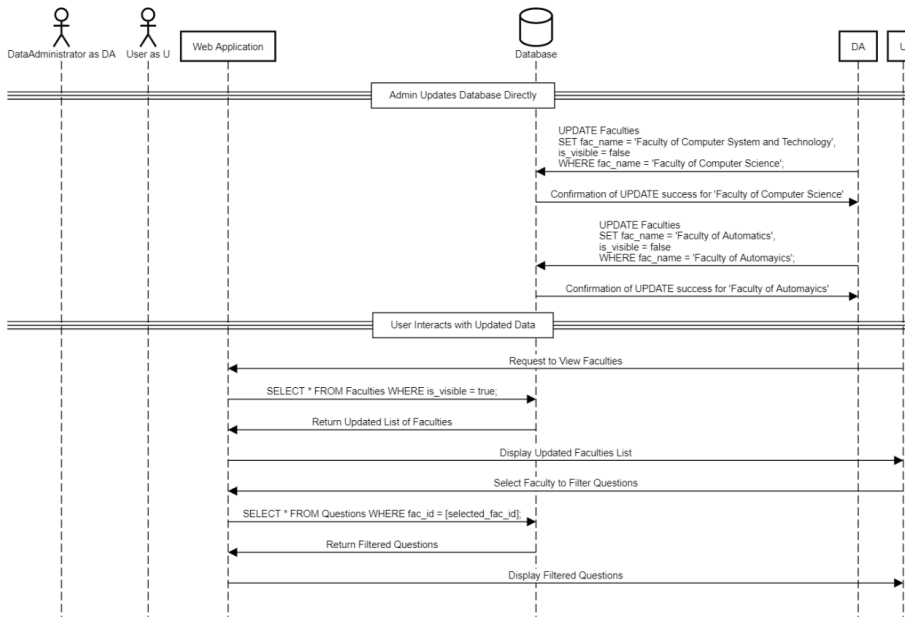
For US4.11




For US4.12



For US4.13



2.3 Sample user interface



HomeAskQuestions

Faculties ^

Faculty of Computer System and Technology ✓

Faculty of Electrical Engineering ✓

Faculty of Telecommunication ✓


Faculty of Automatics ✓

In which block do most of the telecommunication classes take place ?

mail: *****@tu-sofia.bgPreferred language: English

If someone has participated in the erasmus program (related to telecommunications) can you share your experience?

mail: *****@tu-sofia.bgPreferred language: English



HomeAskQuestions

Faculties ^

Faculty of Computer System and Technology ✓

Information technology in industry

Cybersecurity

Computer Science and Engineering

Computer and Software Engineering

Faculty of Electrical Engineering ✓

Faculty of Telecommunication ✓

Faculty of Automatics ✓

In which block do most of the Cybersecurity classes take place ?

mail: *****@tu-sofia.bgPreferred language: English

If someone has participated in the erasmus program (related to Cybersecurity) can you share your experience?

mail: *****@tu-sofia.bgPreferred language: English

3 Testing

For US4.11

This is the query for the first user story:

- `ALTER TABLE Faculties ADD UNIQUE (fac_name);`
- `INSERT INTO Faculties (fac_id, fac_name, is_visible)
VALUES (2, 'Faculty of Electrical Engineering', true),
(1, 'Faculty of Computer science', true),
(3, 'Faculty of Telecommunication', true),
(4, 'Faculty of Automayics', true)
ON DUPLICATE KEY UPDATE
 fac_name = VALUES(fac_name),
 is_visible = VALUES(is_visible);`

Which reveals that the administrator can add faculties into the database.

It runs smoothly as shown

fac_name	is_visible
Faculty of Computer science	1
Faculty of Electrical Engineering	1
Faculty of Telecommunication	1
Faculty of Automayics	1

#	Time	Action	Message	Duration / Fetch
9	22:18:52	ALTER TABLE Faculties ADD UNIQUE (fac_name)	0 row(s) affected, 1 warning(s): 1831 Duplicate index 'fac_name_2' defined on the t...	0.016 sec
10	22:18:52	INSERT INTO Faculties (fac_id, fac_name, is_visible) VALUES (2, 'Faculty of Electr...	4 row(s) affected, 2 warning(s): 1287 'VALUES function' is deprecated and will be re...	0.000 sec
11	22:18:58	SELECT fac_name, is_visible FROM Faculties WHERE is_visible = true LIMIT 0, 1...	4 row(s) returned	0.000 sec / 0.000 sec

For US4.12

This is the query for the second user story:

- ```

50 • UPDATE Faculties
51 SET is_visible = false
52 WHERE fac_name = 'Faculty of Computer science' ;
53
54 • SELECT * FROM Faculties;

```

| fac_id | fac_name                          | is_visible |
|--------|-----------------------------------|------------|
| 1      | Faculty of Computer science       | 0          |
| 2      | Faculty of Electrical Engineering | 1          |
| 3      | Faculty of Telecommunication      | 1          |
| 4      | Faculty of Automayics             | 1          |

| #  | Time     | Action                                                                           | Message                                                  | Duration / Fetch      |
|----|----------|----------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------|
| 12 | 22:29:26 | UPDATE Faculties SET is_visible = false WHERE fac_name = 'Faculty of Computer... | 1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0 | 0.000 sec             |
| 13 | 22:30:05 | SELECT * FROM Faculties LIMIT 0, 1000                                            | 4 row(s) returned                                        | 0.000 sec / 0.000 sec |

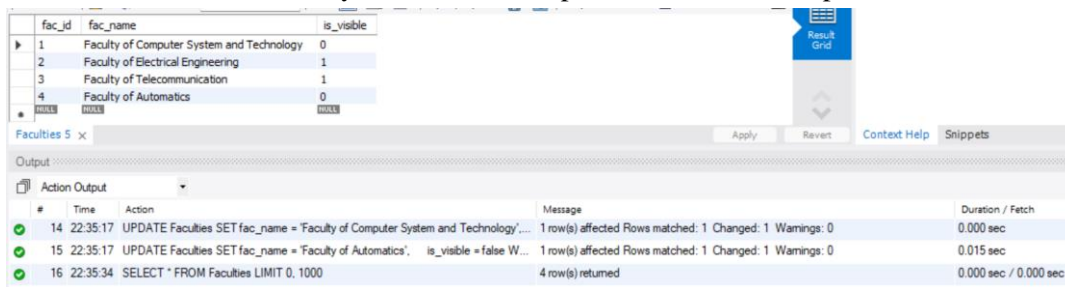
It reveals that the administrator can remove the faculty from the user's view. It doesn't delete it from the database completely but softly deletes it from the web system.

#### For US4.13

This is the query for the third user story:

- **UPDATE** Faculties  
**SET** fac\_name = 'Faculty of Computer System and Technology',  
is\_visible = false  
**WHERE** fac\_name = 'Faculty of Computer Science';
- **UPDATE** Faculties  
**SET** fac\_name = 'Faculty of Automatics',  
is\_visible = false  
**WHERE** fac\_name = 'Faculty of Automayics';

The administrator can modify the faculties, keep all the information up to date and reliable.



The screenshot displays a database management tool interface. At the top, a table named 'Faculties' is shown with columns 'fac\_id', 'fac\_name', and 'is\_visible'. The table contains four rows of data. Below the table, there is an 'Output' window showing a log of SQL actions. The log includes two 'UPDATE' statements that were executed successfully, each affecting one row. The first update changed the 'fac\_name' of the first row to 'Faculty of Computer System and Technology'. The second update changed the 'fac\_name' of the second row to 'Faculty of Automatics' and set 'is\_visible' to false. The log also shows a 'SELECT' statement that returned 4 rows.

| fac_id | fac_name                                  | is_visible |
|--------|-------------------------------------------|------------|
| 1      | Faculty of Computer System and Technology | 0          |
| 2      | Faculty of Electrical Engineering         | 1          |
| 3      | Faculty of Telecommunication              | 1          |
| 4      | Faculty of Automatics                     | 0          |

| #  | Time     | Action                                                                           | Message                                                  | Duration / Fetch      |
|----|----------|----------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------|
| 14 | 22:35:17 | UPDATE Faculties SET fac_name = 'Faculty of Computer System and Technology'...   | 1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0 | 0.000 sec             |
| 15 | 22:35:17 | UPDATE Faculties SET fac_name = 'Faculty of Automatics', is_visible = false W... | 1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0 | 0.015 sec             |
| 16 | 22:35:34 | SELECT * FROM Faculties LIMIT 0, 1000                                            | 4 row(s) returned                                        | 0.000 sec / 0.000 sec |