## Satan7172

proje2.0

Authors of project:

Bekzhan Zharkynbek Adilet Kazhybay Aray Baimolda

About project:

In the 2020-21 during quarantine cyber attacks became very popular for instance phishing site attacks and as cyber security knowledgeable people we found that our goal is to enlighten people by making site forums where users will write and share information about phishing sites and attacks.



Project github link: <a href="https://github.com/180107264/proje2.0">https://github.com/180107264/proje2.0</a>

### 4 Data modeling and database design (5 points)

Like any group project, we decided to divide the task into parts and give the first of this phase to Bekzhan, the result you can see here. The rest I took upon myself because at that time I had better understand how to create a database and work with sqlite. As recommended in the assignment, I decided to make a script in a batch file that will create the database itself and fill it in. The final code can be viewed in the phase4 project folder. Adlet was a team lead who will later become the front-end developer of our project. Thus, we have completed the fourth phase

I rate the team's work done at this stage by 5 points team worked well together

## **5 SQL queries (5 points)**

In this phase of the project I wrote quite simple queries. Because of the simpleness of these queries they were optimized without creating views or indices. You can find queries in the phase5 folder here.

I rate the team's work done at this stage by 3 points because of the simpleness of queries

## 6 User-interface implementation and connection (10 points)

At this phase Adlet did a good job making a user-friendly frontend and Bekzhan and I established a fine connection between python and sqlite using Flask that retrieves the necessary data. Website is interactive and users can select a function from a menu and provide input arguments whenever required. Also they can add their own information to our database or see some statistics in the output data that is displayed. In our website you can be registered by email because there is an email registering system and your information can be saved in our database. All source code can be found here.

I rate the team's work done at this stage by 10 points

#### 7 SQL to Relational Algebra (RA) operators (5 points)

In this section as mentioned in instruction we tooke queries from phase 5 and wrote their corresponding relational expressions (linear notation) and drew their corresponding relation algebra trees. We have used the correct figure-shape notations and used <a href="https://www.lucidchart.com/">https://www.lucidchart.com/</a> for this purpose. For each query, we take a screenshot of its RA linear expression and its RA tree, both together and name each screenshot file as it was required and save it <a href="https://www.lucidchart.com/">https://www.lucidchart.com/</a> for this purpose.

I rate the team's work done at this stage by 5 points. It was great team work

## 8 Calculating true cardinalities and plan evaluation (5 points)

We have not done this part

## 9 Speed performance evaluation (5 points)

In this phase we have done all the work we just forgot to submit. Table measurements in ms

Query number	#1	#2	#3	#4	#5	
Experiment #1	92.2590	32.1916	56.1289	73.5432	80.9324	
Experiment #2	80.9324	38.9775	40.5105	75.2404	74.1225	
Experiment #3	96.0832	24.6531	41.5505	74.0703	86.7487	
Experiment #4	92.4775	30.9913	55.1874	63.7788	80.9087	···

Experiment #5	92.5048	35.3449	52.7101	67.2495	72.5619	
Average time	90.85138	32.43168	49.21748	70.77644	79.05484	

I rate the team's work done at this stage by 5 points.

# 10 Presentation and Demo (5 points)

We have presented our project to you and I rate it by 5 points