DOCUMENTATION FOR DBMS_PR_11

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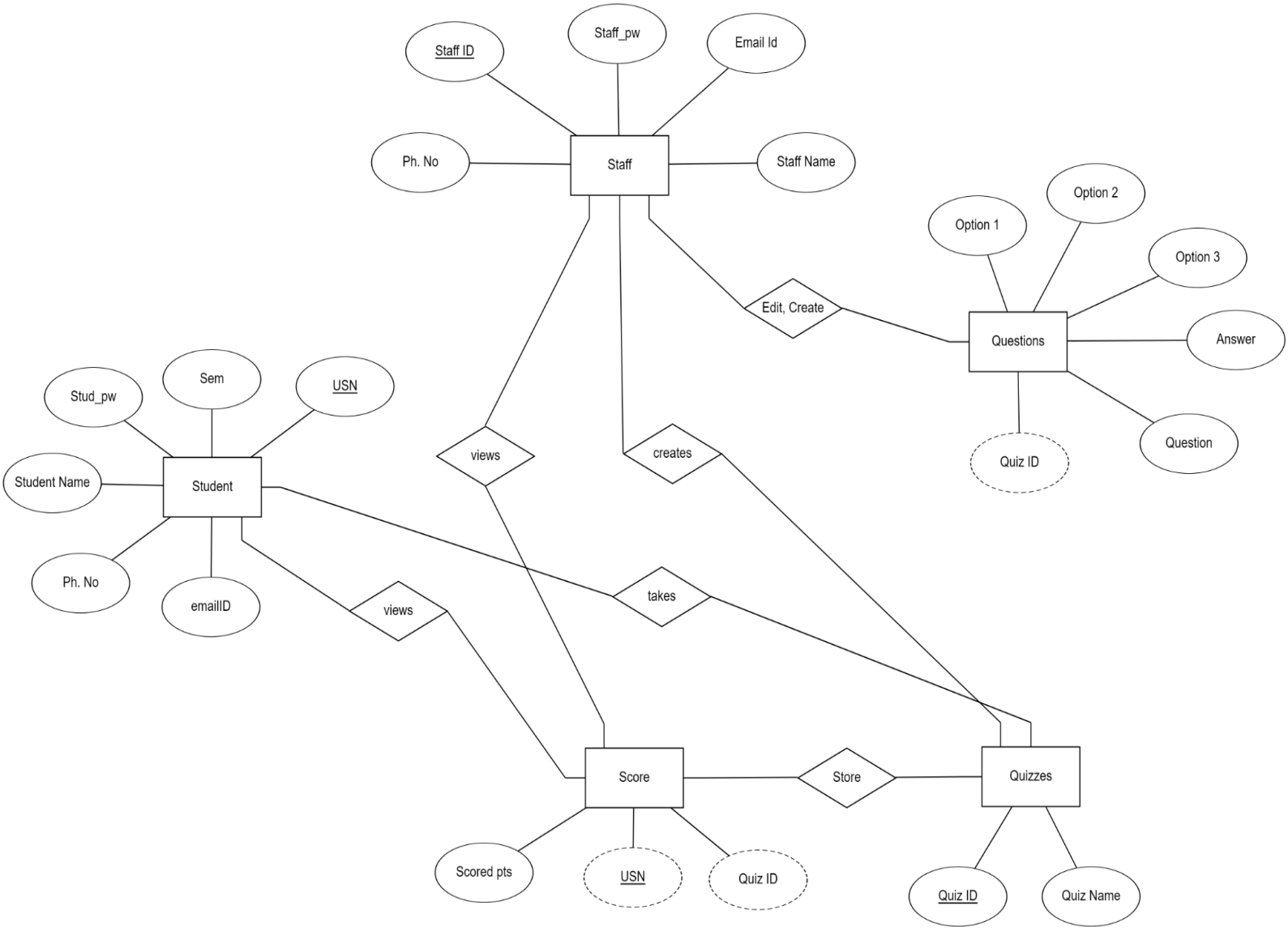
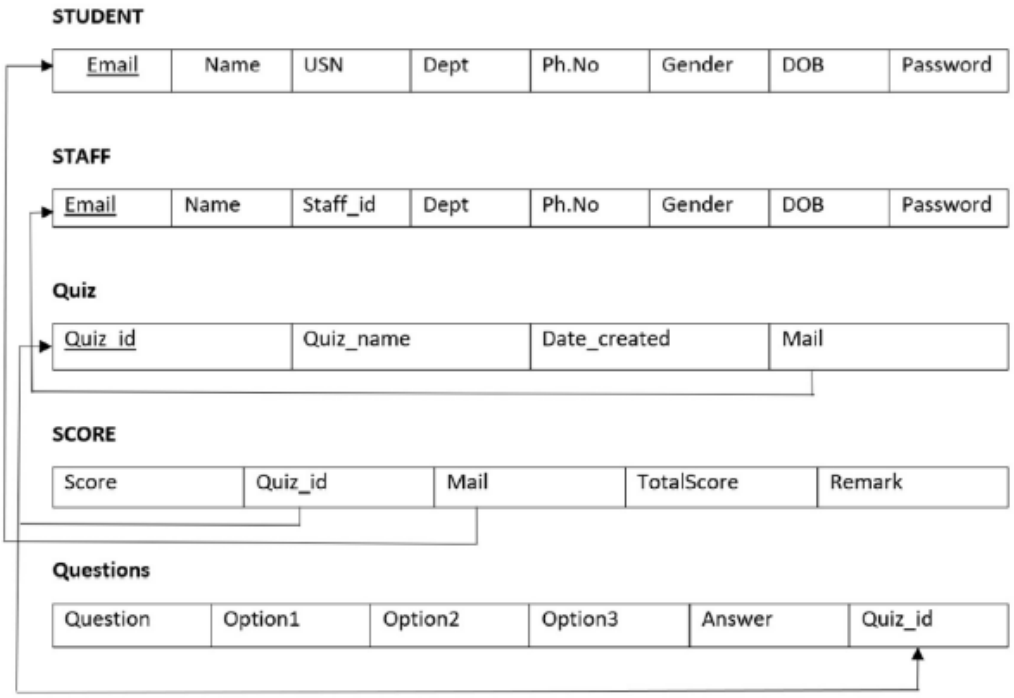
1. System Requirement Specification (SRS)

- Programming language : PHP, MYSQL
- Operating system : ANY OS (Recommended: Windows8,
- Windows 10, Windows 11)
- Application required : XAMPP (Apache and MySQL Server should be running)
- Coding language : PHP,HTML,CSS,Javascript
- 2.4 HARDWARE REQUIREMENTS
- CPU : Pentium IV 2.4 GHz or above
- XAMPP (Apache and MySQL Server should be running)

2. A - ER Diagram



2.B - SCHEMA DESIGN



2.C - Data Normalization -

- If we take a look at the relational diagram above, we can see that the attributes are atomic, so our database is in 1NF.
- Since, there is only 1 primary key for each table, there is no partial dependency and the database is in 2NF.
- Now, as we can see, there is no transitive dependency as well, because no non-prime attribute is able to identify other non-prime attributes in any table. So, it is safe to say that the database is in 3NF as well.
- For every non-trivial functional dependency X->Y, X is a super-key of the tables and also the primary key. So, it is guaranteed that our database is in BCNF. \

So, we can say that our data is well normalized and there is not much repetition. One big reason for this is the use of foreign keys.

2.D - List of Tables Required -

- Students
- Staff
- Quiz
- Score
- Questions

2.E - Additional Components Required/ Procedures

- Install XAMPP.
- Move the submitted folder containing all the code to “htdocs” folder in XAMPP folder in C Directory.
- Run the Apache and MySQL server in XAMPP Control Panel Application.
- Go to localhost/projectname to launch the program in the browser.
- Go to localhost/phpmyadmin/ to see the database used in the program.
- Read the README.txt file for other information.