



Assignment # 1

Presented By

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To

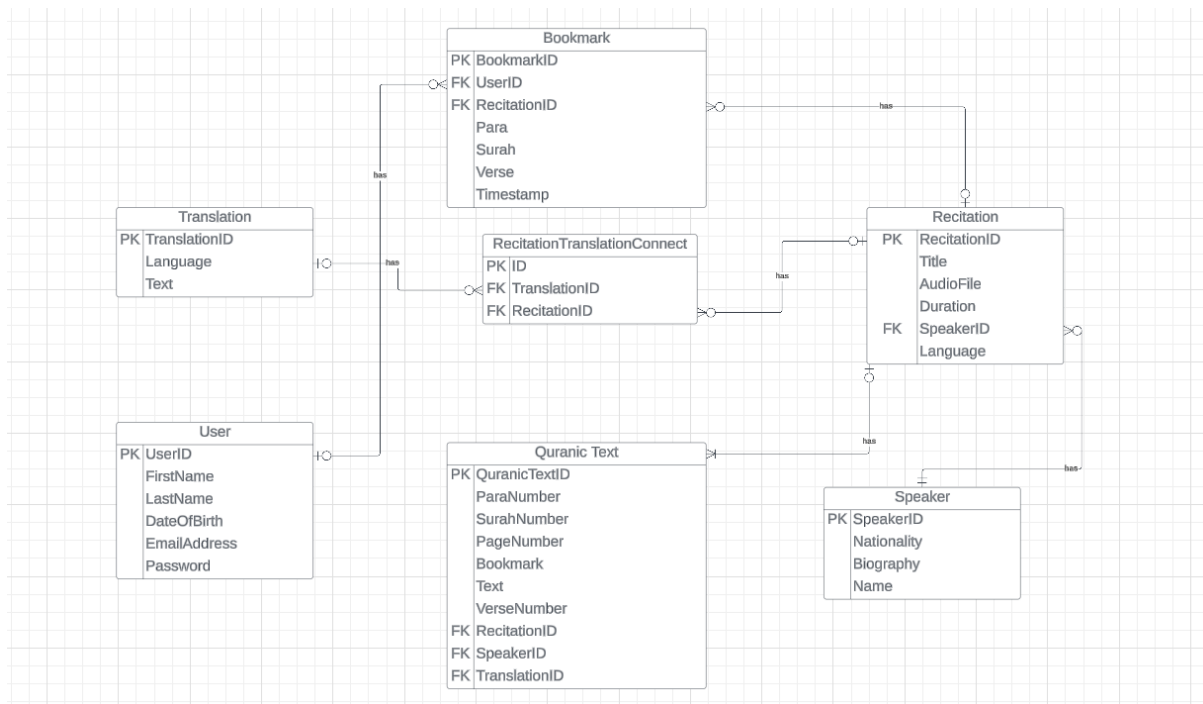
Sir Bilal

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Software Used : Lucid (Web)

1 Question 1



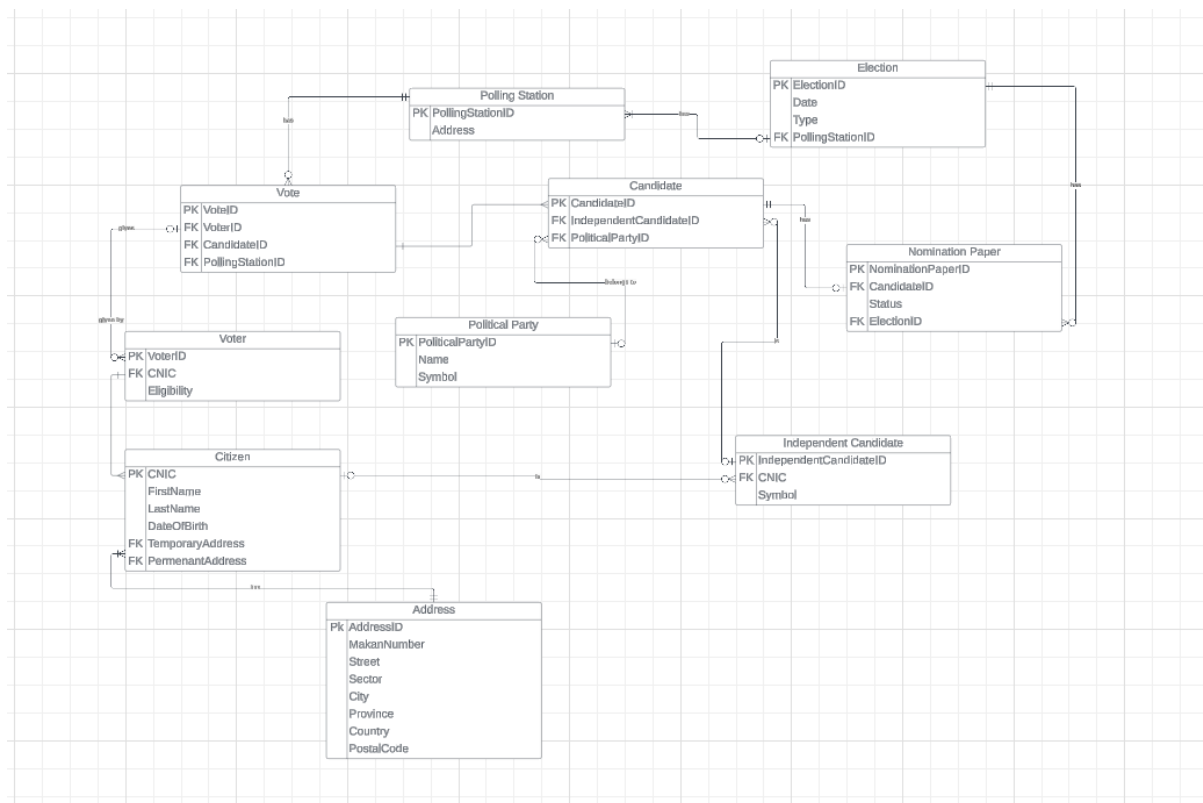
Assumptions:

The Many to Many relations between Translation and Recitation was broken into two 1-M relations and a weak entity RecitationTranslationConnect was made. This enhances data integrity, simplicity, flexibility, maintenance, optimized queries.

Constraints:

Audio file integrity, language accuracy, copyrights, authentication of audio and translation, are constraints that cannot be shown through ERD.

2 Question 2



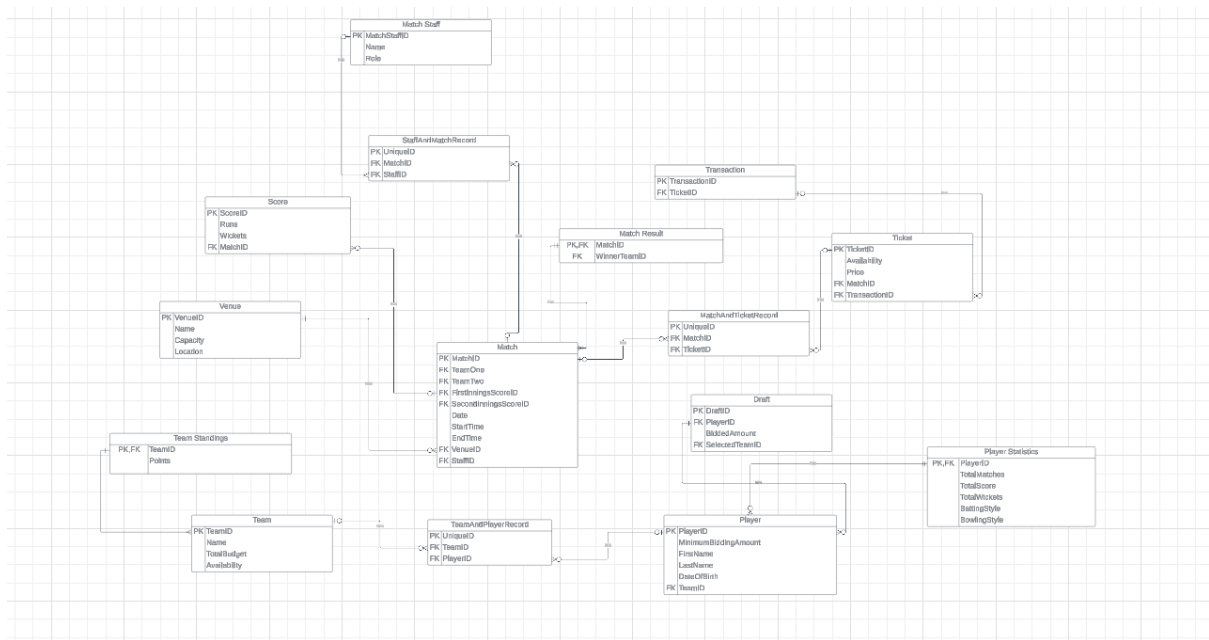
Assumptions:

A citizen entity was made with basic details. As a citizen can have temporary and permanent address so address is a multivalued attribute which was ultimately made a separate entity. Voter has FK of citizen through which eligibility can be verified like if 18 or not. A candidate entity was made which has FKs of political party and independent candidate. Election entity was made for national assembly, and so on elections.

Constraints:

Legal and regulatory compliance, authentication, transparency, operational efficiency, are some of the business constraints that cannot be shown through ERD.

3 Question 3



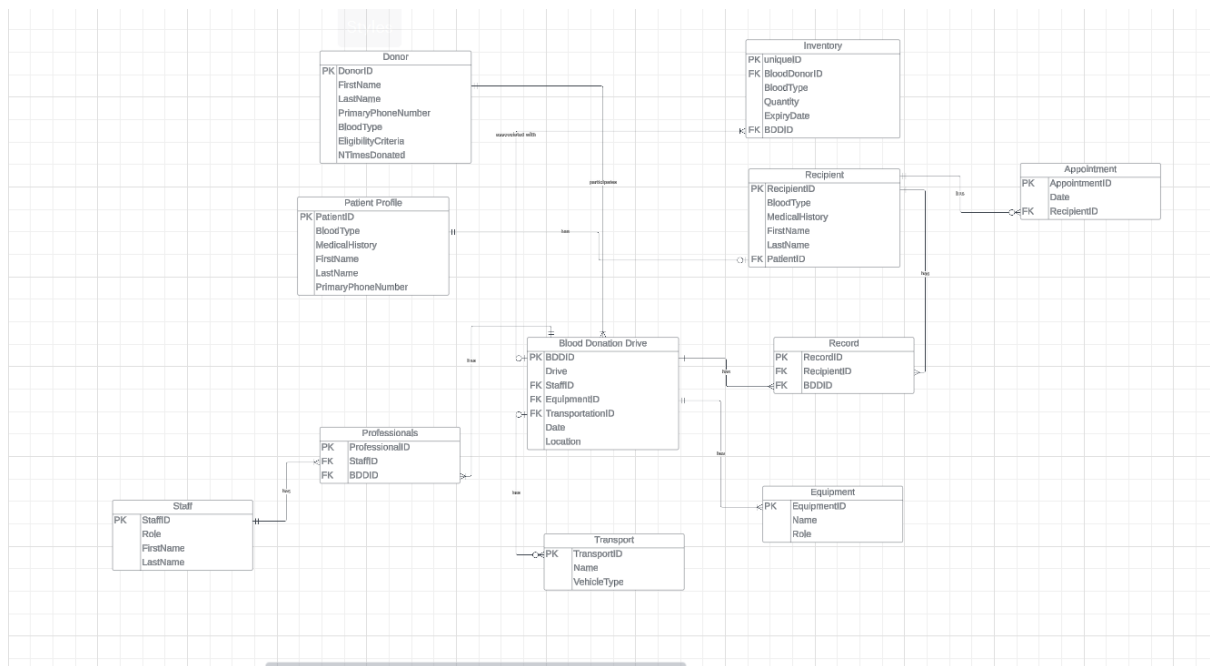
Assumptions:

The Many to Many relations between Match Staff and Match, Ticket and Match, Team and Player were broken into two 1-M relations and StaffAndMatchRecord, MatchAndTicketRecord, TeamAndPlayerRecord weak entities were made. This enhances data integrity, simplicity, flexibility, maintenance, optimized queries. Many attributes belonging to entities were assumed.

Constraints:

Data security, privacy, engagement and experience of fan, operational efficiency, robustness, reliability, regulatory compliance are some constraints which can't be shown through ERD.

4 Question 4



Assumptions:

Appointment entity was assumed for recipient to get blood. Staff entity and BDD had M-M relation which was broken into two 1-M relations and a weak entity Professionals was made. Equipment, Transport, Staff and appointment entities were assumed which had very less data in question related to.

Constraints:

Health assessments to find eligibility, blood matching, quality control, data privacy and security, are some constraints that cannot be shown by ERD.

The constraints of all questions are related to all questions together.