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IEBC Database System

The Commission is responsible for conducting or supervising referenda and elections to any elective body or office established by the Constitution and any other elections as prescribed by the Act of Parliament. It tends to conduct transparent, efficient, impartial election and undertake boundary delimitation for equitable representation and sustainable democracy.

I have coded this IEBC Database to help in organizing, keeping and managing with their different services and personal within the firm across the country. This database stores all the heads and Personales in varies posts and sectors with their details to make them easy to be reached by anyone. This database also groups each workforce under their specific posts and sector and also makes communication much easier has everyone can be reached at the same time.

First form of normalization

As per the rules of the first normal form an attribute cannot hold multiple values, I eliminated the repeating attributes in the separate tables. Some of the employees had more than one tel_no and workforce_email so they were stored in the same field.

Second form of normalization

I have eliminated the repeating set of records into the separate table and make join between the parent table and the child table. Here no non-prime attribute is dependent on the proper subset of any candidate key of the table.

The table is in 1NF because each attribute has atomic values. However, it not in 2NF because non-prime attribute salary is dependent on the post_title alone which is a proper subset of candidate key, so the tables are broken into two.

ERD Diagram for IEBC Database System

Workforce

PK	workforce_id
FK	workforce_name
	tel_no
FK	post_title
	salary
	workforce_email
	KRA_pin

Administration

FK	sector_id
FK	workforce_name
	workforce_id

Wage

PK	transcation_id
	post_title
	salary
FK	workforce_id

Post_Offered

PK	post_title
	salary
	number_needed

Sector

PK	sector_id
	sector_name