**ER Diagram- For Freebies for newbies**

* Till now we have designed layout pages for registration and login in both virtual and physical. By using Android studio, we have designed layout pages and generated output. Based on the work flow I have drawn ER diagram using Lucid chart.
* Below Lucid chart mainly include 3 entities those are Admin login details, User login details and products. Going forward product includes Free stuff, Events and Coupon codes. All these entities are inter linked to Database and Location.
* In both Admin and login entities the id is primary key and coming to products entities, product id is primary key. In Location entity zip code is unique so it is declared as primary key. Primary key is indicated with PK where foreign key is indicated with FK.
* Primary key means unique to that entity. A foreign key is a set of attributes in a table that refers to the primary key of another table. The foreign key links these two entities

Diagram

Description automatically generated

Diagram

Description automatically generated with medium confidence

* Based on above ERD Cardinality we have designed the relationship between entities. In between login page to User and admin page the relationship is exactly one because we have only one admin and user will register only one time. It will not allow duplicate entries.
* Similarly, between location entity and products entities the relationship is Many to many because one location has multiple products and in the same way product is available in multiple locations.
* In between Database to User entity the relationship is one or many because database must contain one user for sure and it will accept any number of new users. Comparatively, between user and database the relationship is exactly one because database will not accept duplicate entries.
* In between location to database entity, we have one to many relationships because one location will have multiple databases. Similarly, between database to location the relationship is only one because right now we are design only in one city.