

# CLASSIFIED ADVERTISEMNT SYSTEM (OLX)

## DATABASE MANAGEMENT PROJECT

# TEAM MEMBERS

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# Scope Of Project

Olx is a classified advertisements website with sections devoted to housing, and second hand products like gadgets, smartphones, cars, furniture, etc. Users can list their item and write a description, upload pictures and set an expected price. Interested users can get in touch with the the seller and negotiate a price and all that through the chat option.



Olx is about:

- giving each other a break, getting the word out about everyday, real-world stuff.
- restoring the human voice to the Internet, in a humane, non-commercial environment.
- keeping things simple, common-sense, down-to-earth, honest, very real.
- providing an alternative to impersonal, big-media sites.
- being inclusive, giving a voice to the disenfranchised, democratizing.
- being a collection of communities with similar spirit, not a single monolithic entity.

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- ❑ The system also allows the traveler to check the status of his/her reservation and allows them to select their seat number and meal options.
  - ❑ This system allows the administrators to update the status of the Bus if required. The main purpose of this software is to reduce the manual errors involved in the Bus ticket reservation process and make it convenient for the customers as well as for the Bus officials, to book the seat as when they require such that they can utilize this software to make reservations.

# INDIVIDUAL CONTRIBUTIONS

# Working

## **1) Login and Register Page:**

The user would first need to “Login” or “Register”

## **2) Home Page:**

On the Home Page there will Be 5 options to choose from “Search Listed Items”, “Browse Ads”, “Select Categories”, “Create a New Ad” and “Messages”.

## **3) Search Listed Items:**

If the User clicks on “Search Listed Items” button it will lead the user to a list of all the listed ads people posted on our website for that search. If the user clicks on a specific ad they are interested in, it will lead them to the Ad profile where they could see the description and expected price and other related details and the user can also send message to seller of that specific product from there.



#### **4) Browse Ads:**

If the user clicks on “Browse Ads” button it will lead them to most recent ads on our website and then they could just follow the same procedure and negotiate with the seller through messages option.

#### **5) Select Categories:**

There are 7 Major Categories in our website. After selecting on a particular category ads will be shown only accordance with your desired field

#### **6) Create a New Ad:**

After clicking on “Create a New Ad” button it will lead the user to a window where they can list any products from the available categories. This button will open a window where the user can add title, picture, contact details, description and expected price for the product they wish to sell. The user would also have an option to choose whether or not to display their contact details for this ad. After this it will show under browse ads in our website.

#### **7) Messages:**

After Clicking on “Messages” button it will show all the messages in the user’s profile



# Stakeholders Identified

- Buyers - They are interested in good quality products at affordable prices. They also want peace of mind with trusted sellers, and trustworthy information in the ads. They also like variety of products..
- Sellers - They value their reach to customers, fair charges (our website doesn't charge any charges). They also value more categories, so they can sell different used products.
- Real Estate Agents - They also value their reach to the interested customers and ease of posting ads. They should not feel alienated, at best, it increases their usage or the perceived value of listing on our website.
- Employees - Income, safe work environment.
- Government
- Owners/Shareholders

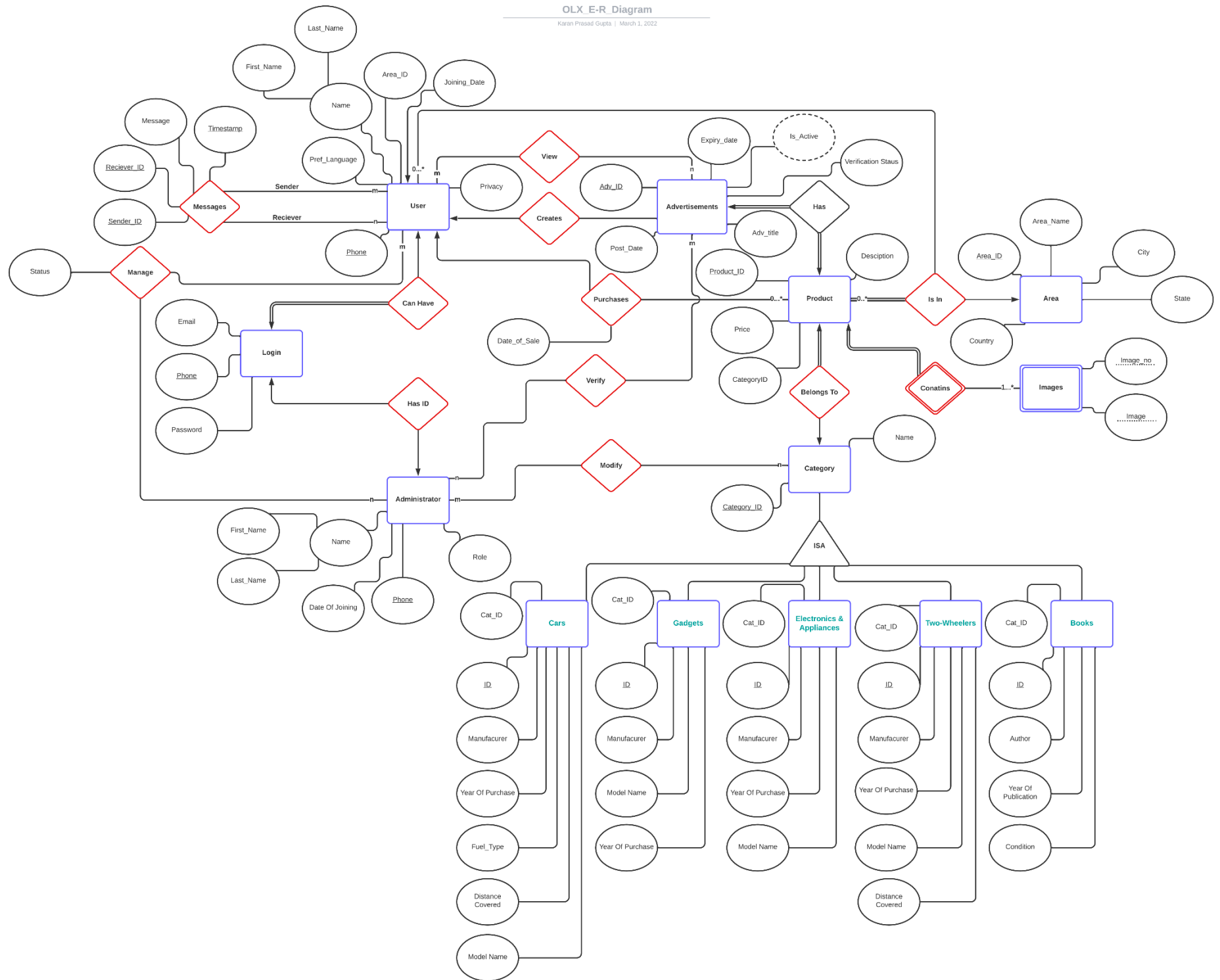


# ENTITY RELATIONSHIP DIAGRAM

<https://drive.google.com/file/d/1cbOBpbZKp-EBVgjJc-QpPTk6MTAqvqVZ/view?usp=sharing>

# OLX E-R Diagram

Karan Prasad Gupta | March 1, 2022



# LANGUAGES AND TOOLS REQUIRED

- MySQL Workbench
- Online Data Generator

# Weak Entity

**Image** – Image is a weak entity because it cannot exist without a product being added in the database a image is only inserted when a product is inserted so its totally dependent on product.

**Contains-** It is the weak relationship between product and image

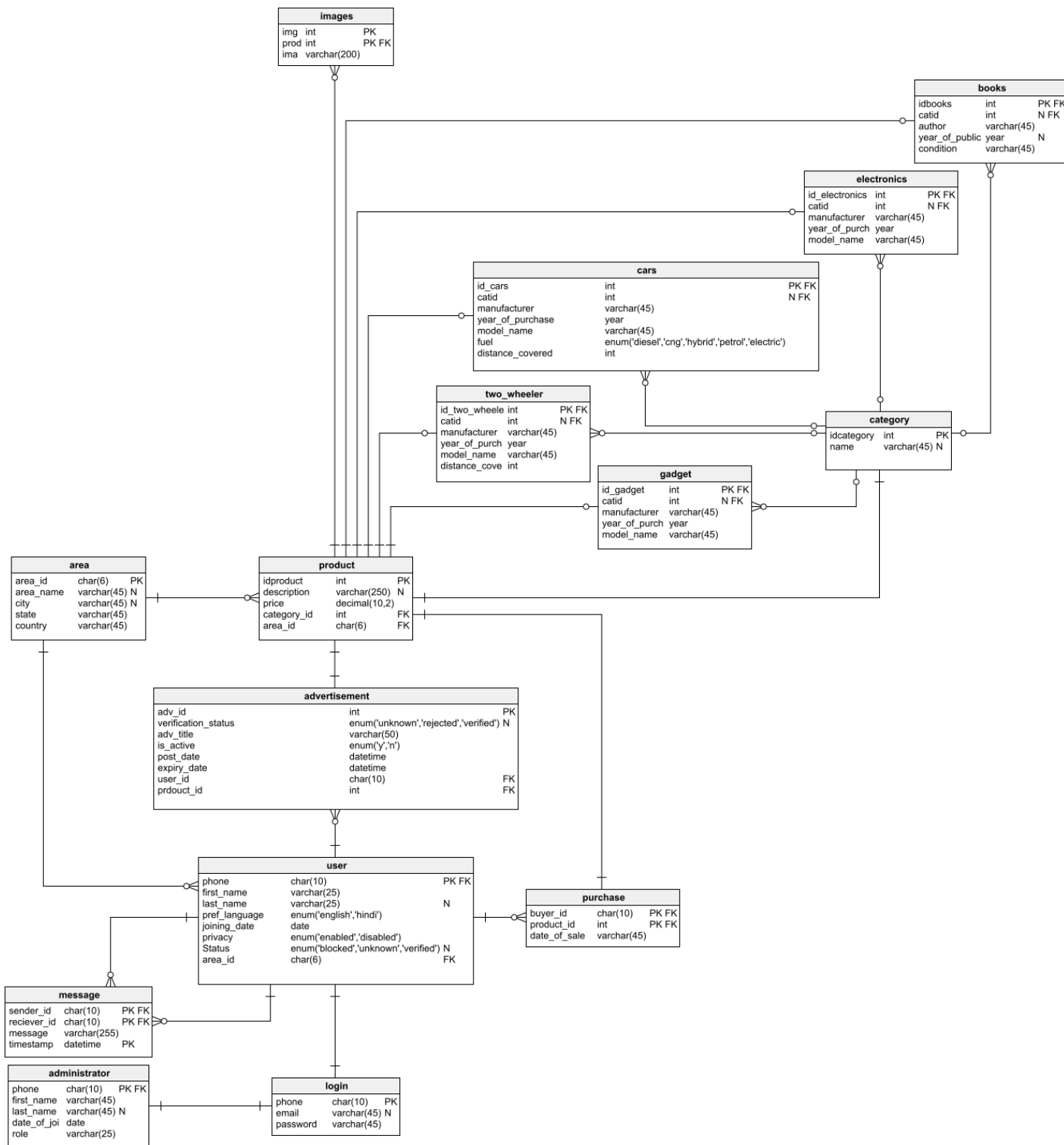
# Ternary Relationship

**Is In** – The Relationship Is In Between User , Product and Area is a ternary Relationship.

- As a product is always associated with a user and is Present in an area
- User may Have products he wish to sell and he must be present in an area.
- An area may have products and user present within its range.

# Relational Schema

<https://drive.google.com/file/d/1vDBejGqw8Hm61skCF9Qn9Yda0yvpOxE/view?usp=sharing>





# SQL QUERIES

-- view all active ads of users

```
Select u.phone,ad.adv_id,ad.adv_title  
from users as u,advertisement as ad  
where ad.is_active='Y' and ad.user_id=u.phone  
Group by phone;
```

# SQL QUERIES

-- view details of all products in the cars category whose manufacturing is more than 2000 and fuel type is petrol or hybrid and distance covered less than 150000

```
Select distinct  
ad.prduct_id,ad.adv_title,p.idproduct,p.description,p.price,p.area_id,c  
.manufacturer,c.model_name,c.year_of_purchase,c.distance_covered,  
c.fuel  
from cars as c, product as p, advertisement as ad  
where c.distance_covered<=150000 and (c.fuel='Petrol' or  
c.fuel='Hybrid') and c.id_cars=p.idproduct and  
p.idproduct=ad.prduct_id
```

# SQL QUERIES

-- A view of all product with all necessary basic details

```
create view all_products as
select concat(u.first_name,' ',u.last_name) as
Product_Owner,ad.adv_title,ad.verification_status,p.description,cat.name,
p.price,ad.is_active
from product as p, advertisement as ad, users as u,category as cat
where p.idproduct=ad.prduct_id and ad.user_id=u.phone and
p.category_id=cat.idcategory;
```

# SQL QUERIES

-- count user joining every year

```
select year(d.joining_date), count(*)  
from users as d  
Group by year(d.joining_date)  
order by year(d.joining_date) desc;
```

# SQL QUERIES

-- show chat between two users

```
SET @user1 = '9835335356', @user2 = '9776132442';  
select distinct *  
from message as m  
where (m.sender_id=@user1 and m.reciever_id=@user2) or  
(m.sender_id=@user2 and m.reciever_id=@user1)  
order by m.timestamp;
```

# SQL QUERIES

-- view average price of product in category cars

```
select avg(price)
from product natural right outer join cars
where idproduct=id_cars;
```

# SQL QUERIES

-- verify a user i.e, update verification status

```
UPDATE olx.users  
set Status ='Verified'  
where phone='9978515081';
```

# SQL QUERIES

```
-- create a role olxuser and give view permission on a view  
CREATE USER 'olxuser'@'localhost';  
GRANT select ON all_products TO 'olxuser'@'localhost' WITH GRANT  
OPTION;  
select * from all_products;
```



# SQL QUERIES

-- search most expensive product

```
with max_price(maxpr) as (select max(price) from product)
select * from all_products as ap,max_price
where ap.price=max_price.maxpr;
```

# SQL QUERIES

-- view product having 'some text' in description and price >20000;

```
select *  
from all_products as pr  
where pr.description like '%integer%'  
having pr.price>20000;
```



THANK YOU