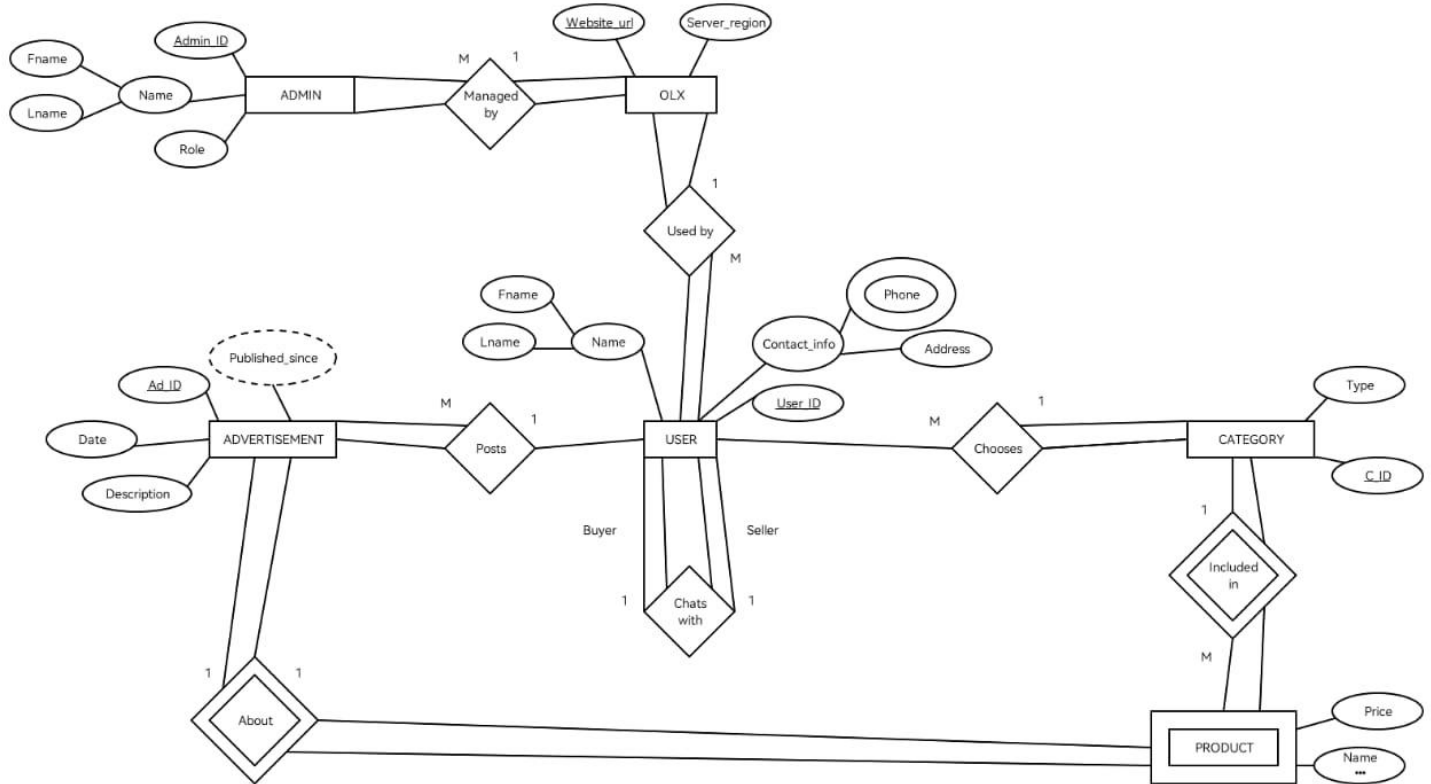


OLX ERD

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Entity Relationship Diagram



Mapping To Schema

OLX

<u>Website_url</u>	Server_region
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ADMIN

<u>Admin_ID</u>	Role	Admin_Fname	Admin_Lname	Website_url
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USER

<u>User_ID</u>	Address	User_Fname	User_Lname	Chat_ID	Category_ID	Website_url
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USER_PHONE

<u>User_ID</u>	<u>Phone</u>
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ADVERTISEMENT

<u>Advertisement_ID</u>	Date	User_ID	Description	Published_since
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CATEGORY

<u>Category_ID</u>	Type
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PRODUCT

<u>P_Name</u>	<u>Category_ID</u>	<u>Advertisement_ID</u>
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PRODUCT PRICE

<u>P_Name</u>	<u>Advertisement_ID</u>	P_Price
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Description

An ERD for OLX application/website that keeps track of OLX features.

OLX

- “Website_URL” as primary key.
- “server_region” as an attribute.

Managed by (relation)

- OLX relation with ADMIN with total participation from both sides.
- Has a Cardinality ratio of 1:M, because OLX has many ADMIN while 1 ADMIN manage 1 OLX.

Uses (relation)

- OLX relation with USER with total participation from both sides as all USER uses OLX and all OLX is used by USER.
- Has a cardinality ratio of 1:M , because OLX has many USER while 1 USER uses 1 OLX.

ADMIN

- “Admin_id” as primary key.
- “Name” as composite attribute which consists of “Fname” and “Lname”.
- “Role” attribute which describes the admin rights.

USER

- “user_id” as primary key.
- “name” as composite attribute which consists of “Fname” and “Lname”.
- “contact_info” as composite attribute which consists of “address” and “phone “.
- “phone” as multivalued because USER can have multiple phone numbers.

Chats With (Recursive relation)

- Relation between 2 USER (Buyer and Seller) with total participation from both sides as all USER(buyer) will chat with USER(seller) and vice versa.
- Has a cardinality ratio 1:1 because USER (buyer) Chat with 1 USER(seller) and vice versa.

ADVERTISEMENT

- “AD_id” as primary key.
- “Date” attribute indicates the date the ADVERTISEMENT was posted.
- “Description” attribute.
- “published_since” derived attribute derived from “date” attribute

Posts (relation)

- USER relation with ADVERTISEMENT with partial participation from the USER as not all USER post ADVERTISEMENT and total participation from ADVERTISEMENT as every ADVERTISEMENT is posted by USER.
- Has cardinality ratio 1:M, because each ADVERTISEMENT is posted by only 1 USER while 1USER can post many ADVERTISEMENT.

CATEGORY

- “c_id” as a primary key.
- “type” as an attribute.

Chooses (relation)

- USER relation with CATEGORY , partial participation from USER and total participation from CATEGORY.
- Has cardinality ratio 1:M because 1 USER choose 1 CATEGORY while 1 CATEGORY is chosen from many USER.

PRODUCT (Weak entity)

- “name” as partial key.
- PRODUCT is weak Entity because it doesn't have a primary key and it depends on CATEGORY and ADVERTISEMENT having the “c_id” , “ad-id” as foreign keys and “name” as partial key. Their combination is the primary key of PRODUCT.
- “price” as attribute.

Included In (identifying relation)

- Relation which identifies PRODUCT(weak entity) from CATEGORY.
- Total participation from both sides as all PRODUCT must be included in a CATEGORY and all CATEGORY have PRODUCT.
- Has a cardinality ratio 1:M because 1 CATEGORY has many PRODUCT while 1 PRODUCT is included in 1 CATEGORY.

About (Identifying relation)

- Relation which identifies PRODUCT(weak entity) from ADVERTISEMENT.
- Total participation from both sides as all PRODUCT must have an ADVERTISEMENT and all ADVERTISEMENT are about PRODUCT.
- Has a cardinality ratio 1:1 because 1 ADVERTISEMENT has 1 PRODUCT while 1 PRODUCT is advertised by 1 ADVERTISEMENT.