Project Name: Online Bazar

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**Tables(13):**

1. products

2. customer

3. staff

4. location

5. ac

6. book

7. mobile\_and\_tablet

8. laptop\_and\_desktop

9. refrigerator

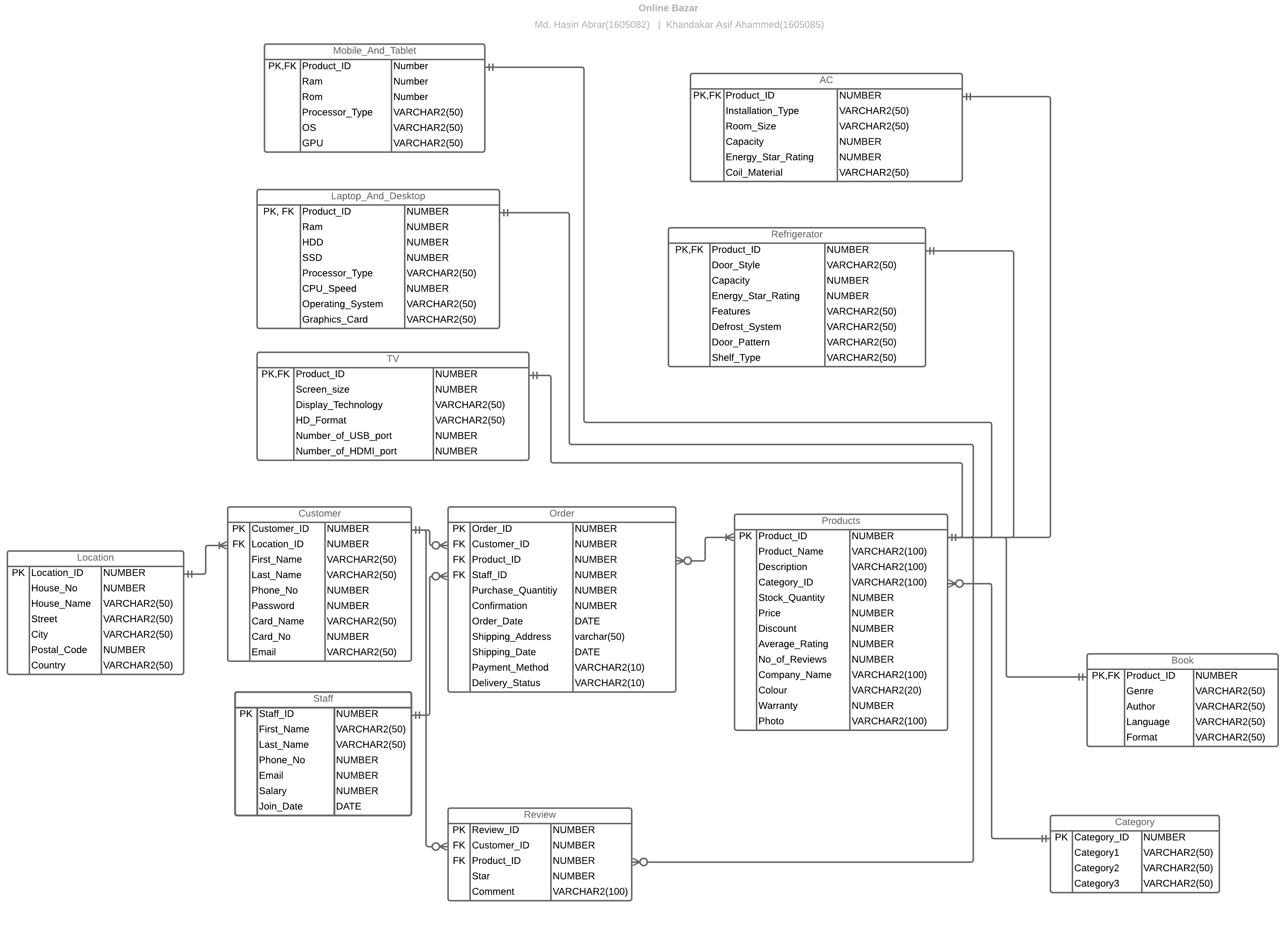
10. tv

11. review

12. category

13. customer\_order

**ERD:**



**Views(6):**

1. ac\_view

2. book\_view

3. laptop\_and\_desktop\_view

4. mobile\_and\_tablet\_view

5. tv\_view

6. refrigerator\_view

**Triggers(2):**

1. review\_trigger: this updates the number of reviews and average review of the product being reviewed.

2. change\_stock\_quantity: this trigger decreases the stock quantity of the product by the number of purchase\_quantity so that the products table remains up-to-date.

**Functions(12):**

1.recommended\_for\_you: this function takes a customer\_id as parameter and shows the product recommended for him based on his order history.

2.top\_deals : this function shows all the products which have discount 20% or more.

3.top\_rated: this function shows all the products which have average rating 4.3 or more.

4.insert\_into\_ac : this function takes input from the user as parameter and then it first inserts the product in the “products” table. In this query, a product\_id is generated automatically and using this product\_id the function then insert into the “ac” table with necessary data.

5. insert\_into\_book: this function takes input from the user as parameter and then it first inserts the product in the “products” table. In this query, a product\_id is generated automatically and using this product\_id the function then insert into the “book” table with necessary data.

6. insert\_into\_category: Admin can add a new category of product into his database. And this function serves that purpose. It takes three parameters named category1, category2 and category3 and then insert this data into category table.

7. insert\_into\_customer: When a new user registers, this function is used to add that user’s information to the database. This function takes user’s personal information including his address as input. Then the address is added to the location table and using the location\_id of that particular location, this function then adds the other informations to the “customer” table.

8.insert\_into\_laptop\_desktop: adds product to laptop\_and\_desktop table.

9.insert\_into\_mobile\_tablet: adds product to mobile\_and\_tablet table.

10.insert\_into\_refrigerator: adds product to refrigerator table.

11.insert\_into\_tv: adds product to tv table.

12.insert\_into\_products: adds product to “products” table.

**Complex Query:**

1.

SELECT products.product\_id,

products.product\_name,

products.description,

products.category\_id,

products.stock\_quantity,

products.price,

products.discount,

products.average\_rating,

products.no\_of\_reviews,

products.company\_name,

products.colour,

products.warranty,

products.photo,

ac.installation\_type,

ac.room\_size,

ac.capacity,

ac.energy\_star\_rating,

ac.coil\_material,

ac.features

FROM (products

JOIN ac USING (product\_id));

This query is used when a user sees the ACs. And this is also used when a user filters the AC products based on various criteria.

2.

SELECT products.product\_id,

products.product\_name,

products.description,

products.category\_id,

products.stock\_quantity,

products.price,

products.discount,

products.average\_rating,

products.no\_of\_reviews,

products.company\_name,

products.colour,

products.warranty,

products.photo,

book.genre,

book.author,

book.\_language,

book.\_format

FROM (products

JOIN book USING (product\_id));

This query is used when a user sees the “book” products. And this is also used when a user filters the book products based on various criteria.

3.

SELECT products.product\_id,

products.product\_name,

products.description,

products.category\_id,

products.stock\_quantity,

products.price,

products.discount,

products.average\_rating,

products.no\_of\_reviews,

products.company\_name,

products.colour,

products.warranty,

products.photo,

laptop\_and\_desktop.hdd,

laptop\_and\_desktop.ssd,

laptop\_and\_desktop.processor\_type,

laptop\_and\_desktop.cpu\_speed,

laptop\_and\_desktop.operating\_system,

laptop\_and\_desktop.graphics\_card,

laptop\_and\_desktop.ram

FROM (products

JOIN laptop\_and\_desktop USING (product\_id));

This query is used when a user sees the “laptop\_and\_desktop” products. And this is also used when a user filters the laptop and desktop products based on various criteria.

4.

SELECT products.product\_id,

products.product\_name,

products.description,

products.category\_id,

products.stock\_quantity,

products.price,

products.discount,

products.average\_rating,

products.no\_of\_reviews,

products.company\_name,

products.colour,

products.warranty,

products.photo,

mobile\_and\_tablet.ram,

mobile\_and\_tablet.rom,

mobile\_and\_tablet.processor\_type,

mobile\_and\_tablet.os,

mobile\_and\_tablet.gpu

FROM (products

JOIN mobile\_and\_tablet USING (product\_id));

This query is used when a user sees the “mobile\_and\_tablet” products. And this is also used when a user filters the mobile and tablet products based on various criteria.

5.

SELECT products.product\_id,

products.product\_name,

products.description,

products.category\_id,

products.stock\_quantity,

products.price,

products.discount,

products.average\_rating,

products.no\_of\_reviews,

products.company\_name,

products.colour,

products.warranty,

products.photo,

refrigerator.door\_style,

refrigerator.capacity,

refrigerator.energy\_star\_rating,

refrigerator.features,

refrigerator.defrost\_system,

refrigerator.door\_pattern,

refrigerator.shelf\_type

FROM (products

JOIN refrigerator USING (product\_id));

This query is used when a user sees the “refrigerator” products. And this is also used when a user filters the refrigerator products based on various criteria.

6.

SELECT products.product\_id,

products.product\_name,

products.description,

products.category\_id,

products.stock\_quantity,

products.price,

products.discount,

products.average\_rating,

products.no\_of\_reviews,

products.company\_name,

products.colour,

products.warranty,

products.photo,

tv.screen\_size,

tv.display\_technology,

tv.hd\_format,

tv.number\_of\_usb\_port,

tv.number\_of\_hdmi\_port

FROM (products

JOIN tv USING (product\_id));

This query is used when a user sees the “tv” products. And this is also used when a user filters the tv products based on various criteria.

Simple Query:

1. update products set $entity=$updatedValue where product\_id = $product\_id

2. update book set $entity=$updatedValue where product\_id = $product\_id

3. update laptop\_and\_desktop set $entity=$updatedValue where product\_id = $product\_id

4. update mobile\_and\_tablet set $entity=$updatedValue where product\_id = $product\_id

5. update refrigerator set $entity=$updatedValue where product\_id = $product\_id

6. update tv set $entity=$updatedValue where product\_id = $product\_id

7. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, ram, rom, processor\_type, os, gpu from mobile\_tablet\_view where category\_id = 1

8. insert into cart(customer\_id, product\_id) VALUES ($cid, $pid)

9. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, ram, rom, processor\_type, os, gpu from mobile\_tablet\_view where category\_id = 2

10. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, hdd, ssd, processor\_type, cpu\_speed, operating\_system, graphics\_card, ram from laptop\_and\_desktop\_view where category\_id in(3, 4, 5)

11. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, hdd, ssd, processor\_type, cpu\_speed, operating\_system, graphics\_card, ram from laptop\_and\_desktop\_view where category\_id = 3

12. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, hdd, ssd, processor\_type, cpu\_speed, operating\_system, graphics\_card, ram from laptop\_and\_desktop\_view where category\_id = 4

13. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, ram, rom, processor\_type, os, gpu from mobile\_tablet\_view where category\_id = 1 and ram = $ram and rom = $rom and company\_name = '$brand' and colour = '$colour'

14. select product\_id,product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, ram, rom, processor\_type, os, gpu from mobile\_tablet\_view where category\_id = 2 and ram = $ram and rom = $rom and company\_name = '$brand' and colour = '$colour'

15. select product\_id, product\_name, description, stock\_quantity, price, discount, average\_rating, no\_of\_reviews, company\_name, colour, warranty, photo, hdd, ssd, processor\_type, cpu\_speed, operating\_system, graphics\_card, ram from laptop\_and\_desktop\_view where category\_id = 3 and ram = $ram and hdd = $rom and company\_name = '$brand' and colour = '$colour'

16. select \* from insert\_into\_mobile\_tablet('$product\_name', '$description', $catID, $stock\_quantity, $price, $discount, '$company\_name', '$colour', $warranty, '$pic', $ram, $rom, '$proc\_type', '$op\_sys', '$gpu')

17. select \* from insert\_into\_laptop\_desktop('$product\_name', '$description', $catID, $stock\_quantity, $price, $discount, '$company\_name', '$colour', $warranty, '$pic', $hdd, $ssd, '$proc\_type', '$cpu\_speed', '$op\_sys', '$gpu', $ram)

18. insert into customer\_order(customer\_id, product\_id, purchase\_quantity, confirmation, order\_date, shipping\_date, payment\_method, staff\_id, shipping\_address) values ($customer\_id, $product\_id, $purchase\_quantity, true, current\_date, null, '$payment\_method', 1, '$shipping\_address')

19. insert into review(customer\_id, product\_id, star, comment, order\_id) VALUES ($customer\_id, $product\_id, $review\_star, '$review\_comment', $order\_id)

20. delete from cart where product\_id = $product\_id and customer\_id = $customer\_id

21. select customer\_id from customer where user\_name = '$username' and password = '$passWord'