REPORT

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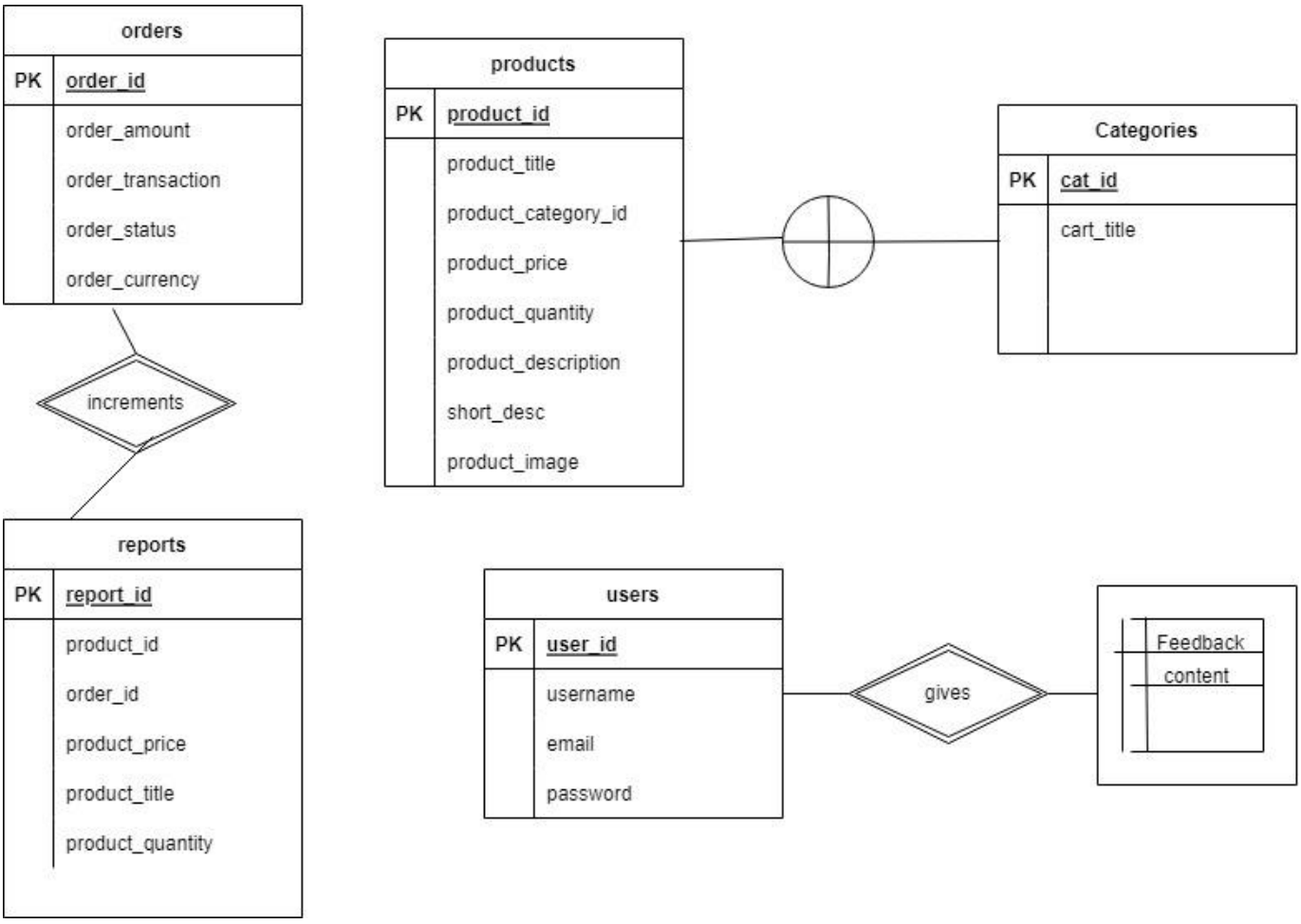
(A20338902)

Following is the ER diagram of my implementation which contains 6 tables.



I have implemented my online database application with the help of 6 tables in which one is subtype table(categories) and other is weak entity(without key that is feedback in my case).

Now let's us see why all my tables are in BCNF :-

Orders :- Different orders will have different ids, different amounts, different status, order_currency because my shopping website is all over the world with different costs and different currencies making it in 1NF.

There is no attribute that is depending on order_id because these are independent of each other and needs to be entered manually. From this the table is in 2NF.

It is also in 3NF because there is no scope of dependency of non attributes on non attributes.

As it satisfies 3NF conditions next condition is every relation from orders table here we have only one relation and that has left side prime key only meaning it is in BCNF.

Products :- this table is in all 1nf, 2nf and 3nf because products will be differing from different countries based on situations implying all unique values. If you see products all other attributes are independent of each other because they can be fetched without dependency of other attributes. Showing it is in 2nf. And non attributes does not depend on any other attributes proving it is in 3nf.

As it satisfies 3NF conditions now, there are no relations from this table, if there are relations then we can say analyze functional dependencies as they are not there we will not have head ache of non primary key -.> key relation only meaning it is in BCNF.

Categories :- It is automatically in bcnf as it is subtype of group and having no relations.

Reports :- It is a table that displays reports of orders meaning how many products are bought with which order. When an order is made automatically it automatically creates report and every attribute is generated independent of each other making it in 3nf. Before that it will be in 1Nf and 2NF because evey report is unique with unique orders making it in 1nf. And no other attributes like order_id, product_id depend on report_id making it in 2nf.

Users :- users table is in bcnf because firstly it has only one relation and that one relation is mainly on user_id so no other non prime attributes ->non prime attributes relationships can be used. Here every user is independent of each means every user will have unique attributes making the table in 1,2 and 3 nf.

Feedback:- It is a weak entity having only one attribute and no relations making it bcnf perfectly.

Therefore all my tables are in bcnf.

1.2) Implementation of my database.

Tools used in this implementation :- Xamp for hosting, php for coding of modules, mysql for database.

I used 1 view for displaying reports with product_price=5

Used 1 trigger before inserting user into database if user email follows rules he will be added or trigger will throw error.

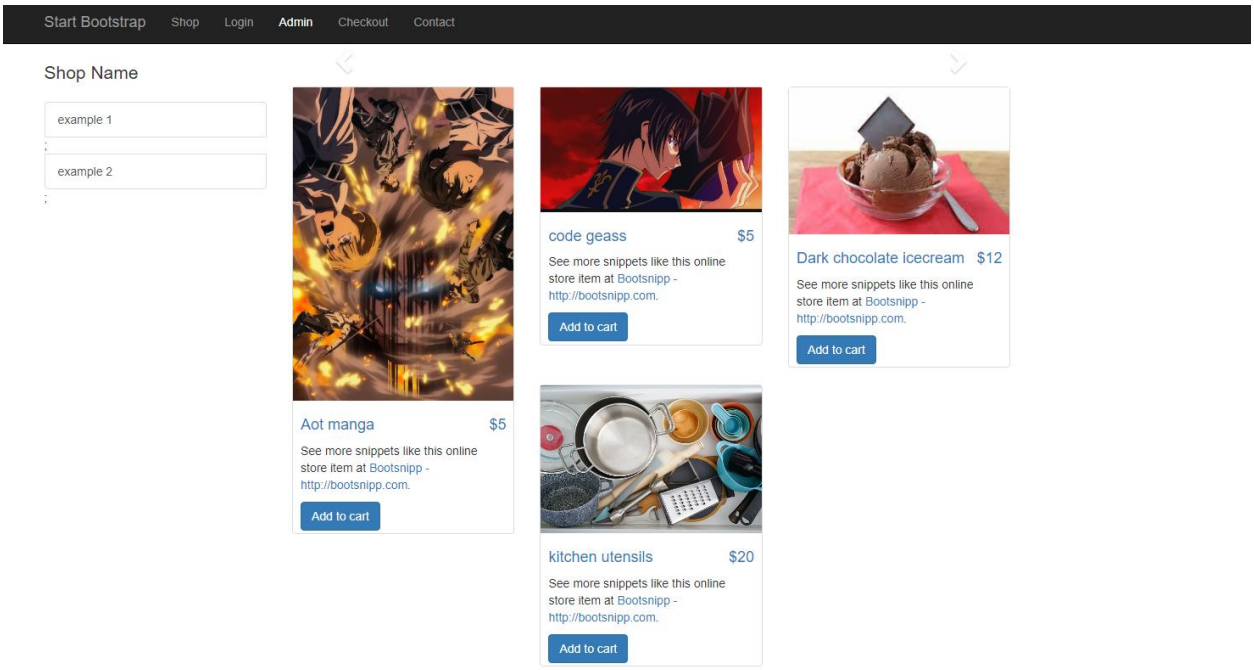
Used 1 procedural call in place of select query for selecting categories and used in the function where getcategories are necessary .

Features implemented :-

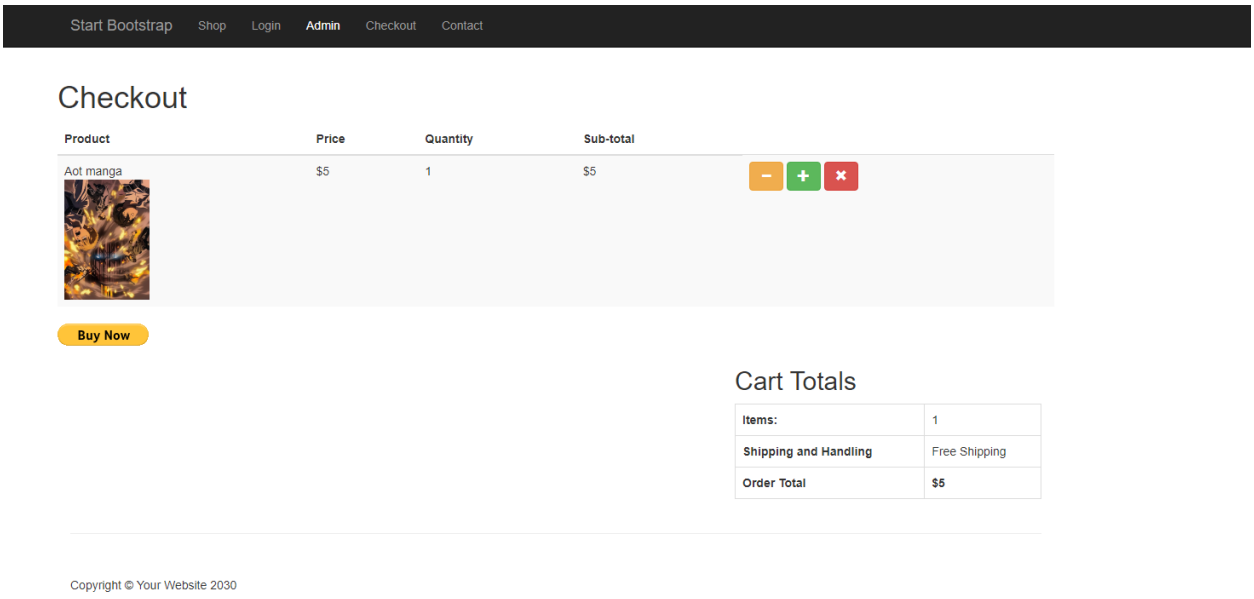
a) Cart function
b) Paypal linking for payment.
c) User admin logging.
d) Adding of products.
e) Removing of products,
f) Editing of products
g) Editing ,adding and deletion of reports.
h) Adding categories ,deleting and editing of reports.
i) Adding and deletion of users
j) Contact page for adding feedback.

All these features are retrieved or fetched or updated in mysql phpMyAdmin and coded in php with some queries.

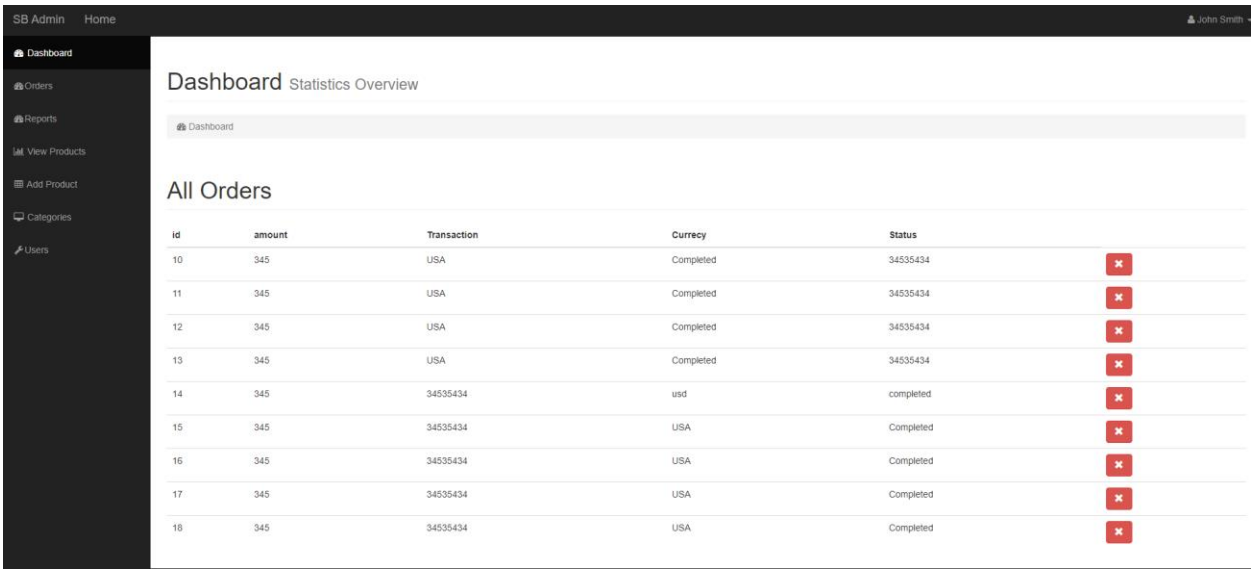
1.3) Appendix



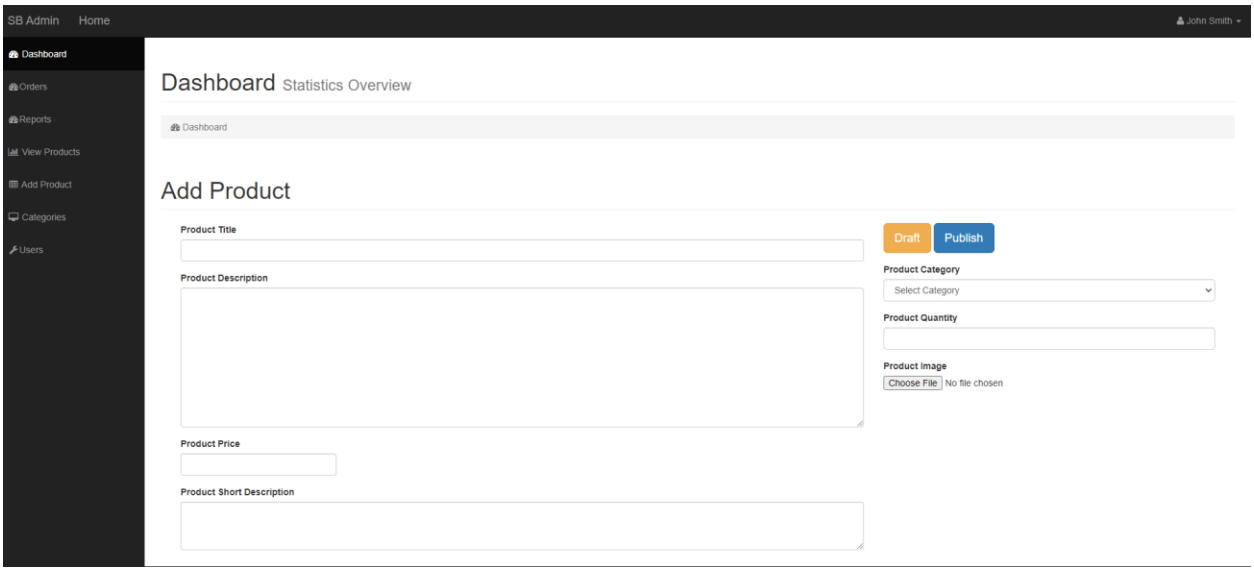
(Initial home page of my website).



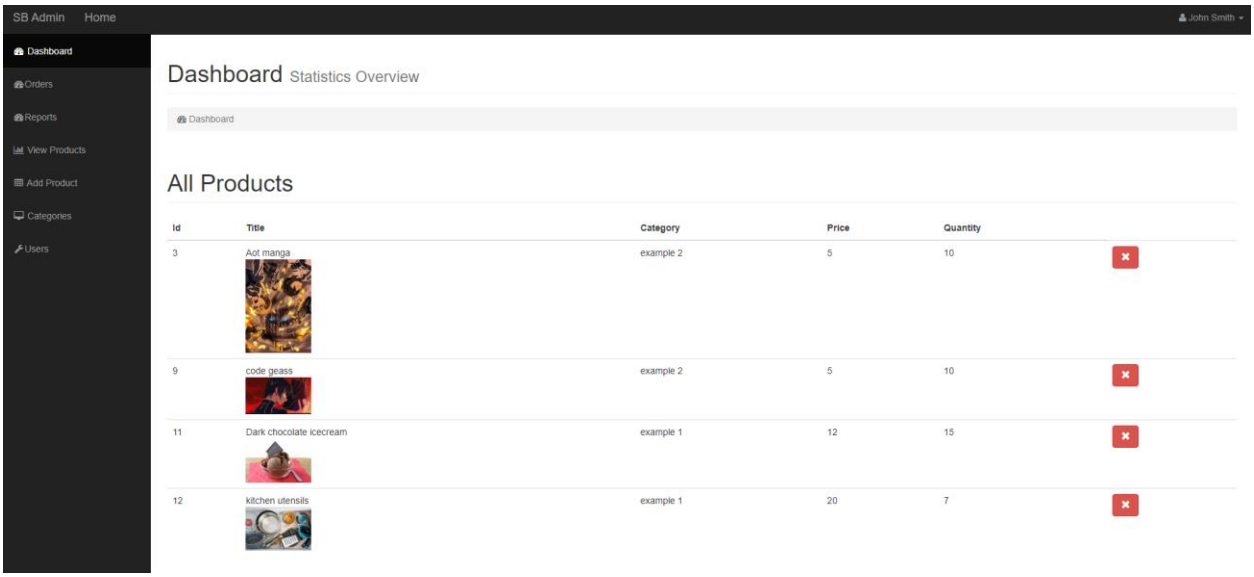
(Cart page for adding, removing, and deleting item in cart bottom will have cart total of selected items).



(orders page orders will be automatically added when user buys and can be deleted by pressing x mark).



(Add products page where user can add any items by filling the info).



(this is view products page where admin can delete items and edit by clicking on them).

Like this I have all features implemented but pasted only 5 of them.