

Project Documentation

CS151: Database systems (Minor)

Submitted to

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ABSTRACT

Introduction-The project focuses on studying and preparing an interactive platform through which the various shops of bakery and grocery in the college will be delivering various products to the students in the hostel at a cheap rate and henceforth making it convenient for the students to buy products by saving their time and money.

Problem Statement-This project is meant to solve the problem of the students of walking kms to shop which are far away from their hostels to buy stuffs by delivering goods and grocery at their hostel itself which will save their time. Even during sem examinations this may help them very much by saving their time.

Procedure-We will create a platform where the respective shop owners may add their items and products and the students can login too. Henceforth the project will show how the shop owners and the students will get in touch with each other and communicate.

Some of the requirements-

PHP- will be used as a backend language and for connecting the database.

MYSQL-for storing and managing database.

CSS , JavaScript and HTML5 for the creating an interactive webpage including certain elements bootstrap – frontend.

MOTIVATION

- **HISTORY-**Sometimes the shops of grocery and bakery that we have in our college fail to deliver good performance just because during the semester times there is lot of rush in these shops and due to this the students must wait for long hours standing outside of these shops which results in a lot of wastage of time. Even many a times the stuffs that we need for our work may or may not be present in these shops, so going there and checking for it doesn't seem a good option in the long run. So, in order to eliminate this problem, we thought of developing a delivery system in which the goods and products will be delivered at the doorstep of our hostel.
- This problem seems interesting because we are going to develop a interactive platform through which the customers (mainly the students) and the shop owners will be able to keep in touch with each other and the students may easily get to know what all products they have or which all products they are short off. This may even be a source of income for some people as we will be needing a few people for delivering of the goods which in turn will give them money. This project will solve the problem of the students very easily and hence they will find it easy to buy stuff , even it will save their time and will increase the sale of the shop owners as well.
- And even considering the current pandemic of COVID-19 it will be good as there will be less of mass gathering in these shops and goods will be delivered in hand to them. This method of delivering products is safe ,time saver as well as will help to reduce the spread of the pandemic.
- This kind of problem of mess arises in the situation of semester examinations which will be solved very easily. This is the first time that this kind of project is taken up as we do have certain large companies and firms delivering the goods and the products at the doorstep of the people. But these firms take good amount of time to deliver the product and we may not get our products on time. We do have other similar platforms like big basket ,amazon ,flipkart etc which are meant for delivering goods to the customers . But they take time to deliver and aren't local but global. The return process even takes a lot of time if the product is damaged or needs an exchange.
- But here by developing a local system within our college we are making it easy for the customers to get in hand goods at a faster and a cheaper rate. They can easily contact us, and we can reach out to them

and solve their problem. Further the innovations , improvement on our idea will reach out to you in the next upcoming sections.

EXISTING APPROACH

PLAN

Here we first plan to create a platform in which the shop owners may be able to add their shop name description and the products. The customers can create their account and can see the details of all the shops which are there in the college. The approach will be that the students by seeing the different shop items may be able to directly add them to their cart and further order it online only. The payment method as of now will only be google pay or cash in hand when the delivery man will arrive at their doorstep. Each customer will get a specific order id after their order is confirmed. We also plan to create a team and distribute the work among them for setting up our website. As of now we are only a member of two so one guy can handle the frontend interactive part and the other can manage the database.

DEFINING

The requirements of our project may mainly comprise of a platform for storing database , the frontend part through which the customers will interact with the shop owners and the backend part. We may require teaching for all the shop owners on as how to use the platform , for this we will keep a tutorial video which will make it easy for them to understand. We may require some people for the delivery of the goods and maybe a person who will take care of the cash inflow and outflow and maintain the data.

DESIGN

The first page of our project will comprise of the login page in which the customer and the users both will have a separate set of username and password. It will be secure. You can see the design from the following webpage.

If the username or the password is incorrect the page may fail to start popping out with the message that your login attempt was unsuccessful, please try again which will be shown in the live functionality of the project.

So, for a good amount of security we have kept username and password both as a combination of characters and numbers , so it may be difficult for the hackers and the intruders to get to know about the password and stuff.

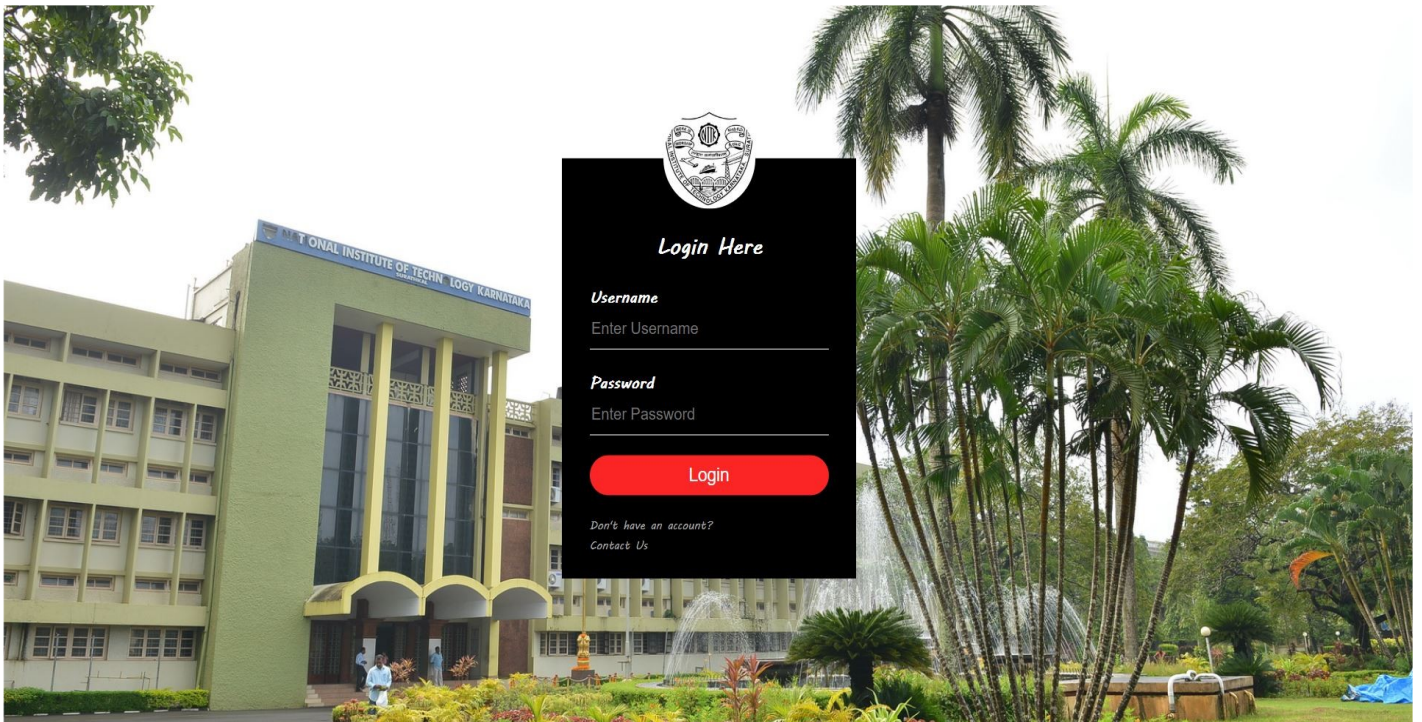
(As along mentioning about the design of our existing webpage I'll also be telling out the features which we wished to include but we couldn't due to the time constraint)

Here we also planned to add a page of forget password in case if the users fail to login and forgets his/her password. Once the user clicks on it a mail will be sent to their respective email asking for the resetting of the password.

We would also like to keep a delay between each subsequent request for password change to enhance the security features. We would also like to assign a specific key for each successful login to keep the data safe and make it end to end encrypted.

Even in case if the account gets hacked , just single mail of the customer would be enough to delete the account from the database to ensure that the data will be in safe hands.

Multiple failed login attempts by the user will eventually lead to temporary blockage of the account for 5 mins to ensure there aren't any malpractices done.



Further if the shop owner or the student both don't have the account, they can create one by clicking on the don't have an account page and correspondingly fill out the required details.

Registration Form

First Name

Last Name

Note: -For all the shop owners begin your username with "s"
-For all the customers begin your username with "c"
-Username can be a combination of variables and characters

Category
☐ Shop Owner ☐ Customer

Email

Password

Username

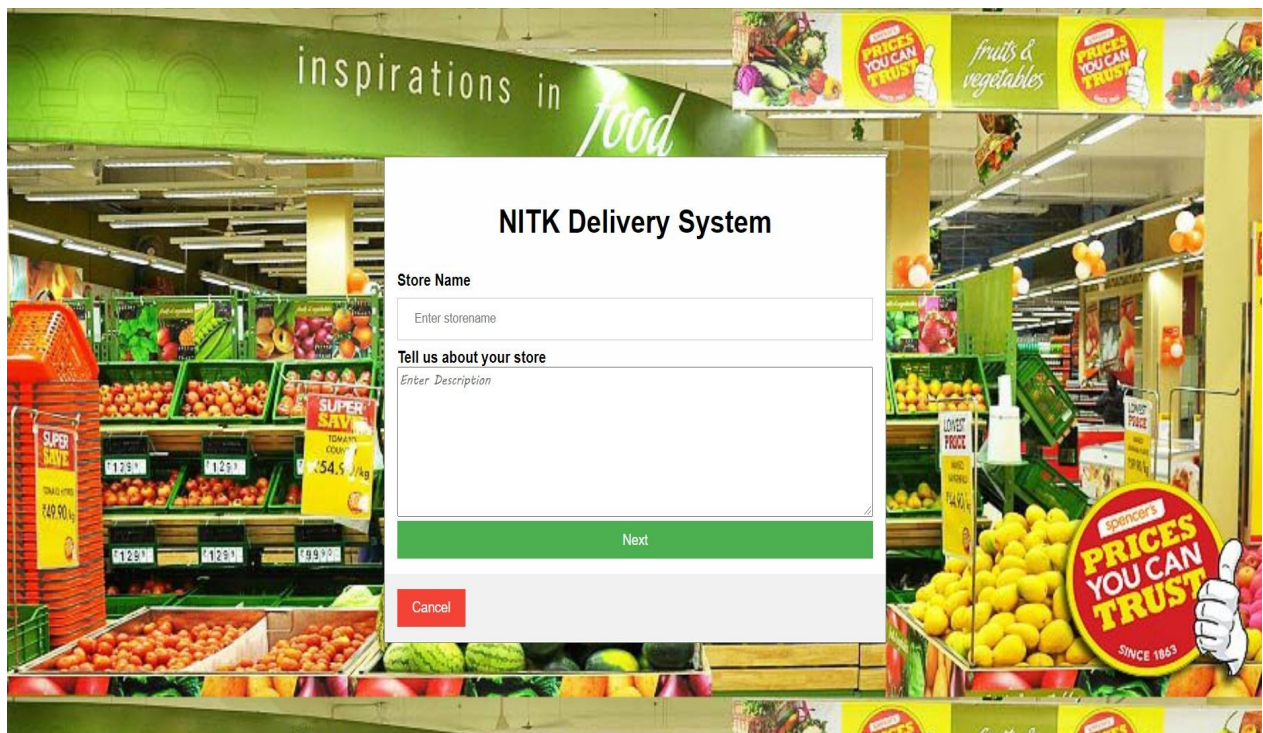
Submit

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After successful creation of the account and login attempt the users can proceed further . The shop owners can add their shop names and a few descriptions about their shop which will make it easy for the customers to get to know about their shop. Further in the next page the shop owners can add their items along with certain specifications which will be shown. The data items which they will enter will be stored in our database.

Further the same data which the shop owner will enter will be displayed in the customer page to give them a panel of selection of our wide range of products.


These small images are the links to the respective customer and the shop keeper pages.



The image shows a registration form for the "NITK Delivery System" overlaid on a background of a grocery store. The form has a white background and is titled "NITK Delivery System" in bold black text. Below the title, there are two main sections: "Store Name" and "Tell us about your store". The "Store Name" section has a text input field with the placeholder "Enter storename". The "Tell us about your store" section has a larger text input field with the placeholder "Enter Description". At the bottom of the form, there are two buttons: a green "Next" button and a red "Cancel" button. The background of the form is a collage of grocery store images, including shelves of fruits and vegetables, and signs that say "inspirations in food", "fruits & vegetables", and "PRICES YOU CAN TRUST".

The shop owners can add their products in the following page:

Add Your Product Here

Product Name :	<input type="text"/>
Quantity :	<input type="text"/>
Expiry Date :	<input type="text" value="dd-mm-yyyy"/> 
Price :	<input type="text"/>

Add Product

Done

List Of Data

Product Name	Quantity	Expiry Date	Price
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In the login page we have a option of contact us where in the customer who have any query or doubt regarding the delivery of product or if he needs and help can directly reach out to us by filling up the required information.

National Institute of technology Karnataka, Surathkal

Email-registrar@nitk.ac.in Phone-0824 247 4000

Contact Us

Any queries ?leave us a message:)



First Name

Your first name...

Last Name

Your last name...

Registration Id

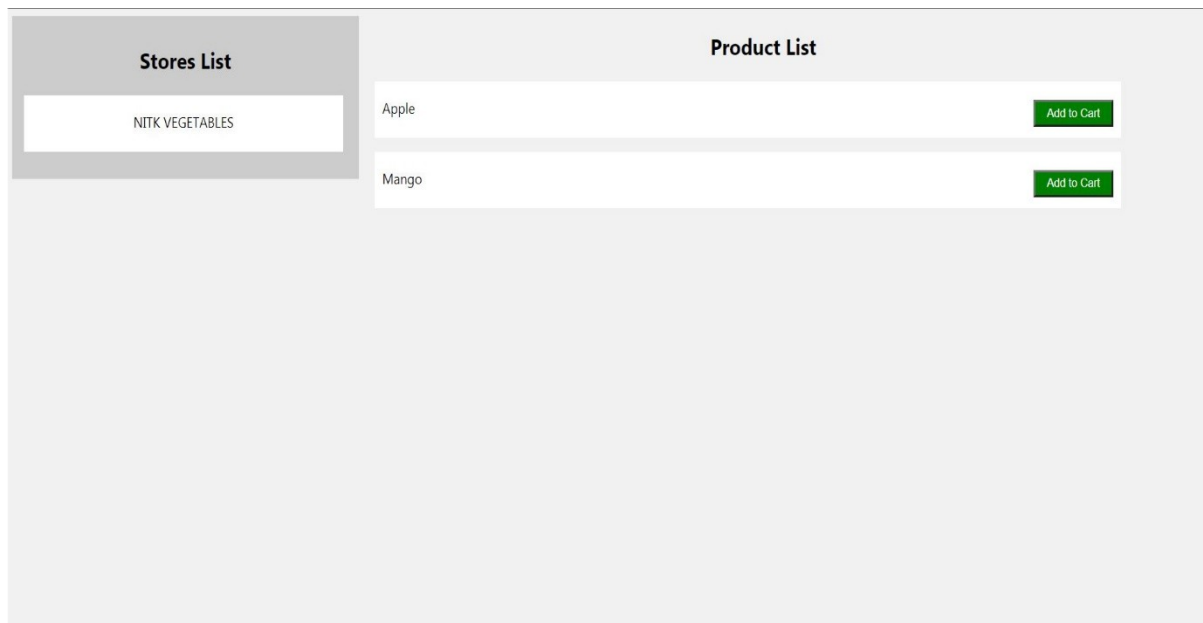
Your college id

Subject

Write something..

Submit

Now after successful login from the shop owner side and entering the required products the customers can now see the list of the products available for them and can order it by adding them to their cart. We will have a separate tab for each of the shop with their specific list of the products.



We also wished to add a page for the order confirmation , where the customers may once again able to recheck their items and add /subtract the quantity of items they have ordered . As well as in real time we also wish to tell them the amount of time it will take to get in delivered to their hostel. Here we will also ask them to mention their hostel no and phone number for in case the delivery man wants to contact you.

DEVELOPMENT PART

NITK DELIVERY SYSTEM is a web application for delivering goods and maintaining data of stores in our college. The application lets you order or maintain your store's data and retrieve anytime. The choice of tools and platform used in development are:

1. Apache- Apache is the most widely used web server software. Developed and maintained by Apache Software Foundation. Apache is an open source software available for free. It runs on 67% of all web servers in the world. It is fast, reliable and secure.

2. PHP- It is a server-side scripting language. that is used to develop Static websites or Dynamic websites or Web applications .PHP stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages. PHP scripts can only be interpreted on a server that has PHP installed.

3. MySQL- MySQL is a relational database management system based on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications. The most common use for MySQL however, is for the purpose of a web database.

The web application is divided into two parts:

1. Shop Owner:

Under this section you can have:

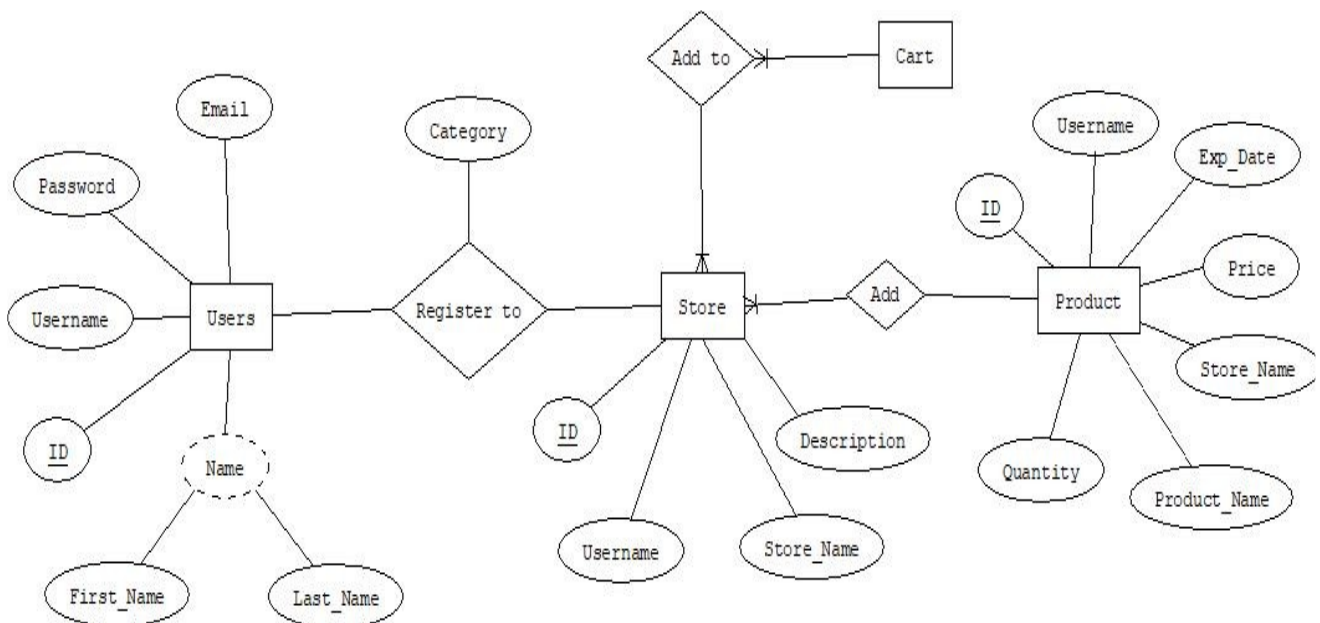
1. Store information.
2. Product information

2. Customer:

Under this section you can have:

1. User Information
2. Your Orders

Flowchart (ER DIAGRAM)



Database schema:

1. In this database schema, we have four relations, which have id as a primary key.
2. Username acquired in the registration form is passed to next relations as a foreign key.
3. Store name got in store is passed to product relation as foreign key

I. Users

<u>id</u>	firstName	lastName	category	email	password	username
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II. Store

<u>id</u>	Username	store_name	description
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III. Product

<u>id</u>	username	store_name	prod_name	quantity	exp_date	price
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IV. Contact

<u>id</u>	fname	lname	regid	subject
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Connectivity:

1. By using the conn variable in PHP, we have connected database to the backend.
2. By using string compare, constrain the login and using SELECT and WHERE we have retrieved login id and password from our database.
3. By using local storage, we store attributes and pass them to the next relation, as a foreign key.
4. By using gate concept, we retrieve information to display it on our screen.
5. new mysqli, INSERT INTO, localStorage.getItem, are some queries used in backend.

PROPOSED INNOVATION

I feel there is a large room for innovation and creativity in our idea. Creating a local platform which is meant for the interaction among the customers and the shop owners is such a great idea. Moreover, we have thought that once this project succeeds, we will expand it to the local market surrounding our college and even to the other staff members who reside in the college. So, the question comes why the people will choose us over other platforms like big basket or any other grocery, food delivery platform. This is because we will be delivering our products at a fast pace that too in the same cost. The customers can directly reach to us and get their queries clear as it will be very convenient for them to approach us. We can even ask the college administration to help us out with some amount of money and even we will be keeping discounts on the weekend, when the students have day off. This will increase the sale of the shops.

Team motivation and rewards. It is very important to keep a team motivated and providing individual recognition or celebrating small team successes. Something that is slightly different from the 'usual' can be greatly appreciated. That's how we will make our team grow. What are some creative ideas that you have seen for rewards and recognition? Here, we will hold a monthly fun day, and, among other activities, it will include the opportunity to ride in a hot air balloon or go 'skeet' shooting, riding boat or even swimming. We will be keeping certain competitions for the students where as in we will advertise our delivery system as well as will be letting out many prizes for the games winners. It can be a good source of recreation for the students.



OUTCOME

After successfully completing the project we have learned how to develop amazing web pages using HTML, JAVASCRIPT and BOOTSTRAP .We also learned how to manage database using PHP , MYSQL and apache and successful implementation of the project. We also learned to how to connect the various databases , the concept of primary key , foreign key . We learned about queries and how to implement it , we learned hp to implement constraints like in the login page. In HTML we learned how to load background images and change font and many more new things. Overall it was a good learning experience which gave us a lot of practical knowledge on how web development is done, and data is managed online.

CONCLUSION

So, the NITK Delivery system was meant to deliver the goods and other different products at the doorstep of students i.e. their hostel by various shop owners who have their shops inside the campus so that it may save their time during the time of examinations by walking distances to their shops . Even they will save their money as no delivery charges will be incurred. Here we had separate pages for both the shop owners to add their product items and the for the customers to purchase those items. Each order will be uniquely identified by an order id and the orders will be delivered by the delivery man. I hope this idea turns out to be good and the most important thing it should benefit the students then only it will be a true success.