

KYE HEALTHCARE AND FITNESS CENTER

CS 6314 Group 38

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1. Project Title:

The title of our project is “Health care and Fitness program”.

2. Name of the website:

The name of the website for our project is “KYE healthcare and fitness Center”.

3. Project description:

Our website offers people many fitness programs which fall into categories such as cardio, strength training, core exercises etc. Each product in our website is a fitness program and each fitness programs have attributes such as the name of the program, the fitness category it falls into, the number of days a week it is given, a brief description of the program and also the price of the program.

We have 2 types of actors to the system: **User** and **Admin**.

A user can surf through programs, search for a specific program, search add an item to cart, access his cart, go through programs on multiple pages, delete items from his cart, checkout his items and he can access his order history.

An Admin can add programs, update programs, delete a program, go through programs on multiple pages, search programs by name and filter them by category.

4. About Kye healthcare and fitness Center:

Here at Kye, we want to make people find and reach their fitness goals. Just in 21 days we will make sure that you are many steps already into reaching your goal. All you have to do is “Show Up!!”. We offer you trainer approved programs and each program is designed according to the person. Along with the programs you need to follow the nutrition approved diet which is catered according to the person’s body. Reaching your fitness goals has never been easy, getting your gains is now just one click away!

5. Technologies used:

Flask, MongoDB, JS, Jquery, Bootstrap, CSS, HTML5, Python(3.9).

6. Database design:

We chose MongoDB as our database. We have 4 collections as part of our database. User, Program, Cart, History

6.1 User:

_id	ObjectId
email	String
password	String
name	String
isAdmin	Int32

_id refers to objectId which is automatically generated by mongoDB

For one object:

```
{
  "_id" : ObjectId("6098703cd3fa64fba2849ee0"),
  "email" : "e.rishi268@gmail.com",
  "password" : "15,Hellouniverse8@",
  "name" : "Rishi",
  "isAdmin" : 1
}
```

6.2 Program:

<u>_id</u>	ObjectId
name	String
duration	Int32
price	Int32
description	String
status	Int32
category	String
image	String

Here _id is auto assigned by the mongodb.

```
{
  "_id" : ObjectId("60986e5181cdcf943b51ae3"),
  "name" : "Cardio",
  "duration" : 7,
  "price" : 20,
  "description" : "A perfect pre workout which will get you ready for strength training. Each day there will be 6 set of cardio workouts done which intensifies as each day passes",
  "status" : 1,
  "category" : "core",
  "image" : "https://hips.hearstapps.com/hmg-prod.s3.amazonaws.com/images/athletic-young-woman-jogging-on-sidewalk-royalty-free-image-1594326378.jpg?crop=0.668xw:1.00xh;0.156xw,0&resize=640:*)"
}
```

6.3 Cart:

<u>_id</u>	ObjectId
<u>user_id</u>	String
<u>program_id</u>	String
<u>status</u>	Int32

Here _id is auto assigned by the mongodb.

```
{
  "_id" : ObjectId("60989cea2b2fa30328107136"),
  "user_id" : "6098792689b9bfe5f4ad577f",
  "program_id" : "60986e9381cdcf943b51af3",
  "status" : 1
}
```

6.4 History:

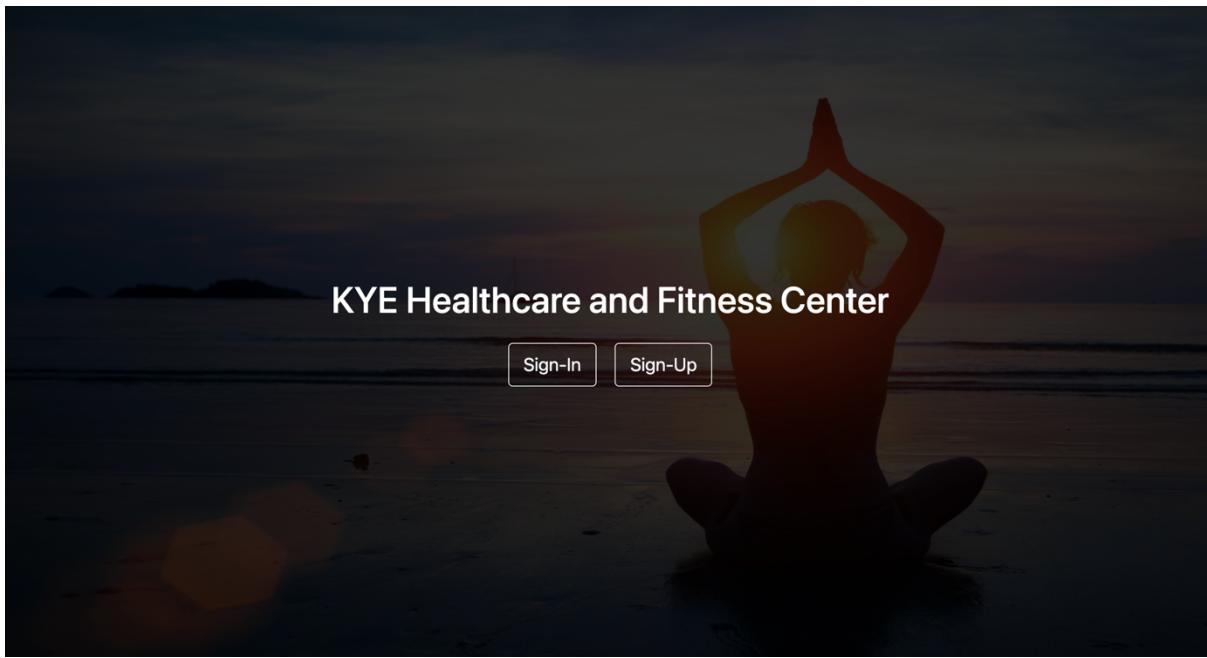
_id	ObjectId
user_id	String
cartIds	Array
programIds	Array
price	Int32

Here price is the total price of all the programs in the history and _id is auto assigned by the mongodb.

```
{
  "_id" : ObjectId("6098798389b9bfe5f4ad5782"),
  "user_id" : "6098792689b9bfe5f4ad577f",
  "cartIds" : [
    "6098797289b9bfe5f4ad5780",
    "6098797989b9bfe5f4ad5781"
  ],
  "programIds" : [
    "60986e7c81cdcf943b51aec",
    "60986e5181cdcf943b51ae3"
  ],
  "price" : 55
}
```

7. Screenshots of important functionalities:

7.1 The sign in/sign up page:



7.2 Sign up page:

The image shows the sign-up page for KYE Healthcare and Fitness center. It has a similar background of a person in a yoga pose at sunset. The form includes fields for Name, Email, and Password, each with a placeholder text ("Name", "Email", "Password"). A blue "Submit" button is located below the password field.

Here when user is trying to signup there is a password check done and we are also checking the strength of the users password, where the user's password need to have one upper case letter, one lower case letter, one number, one special character and also the password must be at least 8 characters long.

Password hashing:

Also, we are storing the hash values of users password instead of storing the actual password:

Hashing technique used: for each user input for password; we prepend the password with the length of the password.

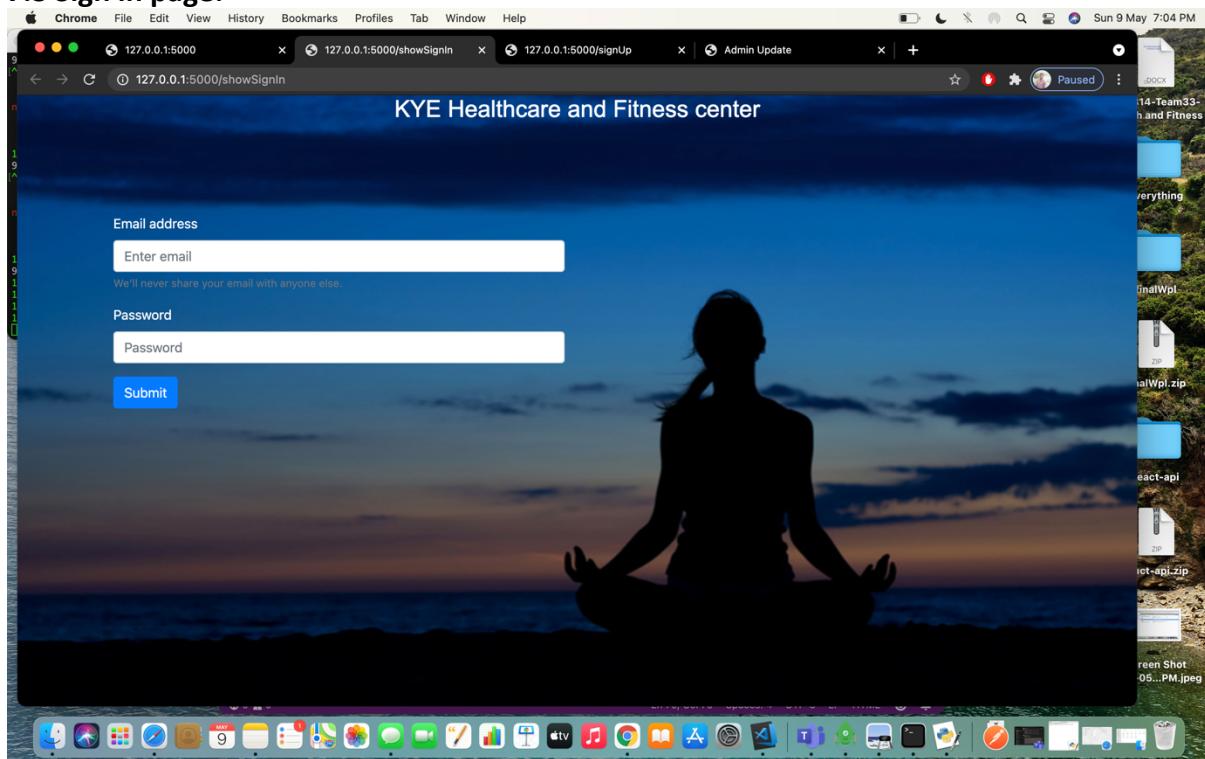
Connection (5)	localhost:27017	health_fitness_program
config		
health_fitness_pr...		
Collections (4)	user	
cart		
history		
program		
user	0.001 sec.	
Functions		
Jsers		
zy		

db.getCollection('user').find({})

Key	Value	Type
_id	{ 5 fields }	Object
email	{ 5 fields }	Object
password	{ 5 fields }	Object
name	{ 5 fields }	Object
isAdmin	ObjectId("6098792689b9bfe5f4ad577f")	Object
	kiran@gmail.com	String
	10>Hello@1234	String
	rishi kesh	String
	0	Int32

Here you can check that the password is hashed.

7.3 Sign in page:



This checks if the password and email match or not and then it goes to the user dashboard.

7.4 User dashboard:

Home Program List Go to Cart Order History Logout

Program list

sort



Program name: Cardio

About our program : A perfect pre workout which will get you ready for strength training. Each day there will be 6 set of cardio workouts done which intensifies as each day passes

Price : 20

Category : core

Duration : 7

[Add to cart](#)



Program name: Strength Training

About our program : A program that is divided into 5 days a week which concentrates on 1 muscle a day.

This is the user dashboard where the user can surf through different fitness programs, add a certain program to cart and search for a specific item or a category.

7.5 Searching for a program:

Home Program List Go to Cart Order History Logout

Program list

sort



Program name: Badminton

About our program : Badminton is a racquet sport played using racquets to hit a shuttlecock across a net. Although it may be played with larger teams, the most common forms of the game are singles (with one player per side) and doubles (with two players per side).

Price : 100

Category : sports

Duration : 10

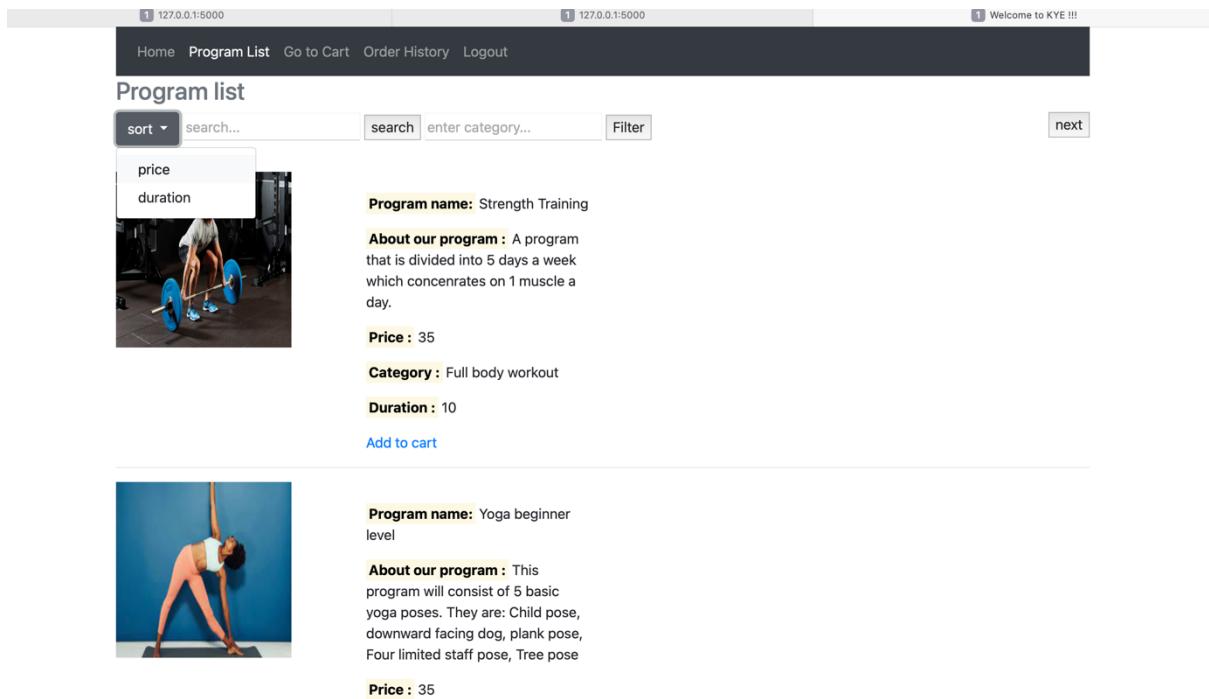
[Add to cart](#)

You can search for a specific program by writing the name in the search box and by hitting the search button.

Sort Functionality :

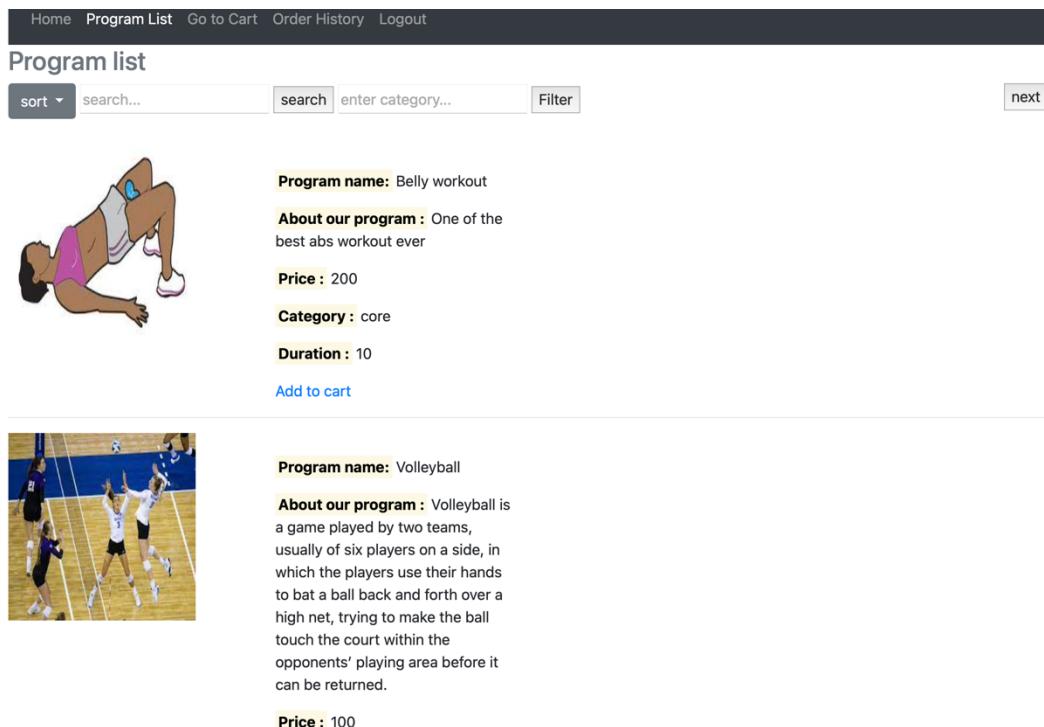
Provided access to the user to sort the programs in the home page based on price or duration of the program

On click of sort, the listings will be ordered in high – low



The screenshot shows a web application interface for a fitness program. At the top, there's a navigation bar with links for Home, Program List, Go to Cart, Order History, and Logout. On the right side of the header, it says "Welcome to KYE !!!". Below the header, the main content area is titled "Program list". It features a search bar with a dropdown menu showing "sort" and "search" options, and a "Filter" button. There are also "next" and "previous" buttons on the right. The first program listed is "Strength Training", which includes a thumbnail image of a person lifting weights, a program name, a detailed description about the program, and its price, category, and duration. The second program listed is "Yoga beginner level", which includes a thumbnail image of a person in a yoga pose, a program name, a detailed description about the program, and its price.

Here I selected sort by price;



This screenshot shows the same web application after sorting the programs by price. The "sort" dropdown menu is now closed, and the programs are listed in ascending order of price. The first program is "Belly workout", which includes a thumbnail image of a person doing a sit-up, a program name, a detailed description about the program, and its price, category, and duration. The second program is "Volleyball", which includes a thumbnail image of people playing volleyball, a program name, a detailed description about the program, and its price.

7.6 Filtering by category:

Screenshot of the Program list page showing filtering results for 'Yoga'.

Header: Home, Program List, Go to Cart, Order History, Logout

Search bar: sort ▾ search... Filter next

Program list items:

- 

Program name: Yoga beginner level
About our program : This program will consist of 5 basic yoga poses. They are: Child pose, downward facing dog, plank pose, Four limited staff pose, Tree pose
Price : 35
Category : Yoga
Duration : 10
[Add to cart](#)
- 

Program name: Yoga intermediate level
About our program : This program will consist of 5 intermediate level yoga poses.

You can filter by category by writing the category name and by pressing filter.

7.7 Adding to cart:

Screenshot of the Cart page showing added programs.

Header: Home, Program List, **cart**, Order History, Logout

Welcome To your Cart !!

Item Number	Name	Duration	Price	Action
1	Yoga beginner level	10	35	delete
2	Cardio	7	20	delete

Total price : 55

[checkout Items](#)

Once you have added certain programs to cart you can press on “Go to cart” above in the navbar and it will redirect you to this page where you can delete an item if you don’t want it in your cart or checkout when ready. The total price of all your programs is displayed above the checkout button.

7.8 Order history:

Program list



Program Name: Yoga beginner level

price : 35



Program Name: Cardio

price : 20

Once you checkout you can check the orders you placed in the order history.

7.10 Pagination:

Program list

sort **search** **Filter**

next



Program name: Cardio

About our program : A perfect pre workout which will get you ready for strength training. Each day there will be 6 set of cardio workouts done which intensifies as each day passes

Price : 20

Category : core

Duration : 7

[Add to cart](#)



Program name: Strength Training

About our program : A program that is divided into 5 days a week which concentrates on 1 muscle a day.

Home Program List Go to Cart Order History Logout

Program list

sort search... enter category...



Program name: Zumba for kids

About our program : Zumba for Kids is for ages 7 to 11. It is a dance fitness class just like mom's Zumba, but with age-appropriate music and moves, and an emphasis on feeling fearless on the dance floor

Price : 20

Category : Zumba

Duration : 8

[Add to cart](#)



Program name: Zumba for adults (8 weeks)

About our program : This is a 8 week program. The design of the

We are allowing 5 products per page; on click of next , user can navigate through the remaining listings.

7.11 Admin page:

Home Program List Logout

Program list

sort search... enter category...



Program name: Cardio

About our program : A perfect pre workout which will get you ready for strength training. Each day there will be 6 set of cardio workouts done which intensifies as each day passes

Price : 20

Category : core

Duration : 7

[edit](#) [delete](#)



Program name: Strength Training

About our program : A program that is divided into 5 days a week which concentrates on 1 muscle a day.

Admin dashboard will have the following view. An admin can edit/delete/add a new program. He can also search/filter his/her programs.

7.12 Admin update item:

Update by Admin

Name	Cardio
Description	A perfect pre workout which will get you ready for strength training. Each day there will be 6 set of cardio workouts done which intensifies as each day passes
Category	core
Duration	7
Price	20
Status	1
Image	[Empty Placeholder]

When the admin wants to update, this page is shown where he can edit any individual field.

7.13 Admin add item:

Admin Add Item

Name	Belly workout
Description	One of the best abs wo
Category	core
Duration	10
Price	200
Image	JJAigC1AiiAigH/2Q==

submit

When admin wants to add an item this is shown where he can input each field and press on submit which will update the specific collection with the new item.



Program name: Abs workouts

About our program : It's not only six-pack seekers who should be paying their abs plenty of attention when they visit the gym. Strong abs are an integral part of a rock-solid core, which should be one of the goals of any fitness regime.

Price : 50

Category : core

Duration : 10

[Add to cart](#)



Program name: Belly workout

About our program : One of the best abs workout ever

Price : 200

Category : core

Duration : 10

[Add to cart](#)

The added item is now visible for the user to add it into his cart.

7.14 Admin delete item:

Program list

sort ▾

search...

search

enter category...

filter

add item

next



Program name: Cardio

About our program : A perfect pre workout which will get you ready for strength training. Each day there will be 6 set of cardio workouts done which intensifies as each day passes

Price : 20

Category : core

Duration : 7

[edit](#) [delete](#)



Program name: Strength Training

About our program : A program that is divided into 5 days a week which concentrates on 1 muscle a day.

Price : 35

Home Program List Logout

Program list

sort search... search enter category... filter add item next



Program name: Strength Training

About our program : A program that is divided into 5 days a week which concentrates on 1 muscle a day.

Price : 35

Category : Full body workout

Duration : 10

[edit](#) [delete](#)



Program name: Yoga beginner level

About our program : This program will consist of 5 basic yoga poses. They are: Child pose, downward facing dog, plank pose, Four limbed staff pose, Tree pose

Admin can press on delete button assigned to any program and it gets deleted from the database. An example is shown above. The cardio program is soft deleted in the database (status is changed to zero).

Robo 3T - 1.4

New Connection (5) db.getCollection("program").find({})

New Connection localhost:27017 health_fitness_program db.getCollection('program').find({})

Key	Value	Type
(1) ObjectId("60986e5181cdcf943b51ae3")	{ 8 fields }	Object
_id	ObjectId("60986e5181cdcf943b51ae3")	Object
name	Cardio	String
duration	7	Int32
price	20	Int32
description	A perfect pre workout which will get you ready for strength training.	String
status	0	Int32
category	core	String
image	https://hips.hearstapps.com/hmg-prod.s3.amazonaws.com/1573833633-hg-best-pre-workout-for-men-1573833628.jpg?crop=1.0x1.0	String
(2) ObjectId("60986e6781cdcf943b51ae6")	{ 8 fields }	Object
(3) ObjectId("60986e781cdcf943b51ae7")	{ 8 fields }	Object
(4) ObjectId("60986e9381cdcf943b51af3")	{ 8 fields }	Object
(5) ObjectId("60986ea481cdcf943b51af4")	{ 8 fields }	Object
(6) ObjectId("60986eb681cdcf943b51b00")	{ 8 fields }	Object
(7) ObjectId("60986ed081cdcf943b51b08")	{ 8 fields }	Object
(8) ObjectId("60986eeeaa81cdcf943b51b0d")	{ 8 fields }	Object
(9) ObjectId("60986efef81cdcf943b51b12")	{ 8 fields }	Object
(10) ObjectId("60986f1481cdcf943b51b18")	{ 8 fields }	Object
(11) ObjectId("60986f2581cdcf943b51b1d")	{ 8 fields }	Object
(12) ObjectId("60986f3881cdcf943b51b23")	{ 8 fields }	Object
(13) ObjectId("60986f4981cdcf943b51b29")	{ 8 fields }	Object
(14) ObjectId("60986f5d81cdcf943b51b2f")	{ 8 fields }	Object
(15) ObjectId("60987a5589b9bfe5f4ad5783")	{ 8 fields }	Object

Logs

8. Team members:

Kiran Devraj, Raj (KXR190038) (CS6314.011 2212)

Yogesh, Bala (YXB200007) (CS6V81.202)

Sai Rishikeswar Reddy Eragam Reddy (SXE190010) (CS6V81.202)

9. Contribution:

9.1 Database:

User collection	Sai Rishikeswar Reddy Eragam Reddy
Program collection	Sai Rishikeswar Reddy Eragam Reddy
History collection	Yogesh Bala
Cart collection	Kiran Devaraj Raj

9.2 Front end:

Sign in page	Kiran Devaraj Raj
Signup page	Kiran Devaraj Raj
Cart page	Sai Rishikeswar Reddy Eragam Reddy
Order history page	Sai Rishikeswar Reddy Eragam Reddy
userHome	Yogesh Bala
adminHome	Sai Rishikeswar Reddy Eragam Reddy
addItem	Kiran Devaraj Raj
editItem	Yogesh Bala

9.3 Backend:

User	Kiran Devaraj Raj
Program	Yogesh Bala
Cart	Sai Rishikeswar Reddy Eragam Reddy
Order History	Yogesh Bala

10 Assumptions:

1. One program can be added only once.
2. There is no stock maintenance since these are programs and not products.

11 References:

- 1) <https://www.w3schools.com>
- 2) <https://stackoverflow.com>
- 3) <https://docs.mongodb.com/manual/>
- 4) Lecture slides, hands on videos and files