

Group Project Log

***Note:** all information must be filled out. You must hand in the project log along with each group project deliverable for this course (e.g., milestones, proposals, reports). The percentage of work allocated to each group member must add up to 100%.*

Group Name:	Med+
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Deliverable:	Project Proposal Document
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Group Member Name	Work Done (%)
Karthik Rammoorthy	25%
Malav Patel	25%
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Karthick Parameswaran	25%
Total:	100%

PROJECT DESIGN BRIEF

Med+

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1. PROJECT BACKGROUND

In today's world where maintaining healthy living is a challenge, proper diagnosis and treatment of any health ailment are even more challenging. Also, as the world has become a global village, people are in constant motion to different places. Locating a reliable pharmacy in the new locality is a tedious process.

Our goal is to address such cases with a one-stop solution. Med+ is an online retailer of medical drugs that provides an extensive catalog of medical drugs for the users to choose from. In addition to this core functionality, other features like product feedback and order history cater to user needs. Medical needs such as the purchase of drugs and medical instruments could be purchased in the event of a button click, thereby saving time and effort.

Working on this project would give the team invaluable experience on full stack web development. By incorporating technologies such as responsive web design and rich UI/UX, high product quality strives.

1.1 Project Objectives

The revenue of the worldwide pharmaceutical market is about 1100 billion US Dollars. There is an increased demand for medical drugs around the world. Technology could play an important role in meeting the objectives of the healthcare industry.

There are various websites such as Practo, PetalMD that assist in providing online medical consultation and appointment booking. However, there are relatively few internet medical retailers. Websites such as Amazon offer only limited service in this regard.

Med+ comes in handy in this regard. It is created exclusively for online medical retailing. Its main objective is to simplify user efforts in the purchase of medical drugs. There are various laws and guidelines set by governments across the world with respect to online drug service. Following safety and regulations would also be an important objective of the application. Only non-prescription drugs are sold without any valid doctor acknowledgment. Valid expiry dates and ingredient information of the products would be displayed to aid users.

This multipurpose application provides multiple features such as drug purchase and payment processing, storing users' order history, search for drugs under different categories and provide feedback on the product. Our goal is to bundle out all these options and provide to the user in an effective and efficient way possible

2. APPLICATION DETAILS

2.1 Target User Insight

Our target user base is very broad. Anyone who is looking to buy medicines can use our website. Med+ aims to solve the problem of availing medicines to everyone by delivering them to home so anyone who couldn't find medicines easily can use the application. Also, people who are looking to buy substitutes for medicines can find them on our website. If people have the basic knowledge about the medicine, they are looking for then our website can serve efficiently otherwise people can check out different symptoms from our category option and browse medicine. Med+ supports non-prescriptive drugs which can be provided hassle-free. People can access our website using the web browsers present in desktop, mobile or tablet.

2.2 Brand Attributes

Med+ is a one-stop medical store where user has access to the widest range of all non-prescriptive drugs/medicines. Med+ intends to provide users with a large number of medicines for specific symptoms. Med+ provides medicines with the vast range in price which is beneficial to all kinds of users. Med+ realizes how important medicines are for the user, So Med+ ensures the user that Med+ will come up with the best medicines and delivered to users on time. Med+ will always remember all the medicines user ordered and make sure they will always be available to users.

2.3 Competitive Landscape

Compared to other e-commerce sites, there are relatively few retailers that serve the sole purpose of online medical transactions. The following website is similar to our project

www.canadadrugs.com

Though the website is novel and serves to the purpose, the user experience is not up to the mark in comparison with modern responsive websites.



Fig. 1. Competitive Landscape – Canada Drugs

Our project would be different from Canada Drugs in several aspects such as UX philosophy and service. We plan to implement the project in line with other e-commerce sites like Amazon, Kijiji, etc.

Also, we plan to implement the prototype in a step by step manner in order to strictly adhere to government guidelines. At first, we plan to sell “Unscheduled” class of drugs that are safe and do not require non-prescription.

2.4 Project Scope

TABLE 1. Project Functionalities

Basic
Login/Register
Search functionality
Product information
Add to cart
Checkout
Order history

Bonus
Review
Refined Filter

2.4.1 Description of functionalities

Login/Register

- This is one of the basic functionalities of the application.
- The user can browse medicines and check details without login but to add them to cart, they need to login into the website.
- Register page captures the basic details of the users that are necessary for the application.
- Features such as add to cart and order history are accessible for logged in users.
- Order history option displays the details of the successful orders made by the users.

Search Functionality

- This feature provides a shortcut for customers who are in a rush.
- Users can enter product name directly in the search bar and select from the responses.
- Once the basic functionalities are completed, we plan to make an improved search button with different filter options for enhanced user experience.
- All products that match the search keyword are displayed and the user can choose the intended product from the list.

Product Purchase

- This feature is the core functionality of the application.
- Users can add the shortlisted products in the cart once logged in to the system.
- Once the products are added to the cart, users can continue shopping.
- Users need to check out the cart in order to place the order.
- Items added to the cart remain in the cart until the order placement or deletion.

User Review System

- This feature allows users to record their personal experience with the product. Users can also provide a rating based on the quality of the corresponding product.
- These reviews act as suggestions for other potential buyers.
- There is also provision for the users to comment anonymously.
- The user comments would be displayed below the product information.

2.5 Information Architecture

2.5.1 Proposed Sitemap

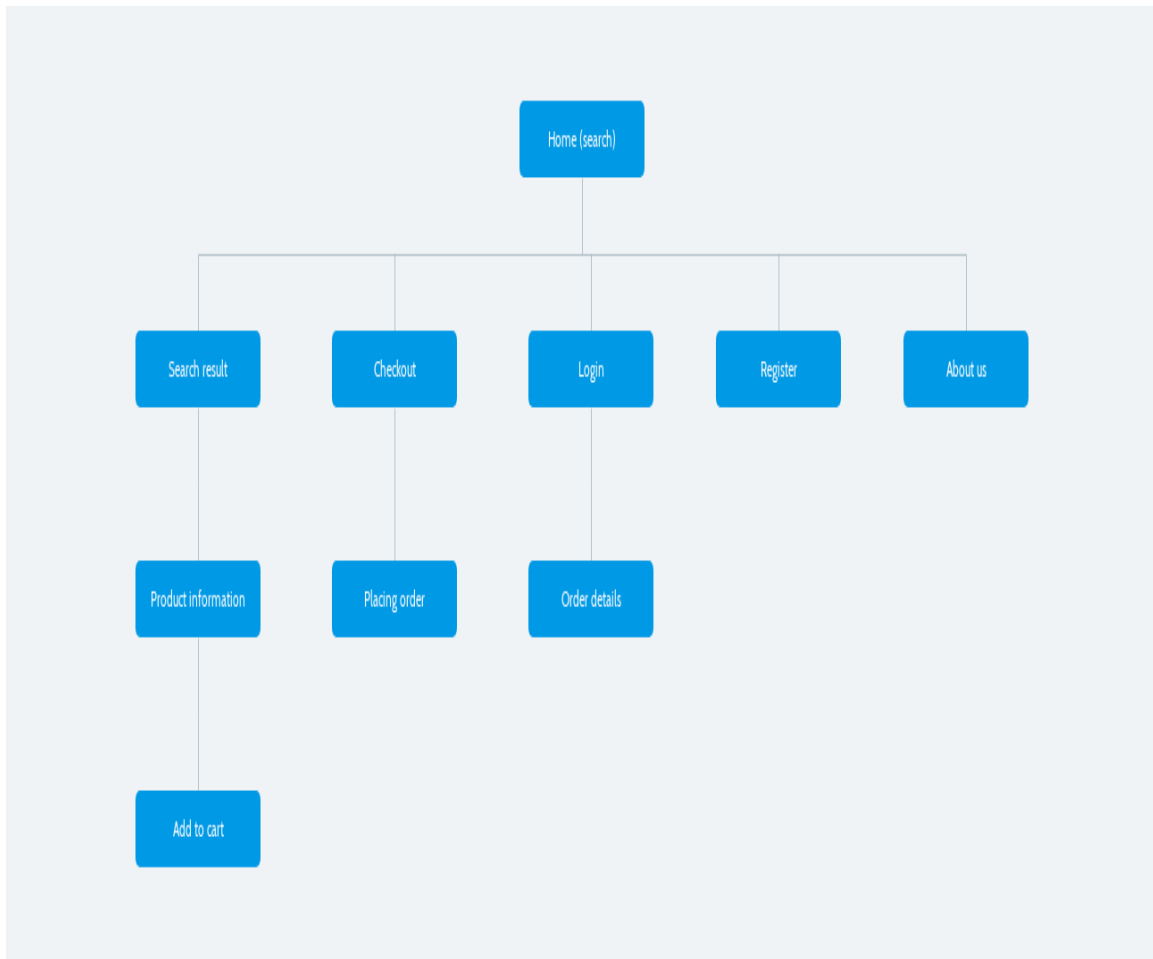


Fig. 2. Sitemap

2.5.2 Database Diagram

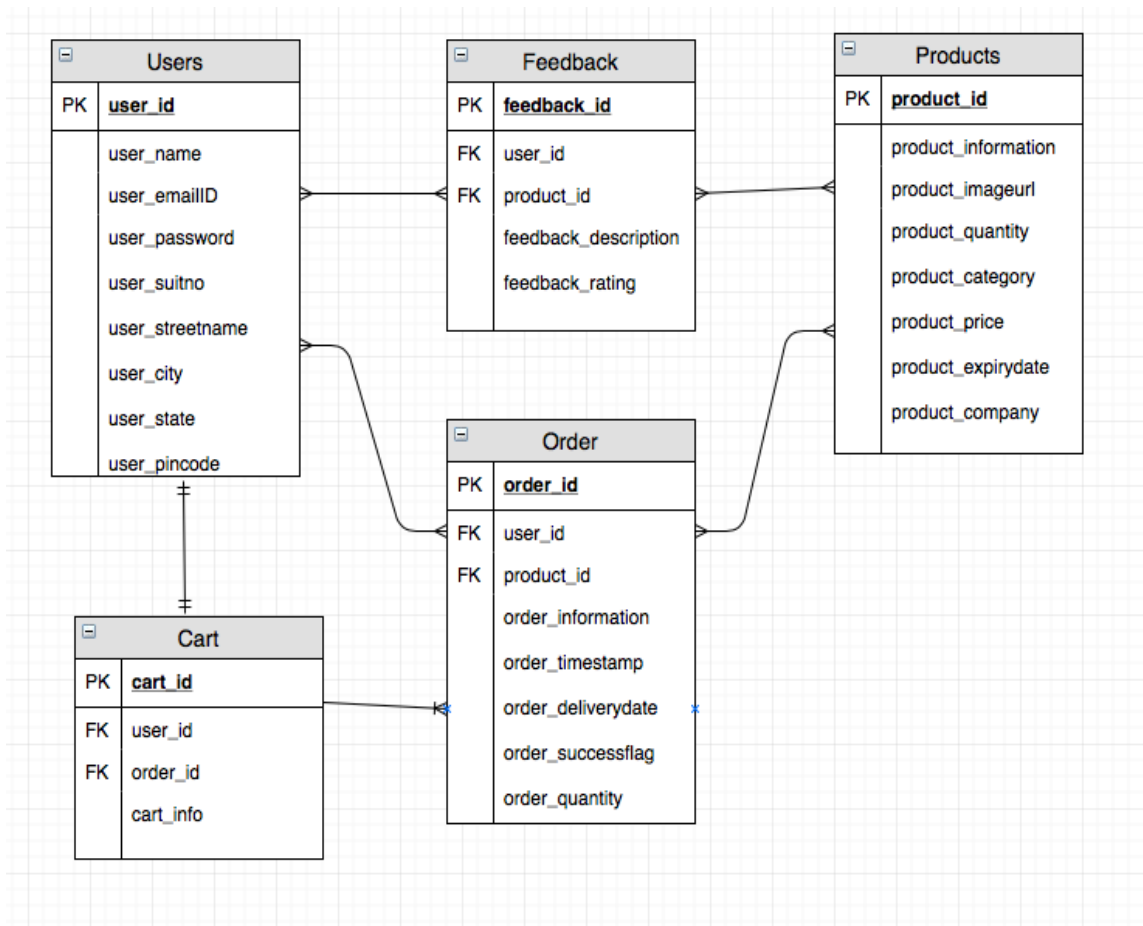


Fig. 3. Database Diagram

2.5.3 Website Design

2.5.3.1 Login Page

The user can browse medicines and check details without login but to add them to cart, they need to login into the website. Login Page will facilitate the user to login into the website.

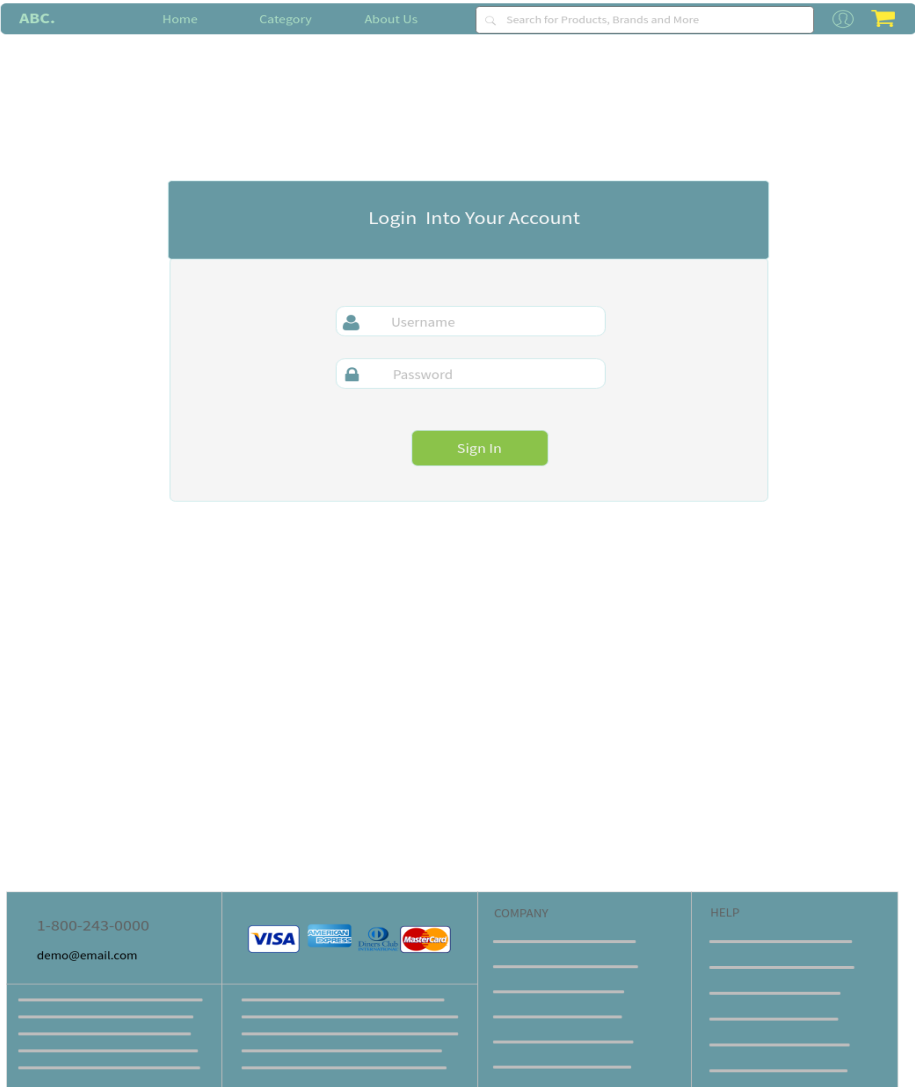


Fig. 4. Login

2.5.3.2 Registration Page

Registration page helps the user to register with the website. This will help our website to store user address which will become helpful while delivering medicine. The registration page is an important medium which helps Med+ to build a relationship with people.

The registration page layout consists of three main sections:

- Navigation Bar:** A teal header bar containing the site logo "ABC.", navigation links "Home", "Category", and "About Us", a search bar with the placeholder "Search for Products, Brands and More", and icons for user profile and shopping cart.
- Sign-up Form:** A central white form with a teal header "Sign up now" and a sub-header "Fill in the form to create account :". It features a grid of input fields for "Username", "Email", "Password", "Confirm Password", "Apt & Suite No", "Street Name", "City", "Province", and "Pincode". Each field is marked with a red asterisk. A green "Sign In" button is positioned at the bottom center of the form.
- Footer:** A teal bar divided into four columns: contact information ("1-800-243-0000" and "demo@email.com"), payment logos (VISA, American Express, Discover, MasterCard), "COMPANY" details, and "HELP" resources. Each of these four columns contains four horizontal lines for text.

Fig. 5. Registration

2.5.3.3 Homepage

The homepage is the first page which will be displayed when the user loads Med+. The homepage will show exciting offer and will also show Deals that are available for the day. The homepage will also contain products which are popular among the public. Also, the user can hover on the category option to check the list of symptoms and their available medicines. The homepage also has a search functionality aimed to search medicines.

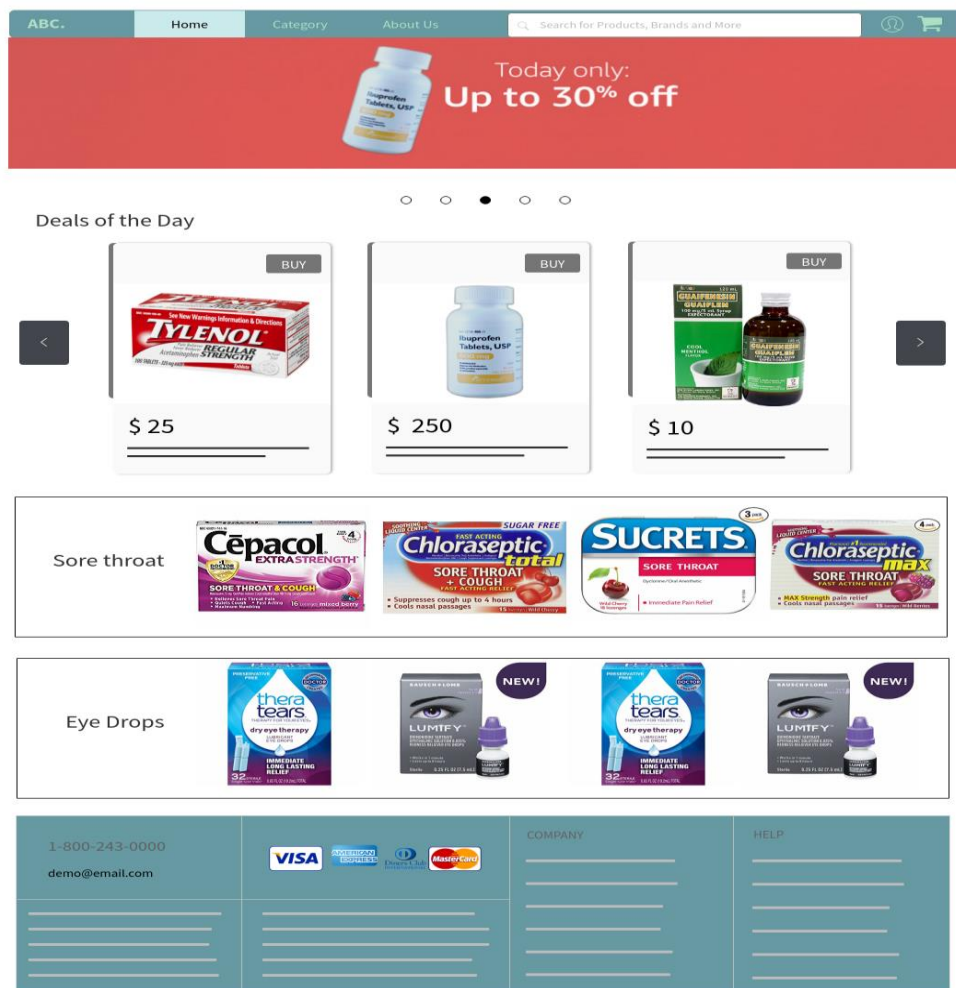


Fig. 6. Homepage

2.5.3.4 Search Result

The homepage has an option to search medicine. Based on the query supplied to the search box, a list of result matching to the query will be displayed in the search result page. From the various result displayed, the user can select any based on their preferences.

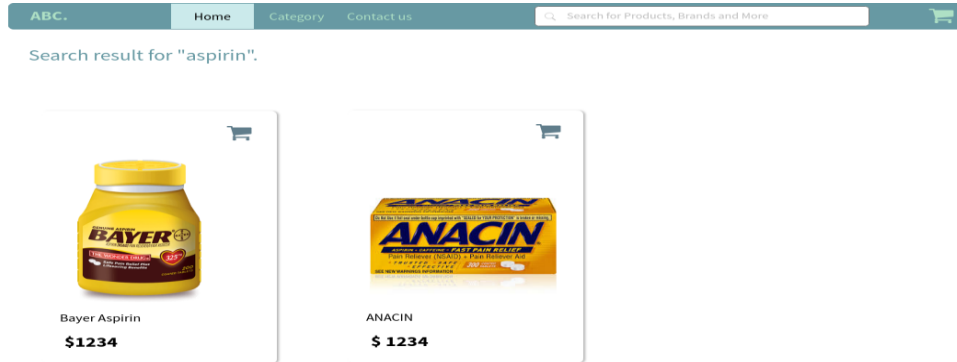


Fig. 7. Search Result

2.5.3.5 Product Information

Product Information page provides information about the particular medicine. This page has additional details like customer review, price, a brief description of a product. The user has an option of either buy or add to cart for that particular product.

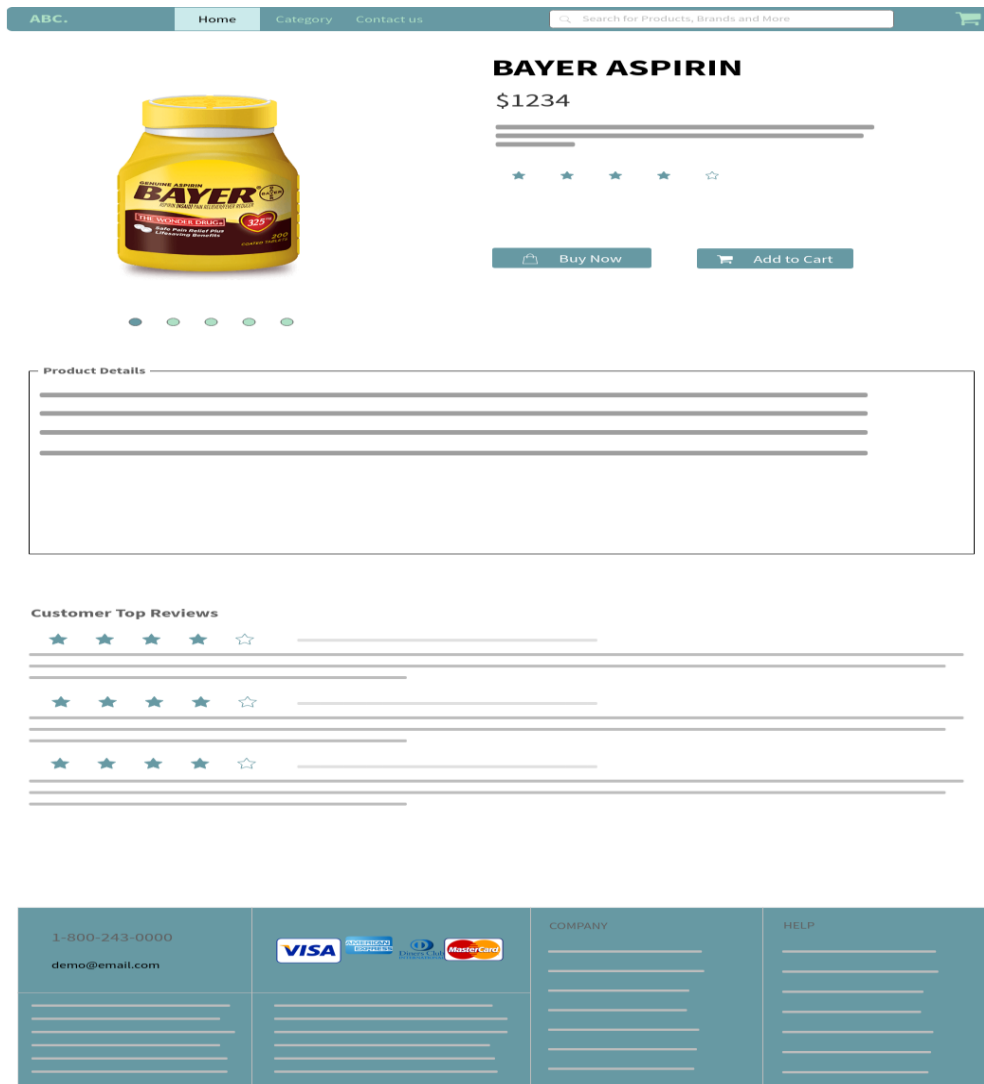


Fig. 8. Product Information

2.5.3.6 Add to cart

Add to cart page provides a list of products added to the cart. It provides the overview of an order information. Products once added to the cart will be saved, in case the user session out, he/she can access the cart details when he/she logs in again.

ABC.



Home

Category

Contact us

🔍

Search for Products, Brands and More.

Product		Quantity	Price	
	ANACIN \$ 88.99	<div>1</div>	\$ 88.99	×
	Bayer aspirin \$25.00	<div>2</div>	\$ 50.00	×

Continue Searching

Go to checkout

1-800-243-0000 demo@email.com	   	COMPANY	HELP

Fig. 9. Add to Cart

2.5.3.7 Checkout

Check out page will be last stop for users before placing an order. Medicines present in the cart will be considered for placing the order. The user can view the details about the order, check the price and pay using any cards. The user can change the delivery address form this page.

ABC.

Home

Category

About Us

Search for Products, Brands and More

Shipping Address

No : 6, Park Victoria Apartment,
South Park Street,
Halifax, Canada - B3J 2K9.

Change

Payment Details

Card Details: 4567 8654 4568 4568

Expiry Date: 11 / 18
(MM) (YY)

CVV: ***

Order Summary

Product Details	Quantity	Total Price
Thera tears	1	\$ 150
Cepacol	1	\$ 150
Tylenol	1	\$ 150
Ibuprofen	1	\$ 150

Order Total: \$ 600

Order Now

1-800-243-0000
demo@email.com

VISA

AMERICAN EXPRESS

Discover

MasterCard

COMPANY

HELP

Fig. 10. Checkout

2.5.3.8 Order History

Order history would keep track of all the medicines that have been ordered in the past. The page would display show details such as delivery address, the status of the order, the date when it was ordered, the quantity of medicine and the final price.

ABC.




Home

Category

Contact us



Search for Products, Brands and More

Your Orders

Product	Shipping Address	Status	Date	Quantity	Price
 ANACIN \$ 88.99	<div></div> <div></div> <div></div>	Order Placed	mm/dd/yyyy	1	\$ 88.99
				Write review	Buy Again
 ANACIN \$ 88.99	<div></div> <div></div> <div></div>	Delivered	mm/dd/yyyy	1	\$ 88.99
				Write review	Buy Again
 ANACIN \$ 88.99	<div></div> <div></div> <div></div>	Cancelled	mm/dd/yyyy	1	\$ 88.99
				Write review	Buy Again

1-800-243-0000

demo@email.com



COMPANY

HELP

Fig. 11. Order History

2.6 User Experience

Ease of access to basic medicines is the prominent goal of Med+. Keeping that in mind, our application focuses on the immediate availability of the basic medicines. This application avoids travel cost for the people to get medicine as it provides door delivery options. If in case an unwell person is unattended, he/she would find it difficult to visit the pharmacy. Similarly, this case goes with elderly people as well. They can get medicines by ordering through our web application. Also, the user can check the availability of basic drugs at any time. Additionally, users can also pre-order medicines in bulk amount. Eventually, our application makes it available for prescribed medicines with in-house doctor teams.

Usecase:

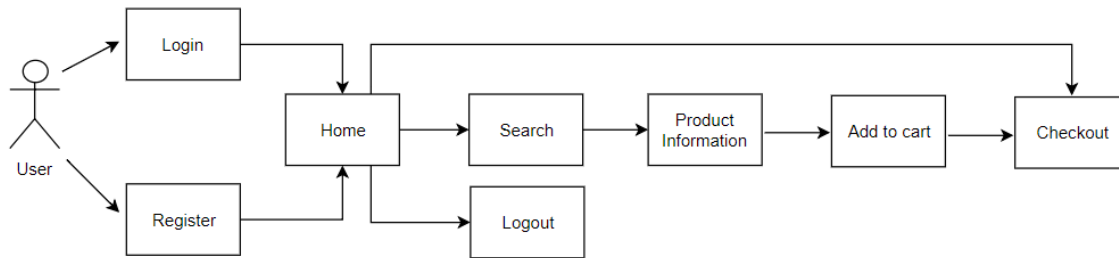


Fig. 12. Usecase Diagram

Workflow Diagram:

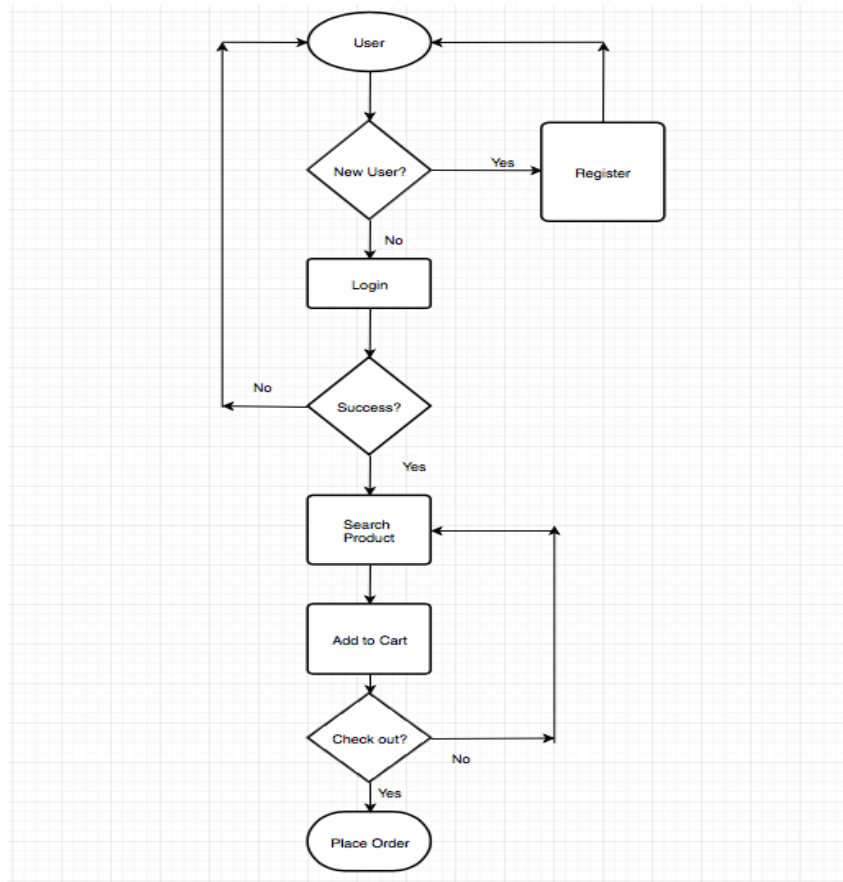


Fig. 13. Workflow Diagram

3. ASSET INVENTORY

TABLE 2. Software Requirements

S No	Component	Specification	Description
1	Front End Framework	Angular 6	Angular Framework employing CSS3, HTML5, JS components. Angular Material Design and Flex Layout for Responsive Web Design. Phantom JS for header-less browser unit testing.
2	Back End Framework	Java	Java Spring Web Service
3	Web Browsers	All major browsers	IE, Firefox, Chrome (Recent versions)
4	Database	MySQL	Tables and stored procedures in MySql DB.
5	Source Version Control	Git	GitHub is used for source code management
6	Software Development	Agile Methodology	Sprints involving the execution of stories and epics are followed.

- Angular Framework is employed to design the Presentation and Logic tiers of the application.
- The UI design is to be completed using HTML5 and CSS3 technologies.
- Angular, preferably Angular 6 is to be used to write the business logic of the application and manipulation of the user data.
- A REST service shall be created using Java in order to serve Front-end with database operations. This web service interacts with MySQL server to perform CRUD operations.
- Master tables are created in MySQL in order to store application transactional details.

4. GROUP ROLES

TABLE 3. Group Roles

S No	Group Member	Primary Role	Secondary Role
Module 1: Login / Register			
1	Karthik Rammoorthy	Documents Manager	Tester
2	Karthick Parameswaran	Tester	Lead Developer
3	Ankit Varshney	Lead Designer	Database Manager
4	Malav Patel	CopyWriter	Documents Manager
Module 2: Search Functionality			
1	Karthik Rammoorthy	Database Manager	Tester
2	Karthick Parameswaran	Lead Developer	Lead Developer
3	Ankit Varshney	Tester	Documents Manager
4	Malav Patel	Lead Designer	Tester

Module 3: Search Result			
1	Karthik Rammoorthy	Lead Developer	Documents Manager
2	Karthick Parameswaran	Lead Designer	Tester
3	Ankit Varshney	Documents Manager	Database Manager
4	Malav Patel	Tester	Documents Manager
Module 4: Product Information			
1	Karthik Rammoorthy	Tester	Tester
2	Karthick Parameswaran	Database Manager	Lead Developer
3	Ankit Varshney	Lead Developer	Database Manager
4	Malav Patel	Documents Manager	Documents Manager
Module 5: Add to Cart			
1	Karthik Rammoorthy	Documents Manager	Lead Developer
2	Karthick Parameswaran	Tester	Documents Manager
3	Ankit Varshney	Lead Designer	Tester
4	Malav Patel	Lead Developer	Copywriter

Module 6: Checkout Feature			
1	Karthik Rammoorthy	Lead Developer	Lead Designer
2	Karthick Parameswaran	Copywriter	Lead Developer
3	Ankit Varshney	Database Manager	Tester
4	Malav Patel	Lead Designer	Copywriter
Module 7: Order History Feature			
1	Karthik Rammoorthy	Lead Designer	Lead Developer
2	Karthick Parameswaran	Lead Developer	Copywriter
3	Ankit Varshney	Tester	Database Manager
4	Malav Patel	Database Manager	Lead Designer

5. References

Website used to create wireframe:

Produce, “MockFlow - Wireframe Tools, Prototyping Tools, UI Mockups, UX Suite,” *MockFlow - Online Wireframe Tools, Prototyping Tools, UI Mockups, UX Suite*. [Online]. Available: <https://mockflow.com/>. [Accessed: 13-Jun-2018].

Website in Competitive Landscape:

“Welcome to Canada Drugs,” *Buy FeraMAX 150mg Medication - Discount Prescription Drugs - Canada*. [Online]. Available: <http://www.canadadrugs.com/>. [Accessed: 13-Jun-2018].

Images in home page

“TYLENOL 325MG 100 RS [Item # CIN1296250],” *TYLENOL 325MG 100 RS , Lakemont Pharmacy*. [Online]. Available:

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“Ibuprofen Tablets,” *Sigma Pharmaceuticals*. [Online]. Available:
<https://www.sigmapharmaceuticals.com/anti-inflammatories-allergy/134-ibuprofen.html>.
[Accessed: 13-Jun-2018].

Denice, “GUAIFENESIN Guaiflem 100 milligrams / 5 milliliters – 60 milligrams,” *Drugstore Philippines - The Generics Pharmacy*, 12-Dec-2016. [Online]. Available: <https://tgp.com.ph/product/guaifenesin-guaiflem-100-milligrams-5-milliliters-60-milligrams/>. [Accessed: 13-Jun-2018].

“Cepacol Extra Strength Sore Throat & Cough Drop Lozenges, Mixed Berry 48ct (3X16ct): Health & Personal Care,” *Amazon*. [Online]. Available: <https://www.amazon.com/Cepacol-Strength-Throat-Lozenges-3X16ct/dp/B0057UUCF6>. [Accessed: 13-Jun-2018].

“Chloraseptic Total Sugar Free Sore Throat Cough Lozenges | Wild Cherry | 15 ct | Suppresses Cough and Cools Nasal Passages: Health & Personal Care,” *Amazon*. [Online]. Available: https://www.amazon.com/Chloraseptic-Throat-Lozenges-Suppresses-Passages/dp/B000WZVQBA/ref=pd_lpo_vtph_121_lp_img_2?_encoding=UTF8&refRID=TVK0NH7D25H8Y4NB9NZY&pdID=51MhUo6Cj6L&preST=_SX300_QL70_&dpSrc=detail&th=1. [Accessed: 13-Jun-2018].

“Chloraseptic Max Strength Sore Throat Lozenges | Wild Berries | 15 ct | Pack of 4 | Maximum Strength Sore Throat Relief: Health & Personal Care,” *Amazon*. [Online]. Available: https://www.amazon.com/Chloraseptic-Strength-Lozenges-Berries-Maximum/dp/B001F0R4X0/ref=pd_sim_121_4?_encoding=UTF8&pd_rd_i=B001F0R4X0&pd_rd_r=CP9RS2G7P8ZX52ZJR492&pd_rd_w=9gZns&pd_rd_wg=XlexN&refRID=CP9RS2G7P8ZX52ZJR492&th=1. [Accessed: 13-Jun-2018].

“TheraTears Dry Eye Therapy- Lubricant Eye Drops- Preservative Free- 32 CT: Health & Personal Care,” *Amazon*. [Online]. Available: https://www.amazon.com/TheraTears-Therapy-Lubricant-Drops-Preservative/dp/B000052XFF/ref=sr_1_1_sspa?s=hpc&ie=UTF8&qid=1528853509&sr=1-1-spons&keywords=eye drops&psc=1. [Accessed: 13-Jun-2018].

“Lumify Redness Reliever Eye Drops, 0.25 Ounce (7.5mL): Health & Personal Care,” *Amazon*. [Online]. Available: https://www.amazon.com/dp/B07BVYZL88/ref=sspa_dk_detail_1?pd_rd_i=B07BVYZL88&pd_rd_w=GLba0&pd_rd_r=78EE5QECTJ235Q0YKZFY&pd_rd_w=84Uqc&th=1. [Accessed: 13-Jun-2018].

Images on Search results, Product information and Add to cart page:

WebCollage. [Online]. Available:
https://smedia.webcollage.net/rwvfp/wc/cp/27545157/module/bayerus//_cp/products/146

3503397069/tab-f81b5f72-7d34-4534-a70f-d66f99492350/1cd5e49c-242c-4701-bd65-b6c76df4ba76.png.web.png. [Accessed: 13-Jun-2018].

[Online]. Available: https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcT5Qs550jUfbgFt9HuWMoccnSnGZsZxdedJPeY6m2Z0q_Ok9mZD. [Accessed: 13-Jun-2018].