Design Document

for

store.it

Version 0.2

Prepared by

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Course: CS253A

Mentor TA: Mr. Swastik Maiti

Date: 14 February 2022

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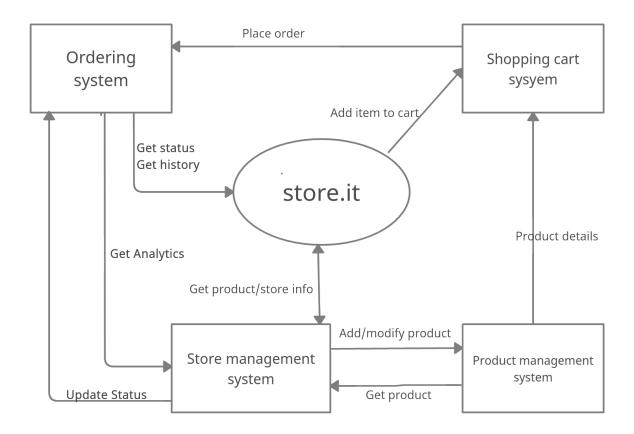
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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
0.1	Akanksha Singh	First Draft	14/02/2022
	Antreev Singh Brar		
	Bhuvan Singla		
	Deepankur Kansal		
	Dipanshu Garg		
	Harshit Raj		
	Hitesh Anand		
	Manas Gupta		
	Priya Gole		
	Tushar		
0.2	Akanksha Singh	Final Draft	27/04/2022
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	Bhuvan Singla		
	Deepankur Kansal		
	Dipanshu Garg		
	Harshit Raj		
	Hitesh Anand		
	Manas Gupta		
	Priya Gole		
	Tushar		

1 Context Design

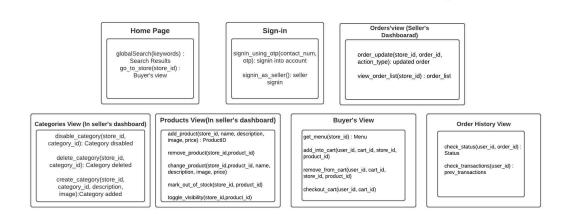
1.1 Context Model

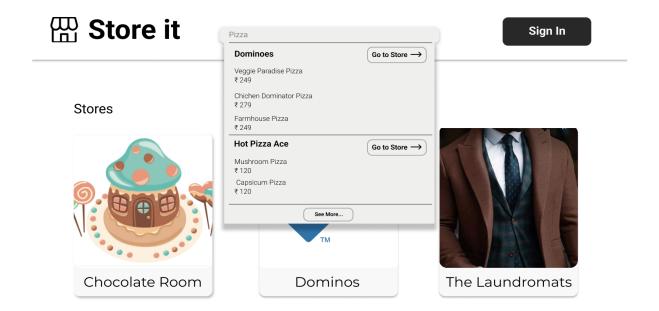


1.2 Human Interface Design

There are seven interfaces in our web-app, each having its own utility. Each interface is meant to be used for either buyers or sellers and facilitates a smooth user experience with the clients. The

interface design of store-it with all seven interfaces is given below.





Home Page

Signin

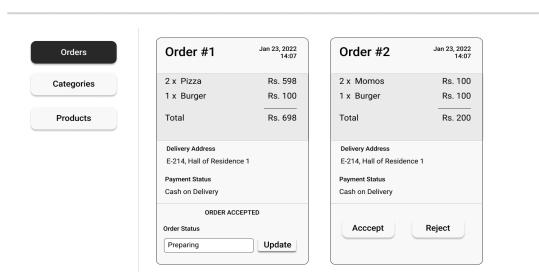


+ Sign in as seller



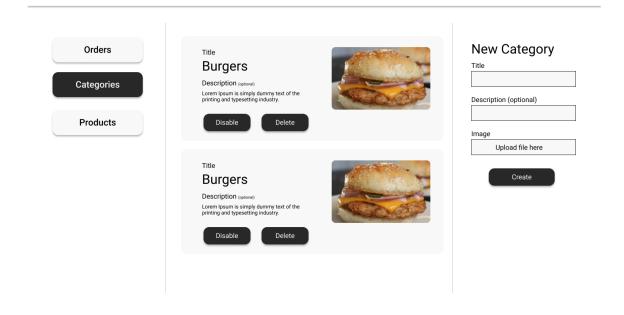
Sign-in

Store Name



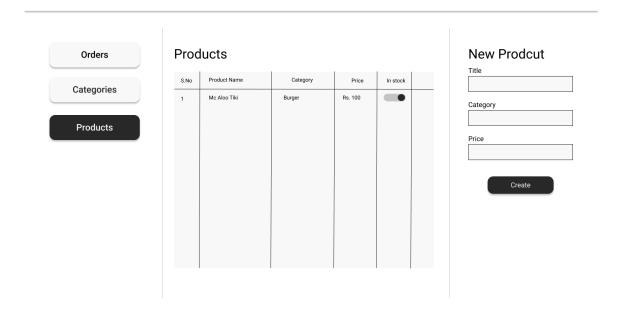
Orders' view (Seller's dashboard)

Store Name

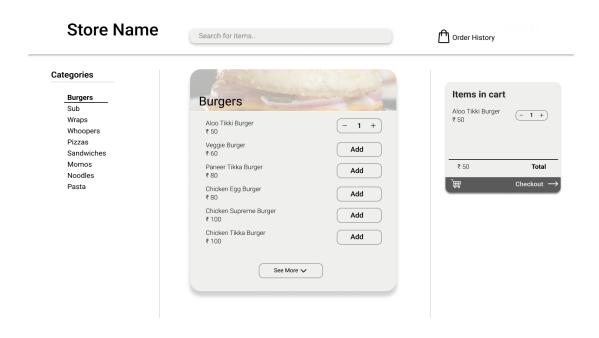


Categories' view (Seller's Dashboard)

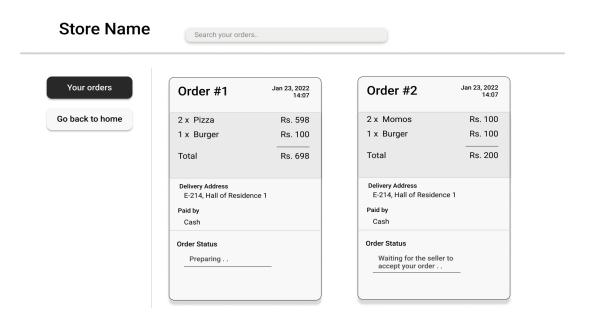
Store Name



Products' view (Seller's dashboard)



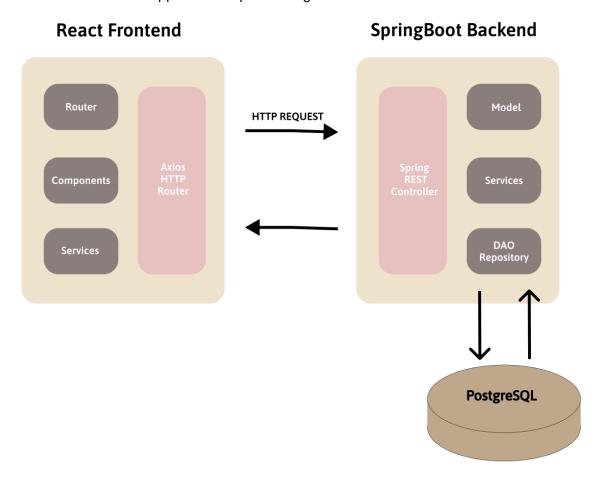
Buyer's view



Order History view

2 Architecture Design

"store.it" is a web-based application implementing a Model-View-Controller model.



<u>Why are we using this</u>: We are using this model since we would be interacting with the data in multiple ways, like checking and receiving requests, managing catalogues, storing transactions. Also, in the near future, one might think of adding some functionalities to it, which makes the Model-View-Controller model as the best fit.

<u>Advantages</u>: One great advantage of this model is that the data can be represented in various manners. Which will prove helpful to us while sorting items based on similar kinds, or from the same stores or in some other fashion. Also, it allows the data to change independently; it would be helpful if something runs out of stock.

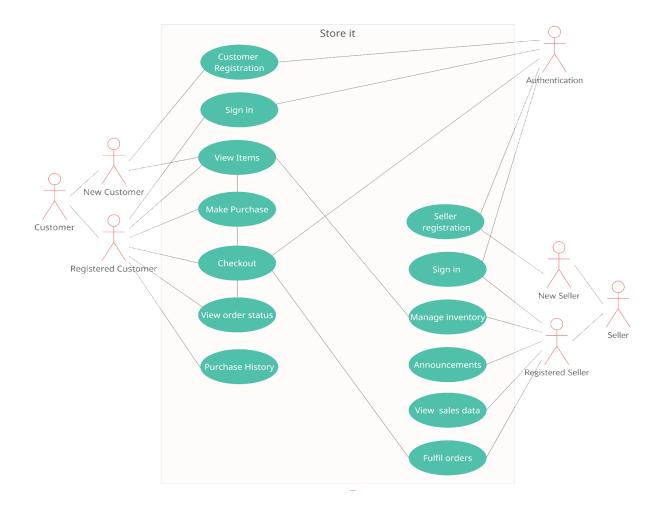
<u>Disadvantages</u>: One disadvantage is that we need to write some additional code for full functionality, even if we know that our implementation is simple in the starting stages.

3 Object-Oriented Design

3.1 Use Case Diagrams

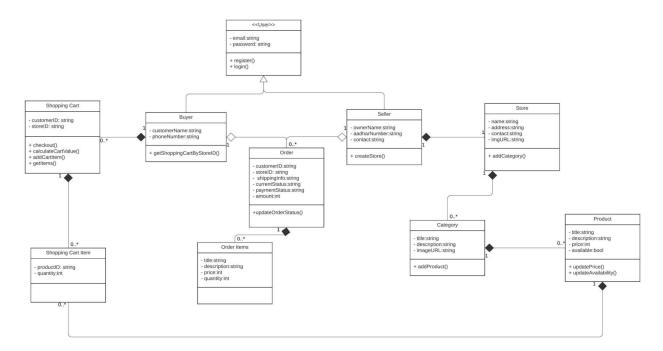
We have given a consolidated diagram showing different use cases provided:

- Shopkeeper registration and catalog creation.
- Browsing catalog of a particular shop
- Items being sold by the shopkeeper and short descriptions and listed prices.
- Adding items to cart.
- Register as a buyer using email and OTP verification.
- Checking out and placing orders.
- Shopkeeper adding/removing items from shop inventory.

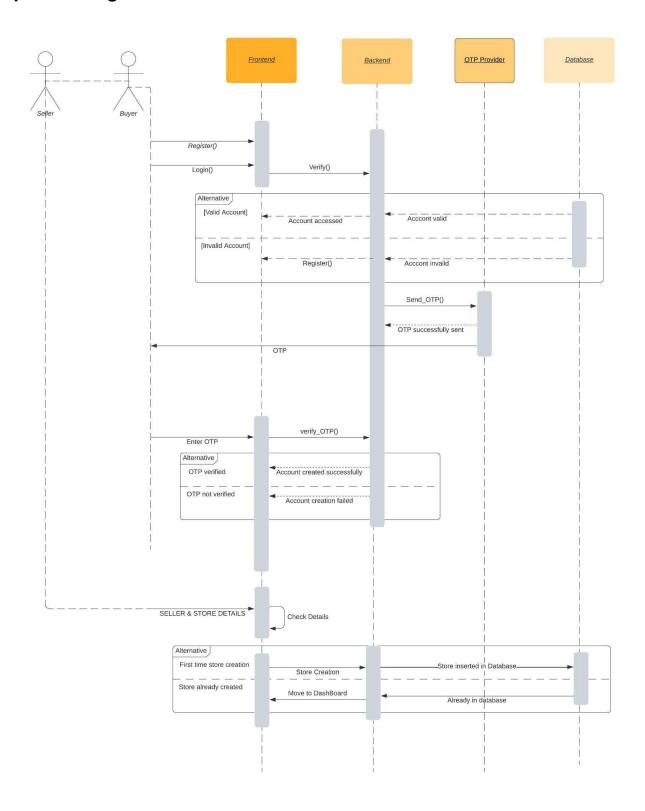


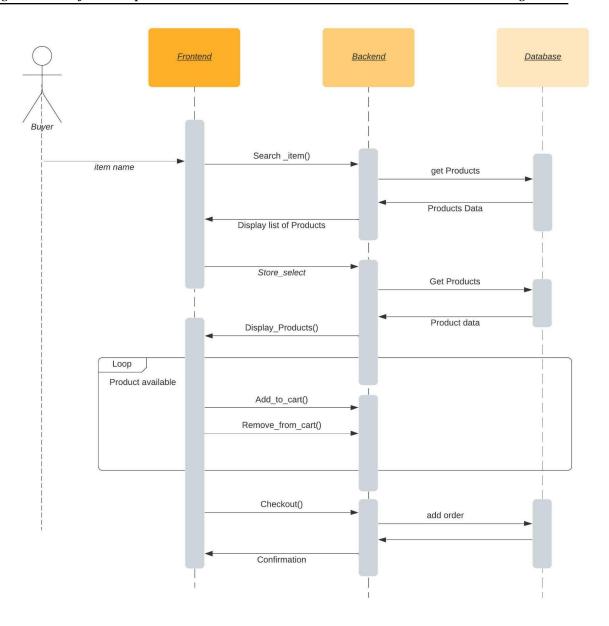
3.2 Class Diagram

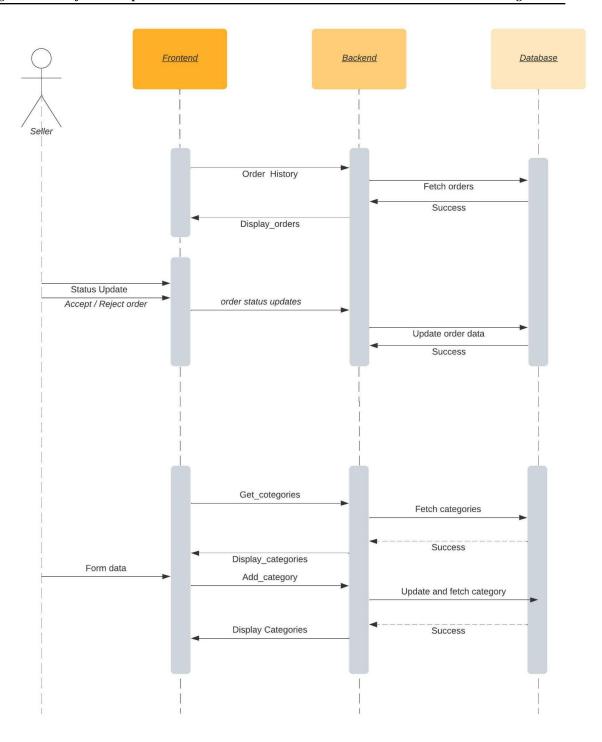
store.it

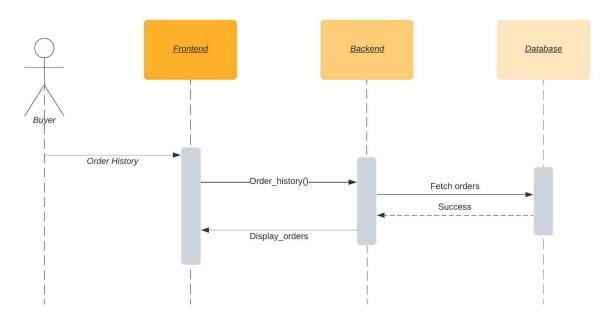


3.3 Sequence Diagrams

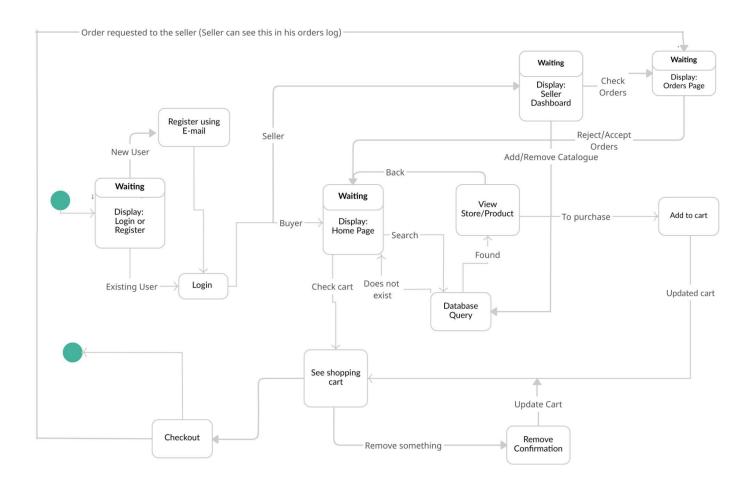








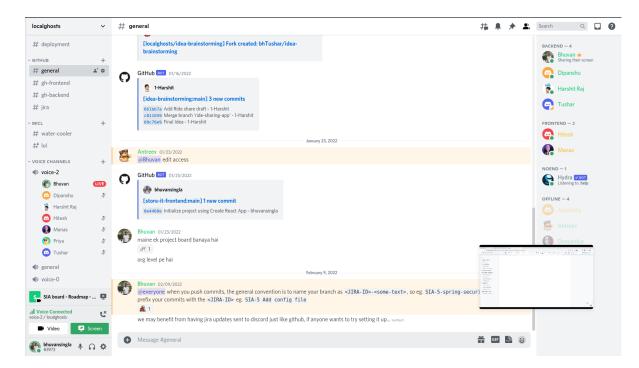
3.4 State Diagrams



4 Project Plan

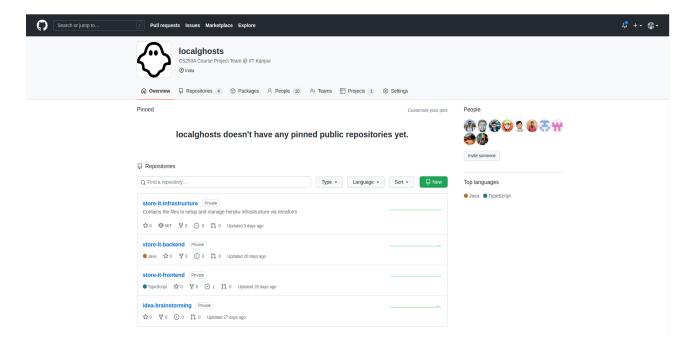
4.1 Communication

- The team communicates internally via a Discord Server both via messaging and voice calls.
- The server is divided into channels based on the scope of work so that discussions are organized based on their context.



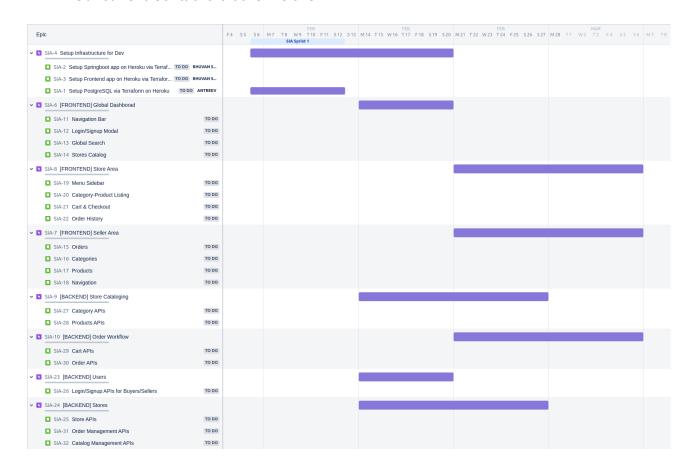
4.2 Code Collaboration

- An <u>organization</u> has been set up on **GitHub** for storing and collaborating on the source code of this project.
- Currently, the organization hosts four repositories (all private access):
 - store-it-backend
 - o store-it-frontend
 - store-it-infrastructure
 - idea-brainstorming
- We will maintain two environments (dev and prod) for the implementation.
 - Dev: where development happens
 - Prod: the hosted version for public use (latest release)
- We aim to keep **high code coverage** of the codebase via unit tests.



4.3 Project Planning

- We have set up a JIRA board for the project planning and developing a Gantt Chart.
- Work has been divided into Epics, which is further divided into Stories.
- We will have weekly sprints where each team member will have clearly defined work.
- Every team member has internally taken the responsibility to focus majorly on either frontend or the backend.
- Our current Gantt chart looks like this:



Appendix A - Group Log

Meeting Minutes	Agenda
29th Jan 2022 2:30 pm - 5:00 pm	Started working on a draft of the Software Design document.
6th Feb 2022 1:00 pm - 4:00 pm	Divided the subsections among the members and completed most of them.
6th Feb 2022 6:00 pm - 7:00 pm	Meet with TA. Updated TA with our current progress. Discussed any issues we were facing. Planned the further steps of development.
12th Feb 2022 3:00 pm - 5:30 pm	Made changes suggested by TA. Completed all the subsections of the document.
12th Feb 2022 6:00 pm - 7:00 pm	Meet with TA. Updated TA with our progress.
27th April 2022 5:00 pm - 7:00 pm	Made final changes to the documentation