

Capstone Project

Milestone 2

Okham Shop

Marketplace for startup products

Team Okham

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Chapter 1

Introduction

1.1 Basic idea

The main idea is to build a marketplace for startups who cannot afford to put their products on giant e-commerce websites like Amazon .

1.2 Problem with giants

The giants like Amazon or Alibaba work on a business model that doesn't allow small entrepreneur to sell products with sustainable profits due to following reasons .

1.2.1 Huge commission

E-commerce giants (like Amazon or Alibaba) take a huge commission from the sale of products, this ecosystem is beneficial for big product companies like Unilever , LG , Sony etc as they need a big distribution platform irrespective of cost. The big companies have huge production facilities and big sales margin that allows them to earn good even after a big cut from e-commerce giants . But this is not an ideal scenario for a small startup which lack in such huge production facilities . Startups are small scale industries that serve a small audience and cannot afford to pay margin to e-commerce giants .

1.2.2 No specific category

Apart from high margin, e-commerce website do not have an environment to sell niche products . For example a person selling a solution to start a lawn mower cannot sell its product in any of the category in Amazon , but if a website is specially made to showcase such ideas people will come and discover such innovative products themselves.

Chapter 2

Use cases

A use case is a written description of how users will perform tasks on the website. It outlines, from a user's point of view, a system's behavior as it responds to a request. Each use case is represented as a sequence of simple steps, beginning with a user's goal and ending when that goal is fulfilled.

2.1 User without login:

- Search products
- Apply various filters to products
- Browse product details
- Read product reviews
- See product rating
- Add item to cart
- Sign in for existing user
- Sign up for new user

2.2 User with login:

- Search products
- Apply various filters to products
- Browse product details
- Read product reviews

- See product rating
- Add item to cart
- Sign in for existing user
- Sign up for new user
- Check out item from cart
- Make payment using Paypal or Credit/Debit Card

2.3 Admin

- Edit User
- Add products
- Remove products
- Edit products
- Add categories
- Edit categories
- View all order status
- Change delivery status

Chapter 3

User stories

A user story is an informal, general explanation of a software feature written from the perspective of the end user. Its purpose is to articulate how a software feature will provide value to the customer. A key component of agile software development is putting people first, and a user story puts end users at the center of the conversation.

3.1 User

A user can look for various products available on the website, it can also search various products and apply various filters to it . A user can also check out and pay for the product . Website also provide feature to track the order .

3.2 Admin

An admin user will be used to manage products , orders and users in the website. An admin user will be on the back-end of the system hidden away from the user. An admin can add , remove or edit any user . An admin user will also be responsible to check the delivery and payment status of orders . Admin user will also be responsible to add various products , manage categories , update filters.

Chapter 4

Competitive Analysis

4.1 Platform

We choose responsive Website (using MERN stack) for our MVP due to following reasons :

4.1.1 Optimized use of budget:

Building a native application or even a hybrid application takes a lot of resources . Native application takes a lot of effort in coding / implementation phase while Hybrid take a lot of effort in testing phase . Building a responsive react website will help us launch the product which can be used on all types of devices .

4.1.2 Scalability

This website will be full 3 tier application , with no dependency among the three layers . After the phase our website gather a permanent customer base , we can easily scale up to make add Native app front-end .

4.2 Uniqueness

There are websites like Kijiji , facebook Marketplace , and e-bay that allows individual seller to sell their products online , but all these website are famous among re-seller rather than retail customers .

Moreover there is no market-place that is exclusive to startup products , so startups have to invest specially on individual websites , wasting their limited resources .

4.3 Quality control

User rating and seller rating will provide a transparent platform for both the parties . On top of that personal quality control teams can also be deployed to maintain product quality.

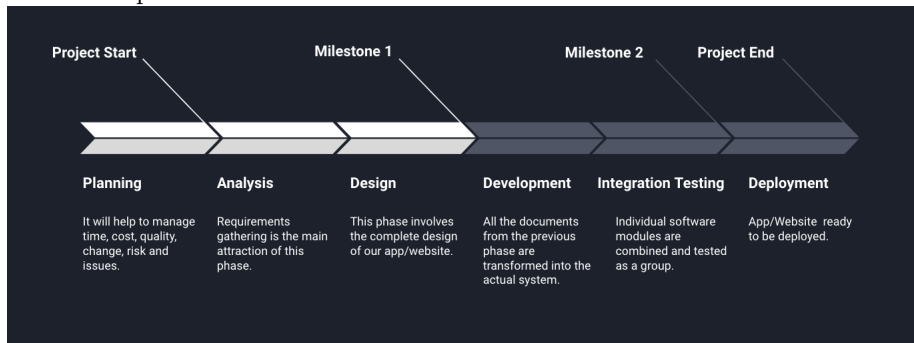
Chapter 5

Work plan

5.1 Development Methodology : Agile

We plan to build this project using Agile methodologies .

In software development, agile (sometimes written Agile) practices approach discovering requirements and developing solutions through the collaborative effort of self-organizing and cross-functional teams and their customer(s)/end user(s).It advocates adaptive planning, evolutionary development, early delivery, and continual improvement, and it encourages flexible responses to change. We plan to deliver our MVP as per the following path and then move on to next phase .



Chapter 6

Requirements

6.1 Functional Requirements

- After entering userID and password "User" should be logged In.
- User can easily add items is their shopping kart.
- User can easily checkout their selected products from their cart.
- "Admin" should be logged In after entering correct username and password.
- Admin can add or delete the products.
- New users can easily create new account.
- If user and Admin wants then they can easily sign out from their existing account.

6.2 Non-Functional Requirements

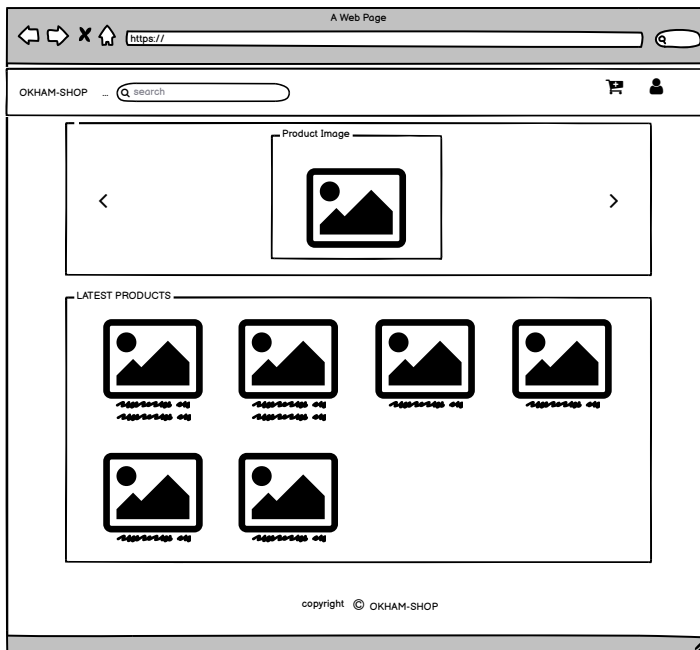
- User and Admin should be logged in under 5 Mses.
- User can't checkout the items if they enter the wrong card details.
- Proper error message must be displayed on the screen if something is wrong.
- User can easily login their accounts and shop using any devise.

Chapter 7

Wireframing

7.1 Screens

HOME SCREEN



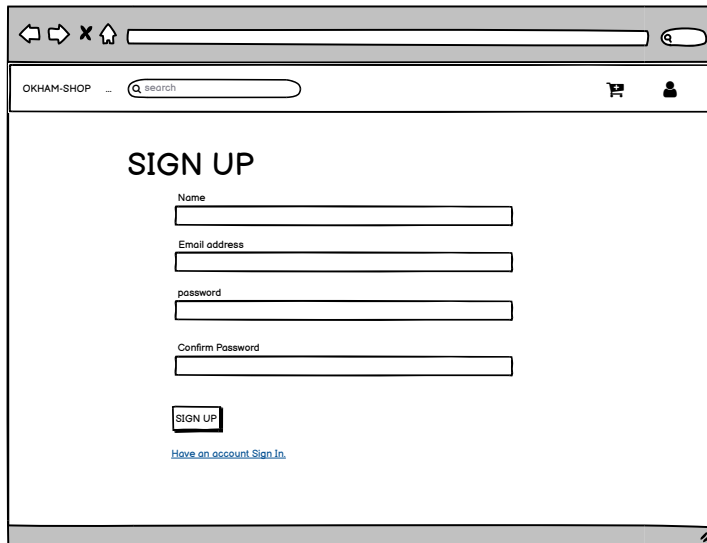
Product Screen



SIGN IN SCREEN



SIGN UP SCREEN



A wireframe of a web browser window showing a 'SIGN UP' form. The browser's address bar is empty. The page header includes 'OKHAM-SHOP', a search bar with the placeholder 'search', a shopping cart icon, and a user profile icon. The main content area features the title 'SIGN UP' followed by four input fields labeled 'Name', 'Email address', 'password', and 'Confirm Password'. Below these fields is a 'SIGN UP' button and a link that reads 'Have an account Sign In.'.

OKHAM-SHOP search

SIGN UP

Name

Email address

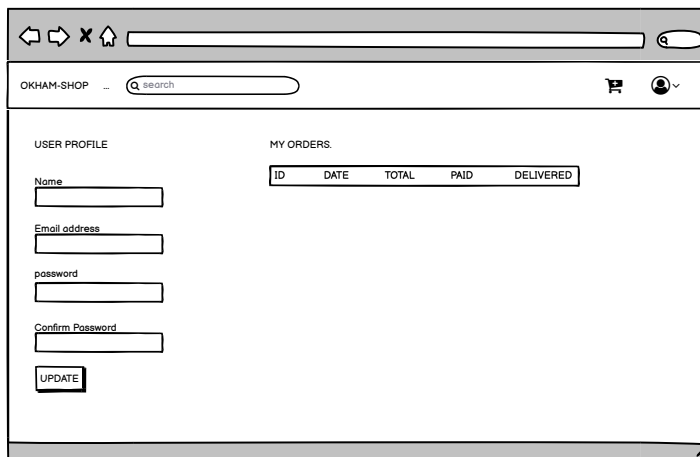
password

Confirm Password

SIGN UP

[Have an account Sign In.](#)

User Profile Screen



A wireframe of a web browser window showing a user profile page. The browser's address bar is empty. The page header includes 'OKHAM-SHOP', a search bar with the placeholder 'search', a shopping cart icon, and a user profile icon with a dropdown arrow. The main content area is divided into two sections: 'USER PROFILE' on the left and 'MY ORDERS.' on the right. The 'USER PROFILE' section contains four input fields labeled 'Name', 'Email address', 'password', and 'Confirm Password', followed by an 'UPDATE' button. The 'MY ORDERS.' section contains a table with five columns: 'ID', 'DATE', 'TOTAL', 'PAID', and 'DELIVERED'.

OKHAM-SHOP search

USER PROFILE

Name

Email address

password

Confirm Password

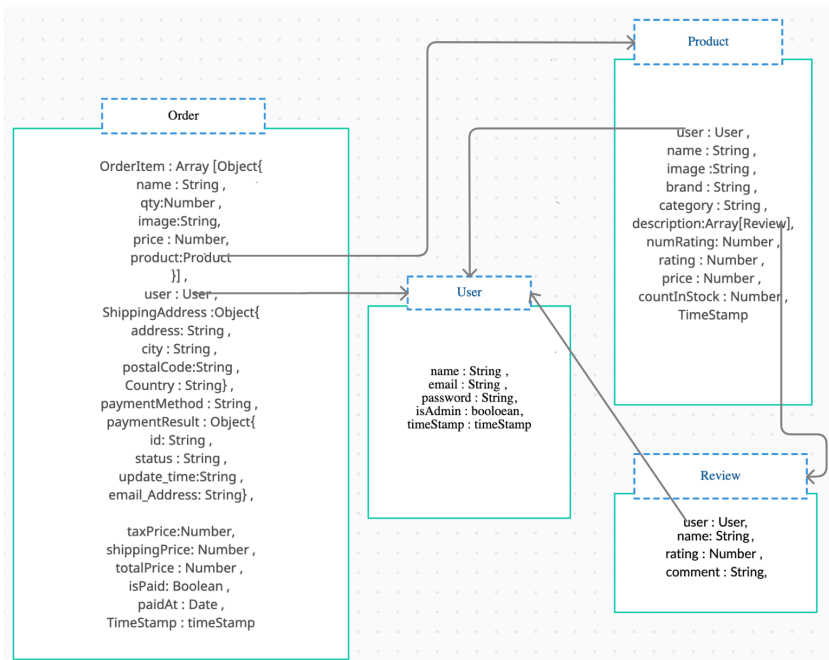
UPDATE

MY ORDERS.

ID	DATE	TOTAL	PAID	DELIVERED
----	------	-------	------	-----------

Chapter 8

Data Flow Diagram (DFD)



Chapter 9

Agile methodology.

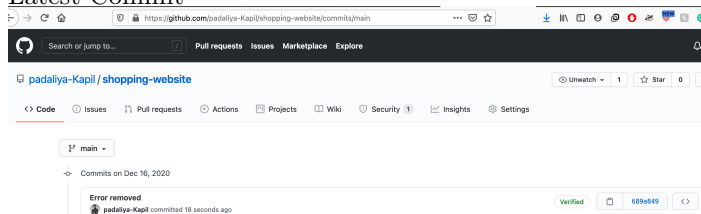
Agile is an iterative approach to project management and software development that helps teams deliver value to their customers faster and with fewer headaches. Instead of betting everything on a "big bang" launch, an agile team delivers work in small, but consumable, increments. Requirements, plans, and results are evaluated continuously so teams have a natural mechanism for responding to change quickly.

9.1 Github










url : <https://github.com/padaliya-Kapil/shopping-website>

9.2 Github screenshots












Latest Commit



Dependency in package.json (Backend)

Dependencies defined in package.json 9		
>	 dcodeIO / bcrypt.js <small>bcryptjs</small>	^ 2.4.3
>	 kimmobrunfeldt / concurrently	^ 5.3.0
>	 motdotla / dotenv	^ 8.2.0
>	 expressjs / express	^ 4.17.1
>	 Abazhenov / express-async-handler	^ 1.1.4
>	 auth0 / node-jsonwebtoken <small>jsonwebtoken</small>	^ 8.5.1
>	 Automatic / mongoose	^ 5.10.10
>	 expressjs / multer	^ 1.4.2
>	 remy / nodemon	^ 2.0.6

Dependency in package.json (Frontend)


Dependencies defined in frontend/package.json 16		
>	 testing-library / jest-dom <small>@testing-library/jest-dom</small>	^ 4.2.4
>	 testing-library / react-testing-library <small>@testing-library/react</small>	^ 9.5.0
>	 testing-library / user-event <small>@testing-library/user-event</small>	^ 7.2.1
>	 axios / axios	^ 0.21.0
>	 facebook / react	^ 17.0.0
>	 react-bootstrap / react-bootstrap	^ 1.4.0
>	 facebook / react <small>react-dom</small>	^ 17.0.0
>	 nfl / react-helmet	^ 6.1.0
>	 Luehang / react-paypal-button-v2	2.6.1
>	 reduxjs / react-redux	^ 7.2.1
>	 react-bootstrap / react-router-bootstrap	^ 0.25.0


.gitIgnore

 main ▾ shopping-website / .gitignore



padaliya-Kapil updated gitignore

 1 contributor

 **We found a potential security vulnerability in one of your dependencies.**
Only the owner of this repository can see this message.

27 lines (22 sloc) | 426 Bytes

```
1 # See https://help.github.com/articles/ignoring-files/ for more about ignor
2
3 # dependencies
4 /node_modules
5 #for all the nodemodules in our root
6 node_modules/
7 /.pnp
8 .pnp.js
9
10 # testing
11 /coverage
12
13 # production
14 /build
```

Chapter 10

Promotion of application

10.1 Focus on Website SEO

Search engine optimization (SEO) is the process of improving the quality and quantity of website traffic to a website or a web page from search engines. SEO targets unpaid traffic (known as "natural" or "organic" results) rather than direct traffic or paid traffic. Unpaid traffic may originate from different kinds of searches, including image search, video search, academic search, news search, and industry-specific vertical search engines.

As an Internet marketing strategy, SEO considers how search engines work, the computer-programmed algorithms that dictate search engine behavior, what people search for, the actual search terms or keywords typed into search engines, and which search engines are preferred by their targeted audience. SEO is performed because a website will receive more visitors from a search engine when websites rank higher in the search engine results page (SERP). These visitors can then potentially be converted into customers.

10.2 Social Media Marketing

The world of social media has completely changed online marketing. Creating a social media account, and interacting with the customers often is the best way to promote a website. Different social media accounts provide businesses with an excellent platform to advertise their business to the right audience. The promotion of websites on social media accounts can have branded imagery. Consider running contests and giveaways with unique landing pages to gain new "likes" and customer contact information. Facebook and Twitter remain the dominant forces of social media, but Pinterest and Instagram are starting to catch on with businesses as other ways to promote a website.

10.3 Signature Branding

The word signature can be defined as a “distinctive pattern, product or characteristic by which someone or something can be identified.” A signature brand is an original, cohesive design based on the personality of our company that is carried across all print, digital and web communications.

Chapter 11

Marketing and Monetization

We will use following methods to monetize our website :

11.1 Affiliate marketing

Affiliate marketing is the process of earning a commission by promoting other people's (or company's) products. You find a product you like, promote it to others and earn a piece of the profit for each sale that you make.

We can run adds or banners on our front end to earn with Affiliate marketing.

11.2 Paid membership

We plan to add paid members like to our website . These members will be able to see new innovative products in development phase and may also invest in those products before public release .

11.3 Publish sponsored posts and product reviews

Another way we plan to to leverage our website audience is to negotiate sponsorship deals with other sellers. While sponsored content isn't a scalable website monetization strategy, it can yield us some extra cash . This method is very popular in Facebook marketplace , Kijiji and several other e-commerce platform.