
INDIVIDUAL ASSIGNMENT

LEVEL 5

COMP50016: SERVER-SIDE-PROGRAMMING-2

CB NO: CB010188

Batch code :IF2231COM

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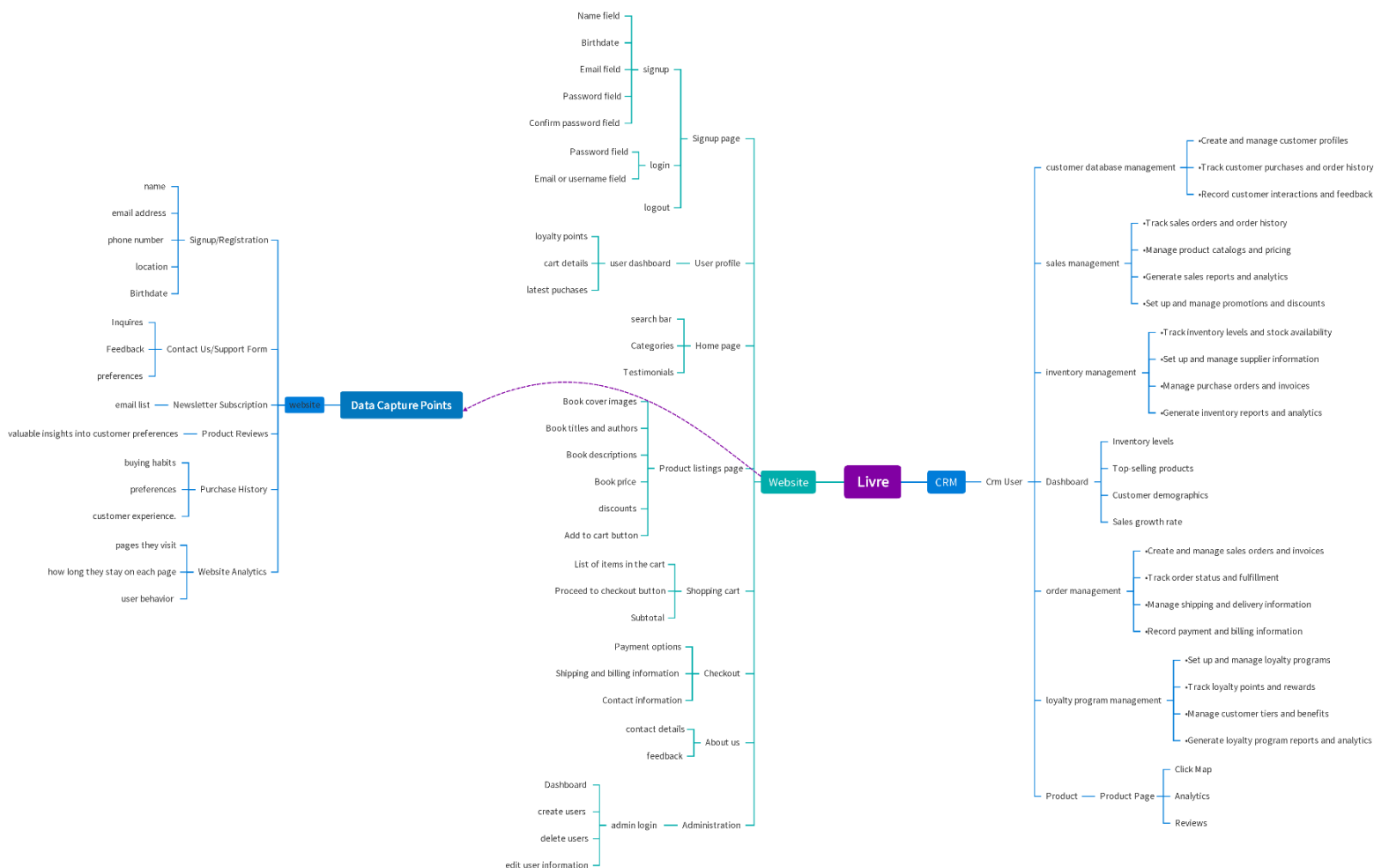
1.Introduction

In today's ever-evolving business landscape, Customer Relationship Management (CRM) systems have become absolutely essential. They're like Swiss Army knives for organizations, helping them simplify their processes, boost customer interactions, and lay the groundwork for sustainable growth. This document is your backstage pass to the meticulous journey of crafting a top-notch CRM application. But, it's not just any CRM; it's a tailor-made solution for our fictitious friend, Livre a company in the education world. Picture this CRM as a trusty sidekick, built with Laravel, jazzed up with tailwind and AlpineJS, all designed to make users life easier as they handle customers, products, and day-to-day tasks with grace and efficiency

1.1.Github Link

<https://github.com/krm-aadil/crm-system-laravel.git>

2.Mind Map / Er Diagram



3.Explanation of My Solution

LIVRE: ECOMMERCE+CRM

- My e-commerce website has an integrated CRM system which offers a comprehensive solution for effectively managing and optimizing the book-selling process. With my platform, customers can browse and purchase books seamlessly, while the CRM system enables efficient management of customer relationships and sales activities.

- The e-commerce website provides a user-friendly interface, allowing customers to easily search for books based on titles, authors, genres, or keywords. They can view detailed book descriptions, check availability, and add items to their shopping carts. Secure payment options ensure a smooth and reliable transaction process.
- The CRM system plays a crucial role in managing customer interactions and streamlining business operations. It captures and centralizes customer data, including contact information, purchase history, and preferences. This information helps us gain valuable insights into my customers' interests and behaviors, enabling us to provide personalized recommendations and targeted marketing campaigns.
- Furthermore, the CRM system facilitates effective order management. It tracks and updates the status of each order, from initial purchase to delivery confirmation. This ensures timely and accurate order processing, reducing the chances of errors and improving customer satisfaction.
- My CRM solution also enables efficient customer support. By storing customer communication history, my support team can quickly access past interactions and provide personalized assistance, resulting in faster issue resolution and enhanced customer service.
- Additionally, the CRM system offers analytics and reporting capabilities. It generates reports on sales performance, customer behavior, and inventory management, empowering us to make data-driven decisions and optimize my operations for better business outcomes.
- In summary, my e-commerce website with a CRM system for book sales provides a seamless and personalized shopping experience for customers, while enabling efficient management of customer relationships and sales processes. It enhances customer satisfaction, improves operational efficiency, and empowers data-driven decision-making for business growth.

4. System Design

4.1. Technologies I Used and The Reason

➤ **Jetstream:**

- I chose Jetstream because it provides a comprehensive scaffolding for user authentication in Laravel applications.
- It offers pre-built UI components and features such as registration, login, and password reset functionality, which saved me development time.

➤ **Tailwind CSS:**

- I opted for Tailwind CSS as it is a highly customizable utility-first CSS framework.
- It provides a wide range of pre-defined CSS classes that allowed me to quickly style and design my website and CRM interface.
- With Tailwind CSS, I had granular control over the design by composing utility classes, resulting in a visually appealing and responsive layout.

➤ **Daisy Tailwind UI:**

- I utilized Daisy TailwindUI, which is a opensource set of pre-designed UI components and templates built on top of Tailwind CSS.
- It offered a collection of professionally designed and ready-to-use components, including navigation bars, cards, modals, and forms.
- By incorporating This , I was able to accelerate the development process by leveraging these pre-designed components and achieving a consistent and polished user interface.

➤ **SweetAlert:**

- SweetAlert is a valuable library I integrated into the project to enhance user experience. It allows for the creation of attractive and customizable pop-up modals for various alerts and notifications.
- I employed SweetAlert to present users with visually appealing messages for actions such as successful form submissions, error handling, or confirmation dialogs. This not only adds a touch of professionalism but also improves user understanding and engagement.
- Its seamless integration made it an excellent choice for creating user-friendly alerts without the need for extensive custom JavaScript code.

➤ **Ajax (Asynchronous JavaScript and XML):**

- Ajax is a fundamental technique I harnessed to enable asynchronous data exchange between the client and server without the need to refresh the entire web page.
- I leveraged Ajax to implement features like dynamic content loading, real-time updates, and background data retrieval. For example, I used it for instant search suggestions as users typed in keywords.
- This technology significantly improved the website's responsiveness and interactivity, providing a smoother and more efficient user experience.

➤ **Alpine.js:**

- Alpine.js served as a pivotal part of the project, allowing me to create dynamic and interactive user interfaces with minimal JavaScript overhead.
- I utilized Alpine.js to build event listeners, handle user interactions, and manage data-driven components. For instance, it was instrumental in creating live updates for shopping cart contents without page reloads.
- Its simplicity and seamless integration with HTML templates made it a valuable tool for achieving real-time functionality while keeping the codebase clean and maintainable.

4.1 Data Model Design(Screenshots Eloquent of Models)

4.1.1.Product Model

```
<?php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
use Illuminate\Database\Eloquent\Relations\BelongsTo;
class Book extends Model
{
    use HasFactory;
    protected $fillable = [
        'title',
        'ISBN',
        'price',
        'summary',
        'CoverImage',
        'publication_date',
        'author_id',
        'genre_id',
    ];
}
```

```

        'language_id',
        'quantity'
    ], 'views'
];
public function author(): BelongsTo
{
    return $this->belongsTo(Author::class, 'author_id');
}
public function genre(): BelongsTo
{
    return $this->belongsTo(Genre::class, 'genre_id');
}
public function language(): BelongsTo
{
    return $this->belongsTo(Language::class, 'language_id');
}
}

```

4.1.2.Categories Model

```
<?php
```

```
namespace App\Models;
```

```
use Illuminate\Database\Eloquent\Factories\HasFactory;
```

```
use Illuminate\Database\Eloquent\Model;
```

```
class Genre extends Model
```

```

{
    use HasFactory;

    protected $fillable = [
        'genre_name', 'description'
    ];
}

```

```
<?php
```

```
namespace App\Models;
```

```
use Illuminate\Database\Eloquent\Factories\HasFactory;
```

```
use Illuminate\Database\Eloquent\Model;
```

```
class Language extends Model
```

```

{
    use HasFactory;

    protected $fillable = ['language_name'];
}

```

```
<?php
```

```
namespace App\Models;
```

```
use Illuminate\Database\Eloquent\Factories\HasFactory;
```

```
use Illuminate\Database\Eloquent\Model;
```

```
class Author extends Model
```

```

{
    use HasFactory;

    protected $fillable = ['first_name', 'last_name', 'biography'];
}

```

4.1.3.Attributes Model

```
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Genre extends Model
{
    use HasFactory;

    protected $fillable = [
        'genre_name', 'description'
    ];
}
<?php
```

```
namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Language extends Model
{
    use HasFactory;

    protected $fillable = ['language_name'];
}

```

4.1.4.Other Models

```
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Cart extends Model
{
    use HasFactory;

    protected $fillable = [
        'user_id',
        'book_id',
        'quantity',
    ];

    public function book()
    {
        return $this->belongsTo(Book::class);
    }

    public function user()
    {
        return $this->belongsTo(User::class);
    }
}
<?php

namespace App\Models;
```

```

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class City extends Model
{
    use HasFactory;

    protected $fillable = [
        'name',
        'latitude',
        'longitude',
    ];
}
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Click extends Model
{
    use HasFactory;

    protected $fillable = [
        'click_count',
        'last_click_time',
    ];

}
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Customer extends Model
{
    use HasFactory;

    protected $fillable = [
        'first_name',
        'last_name',
        'email',
        'phone',
        'address',
        // Add other customer-related fields here
    ];

}
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Order extends Model
{
    use HasFactory;

    protected
$fillable=[ 'user_id', 'book_id', 'quantity', 'customer_name', 'customer_email',
            'customer_address', 'customer_phone', 'payment_method', 'total_amount',

```



```

        'status'];

    public function book()
    {
        return $this->belongsTo(Book::class, 'book_id');
    }

    public function user()
    {
        return $this->belongsTo(User::class, 'user_id');
    }
}
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Province extends Model
{
    use HasFactory;

    protected $fillable = [
        'name',
        'latitude',
        'longitude',
    ];
}
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

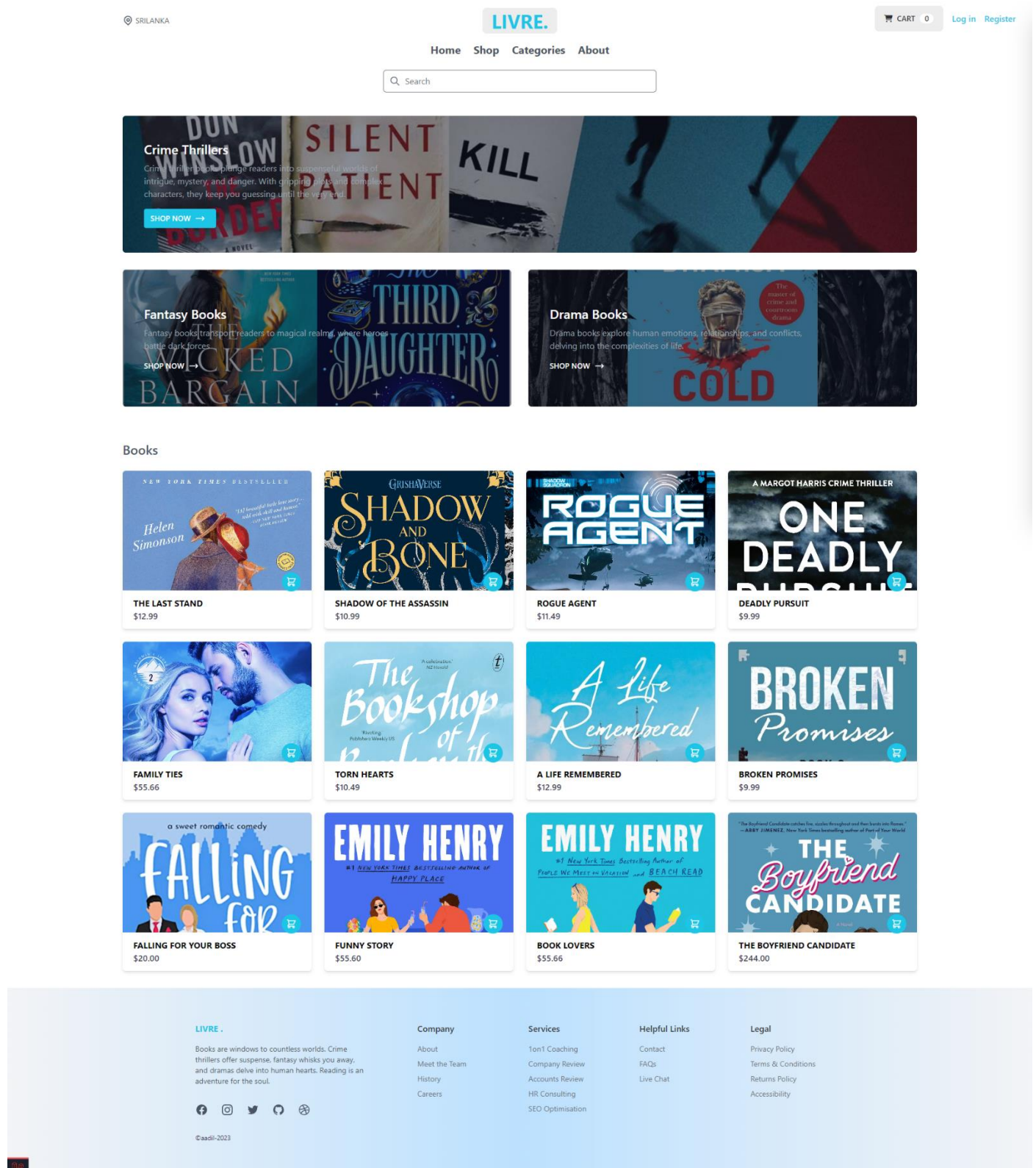
class Review extends Model
{
    use HasFactory;

    protected $fillable = [
        'review_id',
        'book_id',
        'customer_id',
        'rating',
        'review_text',
        'review_date',
    ];
}

```

5.Features Design(Screenshots of The User Interface)

5.1.Home Page (Screenshot + Design Description)



5.2.Login (Screenshot + Design Description)



LIVRE .

Log in

Email Address

Password

☐ Remember me

[Forgot your password?](#)

Log in

Need an account? [Create an account](#)

5.3.Register (Screenshot + Design Description)

Register

Name

Email

Birthdate

mm/dd/yyyy

Phone

Address

City

Select a city

Province

Select a province

Password

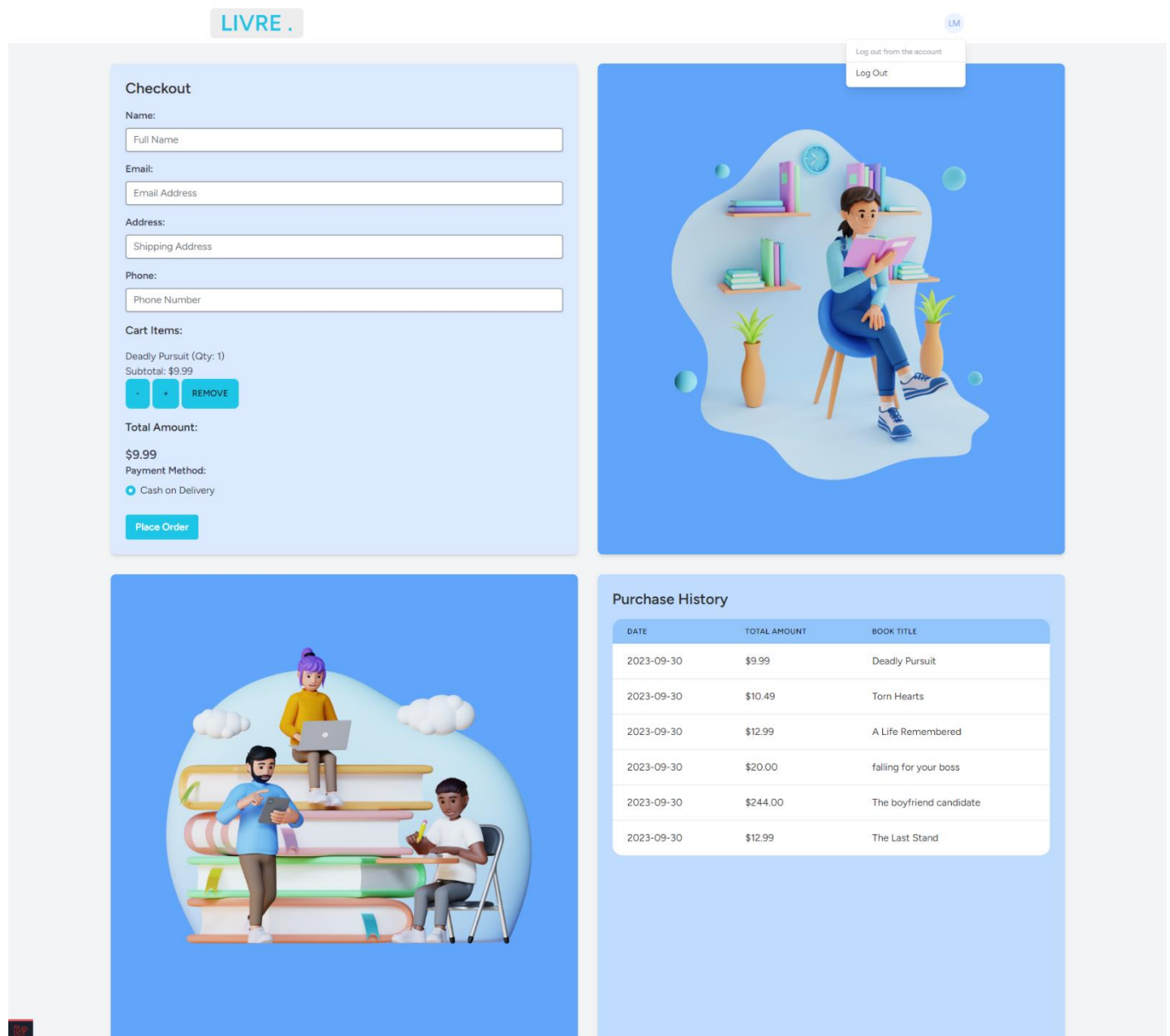
Confirm Password

[Already registered?](#)

Register



5.4. User Dashboard picture (Screenshot + Feature Description)



5.5.Categories Page (Screenshot + Feature Description)

SRI LANKA

LIVRE.

CART

0

HomeShopCategoriesAbout

Q

Search

Action Books

NEW YORK TIMES BESTSELLER

Helen Simonson

"All beautiful tales have one thing in common... they end with a bang!" —THE NEW YORK TIMES

THE LAST STAND

View Details \$12.99

GRISHAVERSE

SHADOW AND BONE

SHADOW OF THE ASSASSIN

View Details \$10.99

ROGUE AGENT

View Details \$11.49

A MARGOT HARRIS CRIME THRILLER

ONE DEADLY

DEADLY PURSUIT

View Details \$9.99

Drama Books

2

FAMILY TIES

View Details \$55.66

The Bookshop of the

TORN HEARTS

View Details \$10.49

A Life Remembered

View Details \$12.99

BROKEN PROMISES

View Details \$9.99

Comedy Books

a sweet romantic comedy

FALLING FOR

FALLING FOR YOUR BOSS

View Details \$20.00

EMILY HENRY

#1 NEW YORK TIMES BESTSELLING AUTHOR OF HAPPY PLACE

FUNNY STORY

View Details \$55.60

EMILY HENRY

#1 New York Times Bestselling Author of PEOPLE WE MEET ON VACATION and BEACH READ

BOOK LOVERS

View Details \$55.66

THE BOYFRIEND CANDIDATE

View Details \$244.00

Horror Books

Mystery Books

Thriller Books

LIVRE.

Books are windows to countless worlds. Crime thrillers offer suspense, fantasy whisks you away, and dramas delve into human hearts. Reading is an adventure for the soul.

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Company

About

Meet the Team

History

Careers

Services

1on1 Coaching

Company Review

Accounts Review

HR Consulting

SEO Optimisation

Helpful Links

Contact

FAQs

Live Chat

Legal

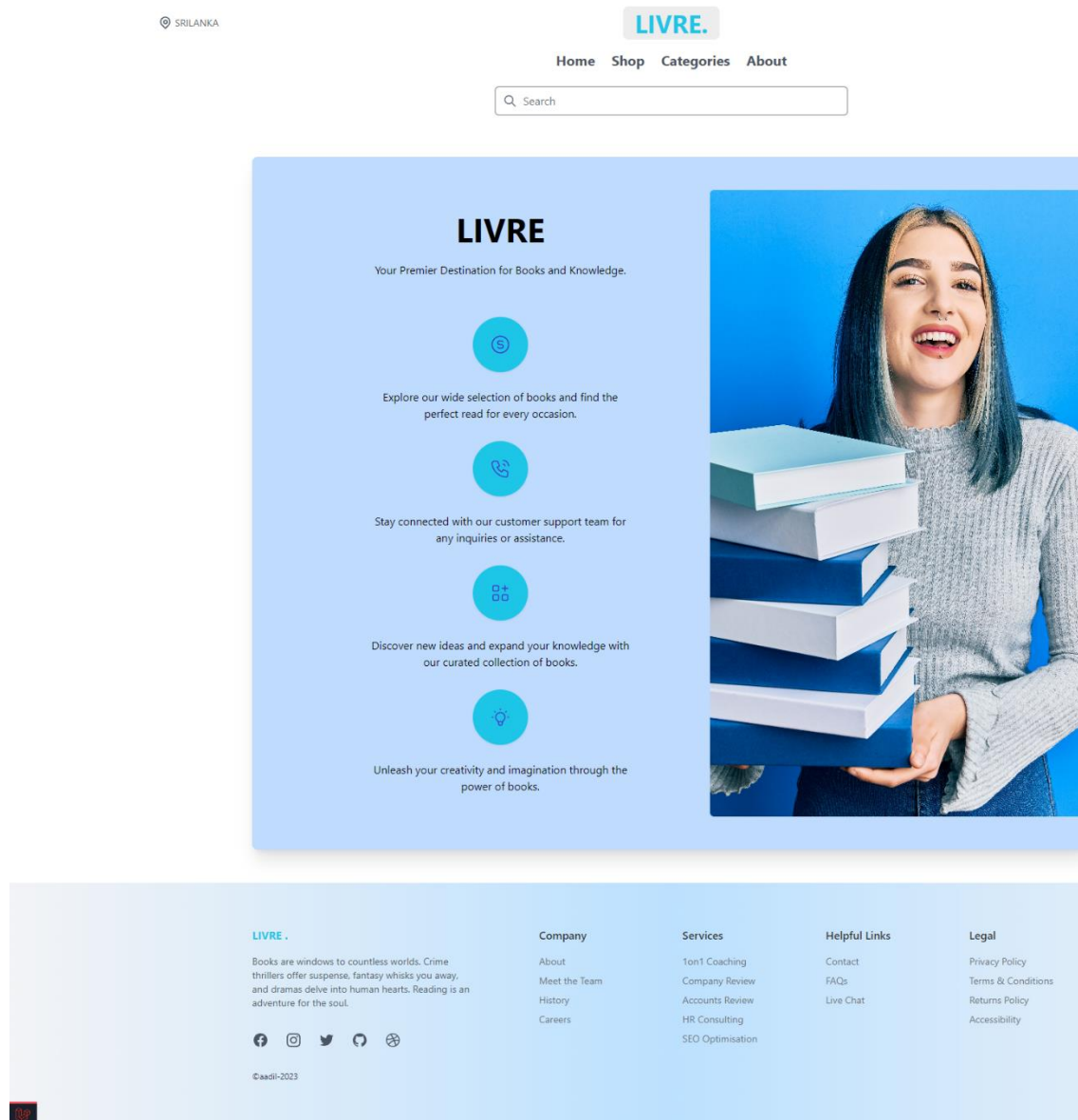
Privacy Policy

Terms & Conditions

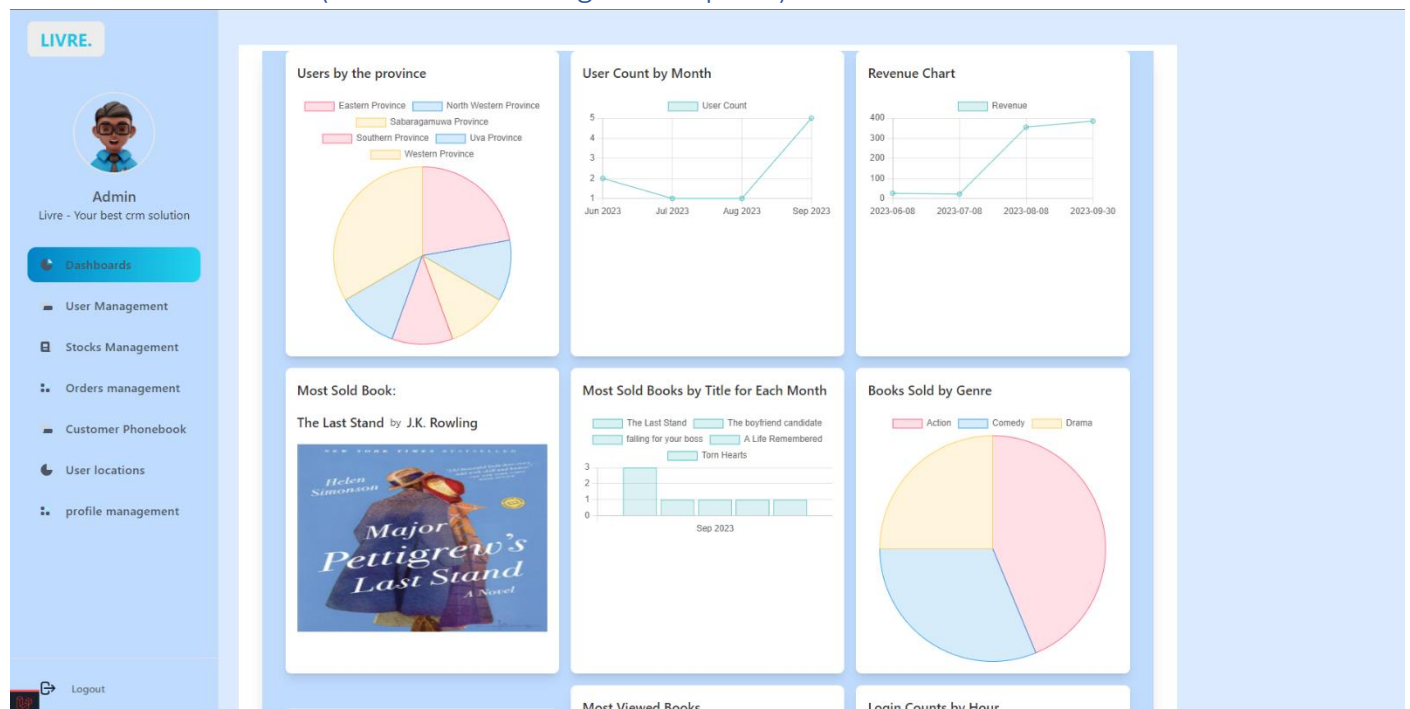
Returns Policy

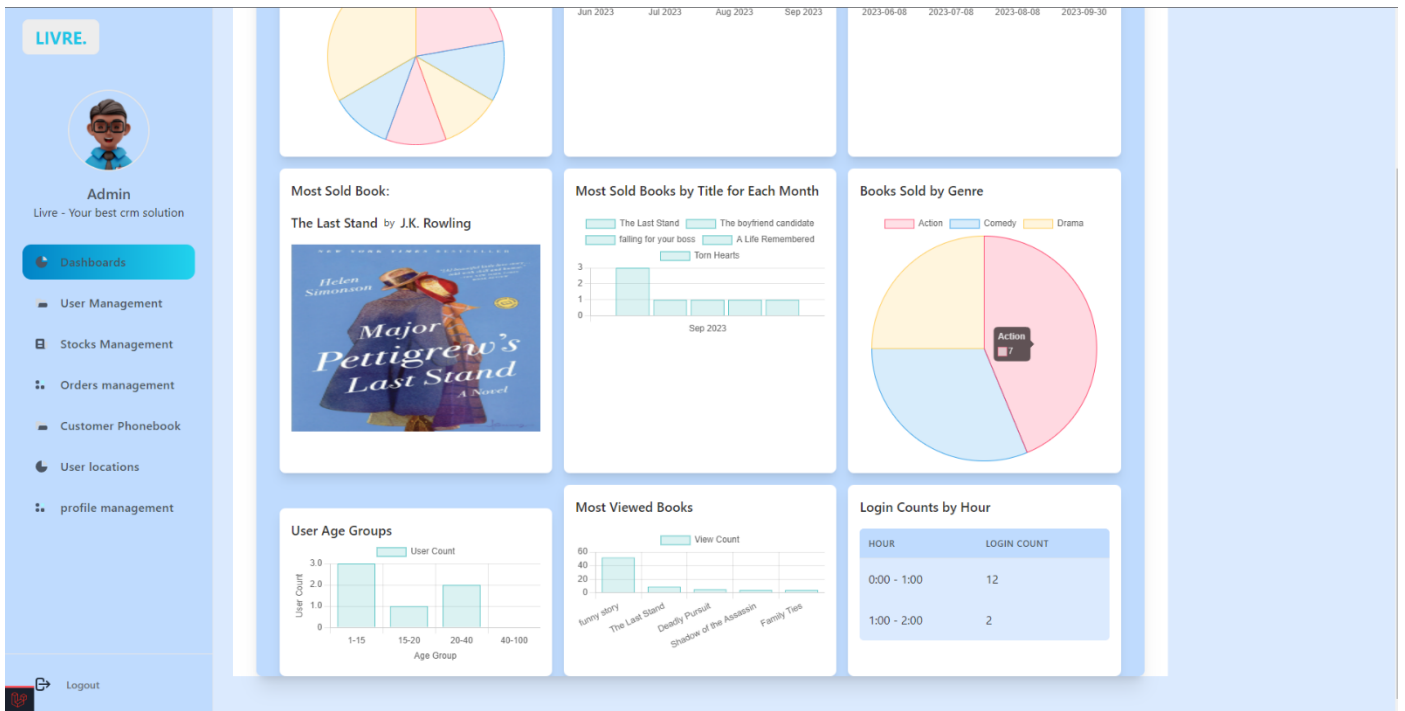
Accessibility

5.6.About us Page (Screenshot + Feature Description)

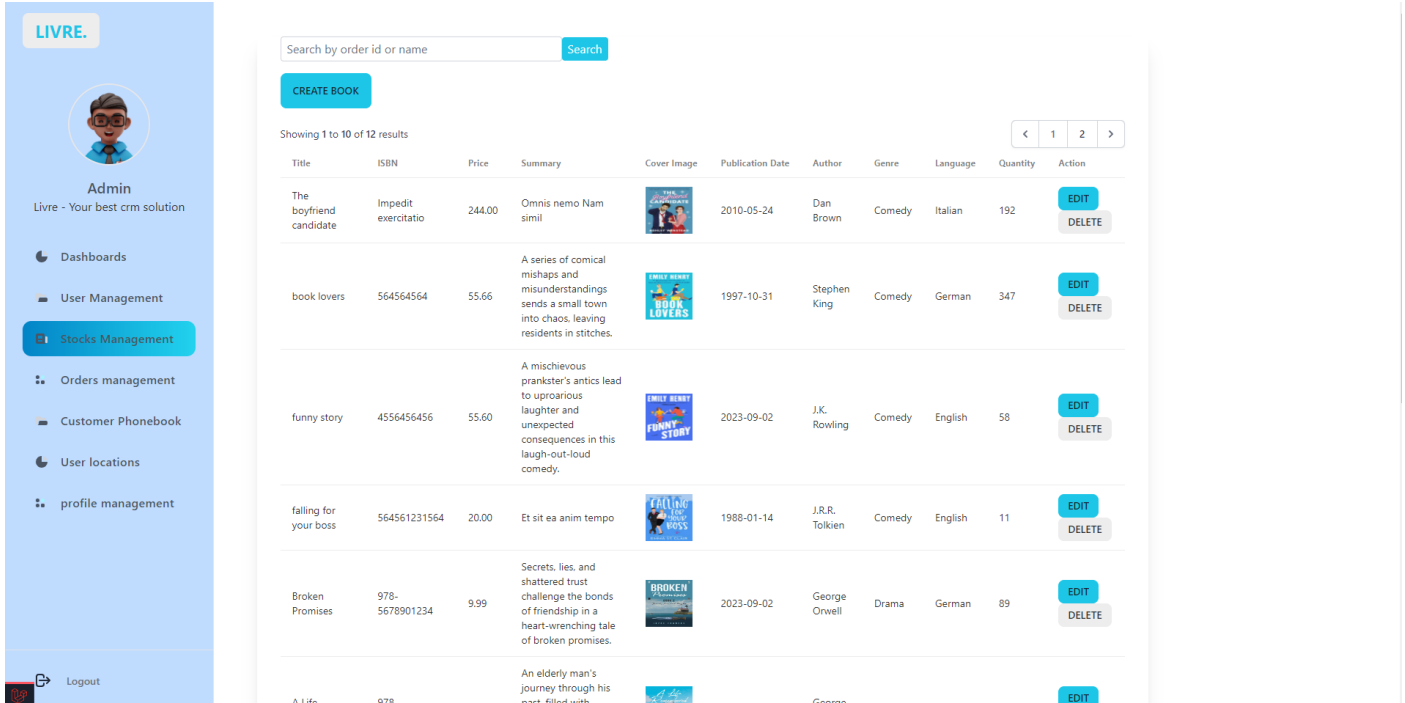


5.7.Admin Dashboard (Screenshot + Design Description)






5.8.Crud Operation for Product(Feature + Design Description)



5.9.Crud Operation for Users (Screenshot + Design Description)

LIVRE.



Admin
Livre - Your best crm solution

🏠 Dashboards

User Management

📊 Stocks Management

📦 Orders management

📞 Customer Phonebook

📍 User locations

👤 profile management

Logout

Create User


Search by Customer Name

Search

NAME	EMAIL	BIRTHDATE	ROLE	ACTION	
Lee Mckay	duhydaw@mailinator.com	2001-12-25	user	EDIT	DELETE
John Downs	doginy@mailinator.com	2014-12-09	user	EDIT	DELETE
Laith Phillips	vyneqoteg@mailinator.com	2019-10-29	user	EDIT	DELETE
Amena Ellison	qyqeq@mailinator.com	2018-07-06	user	EDIT	DELETE
Nina Tillman	zojydogyf@mailinator.com	2005-06-16	user	EDIT	DELETE
Riley Knowles	cibuc@mailinator.com	1997-07-16	user	EDIT	DELETE
crm	crm@gmail.com		crm	EDIT	DELETE
user	user@gmail.com		user	EDIT	DELETE
admin	admin@gmail.com		admin	EDIT	DELETE

5.10. Location Analytics (Screenshot + Feature Description)

LIVRE.



Admin
Livre - Your best crm solution

🏠 Dashboards

User Management

📊 Stocks Management

📦 Orders management

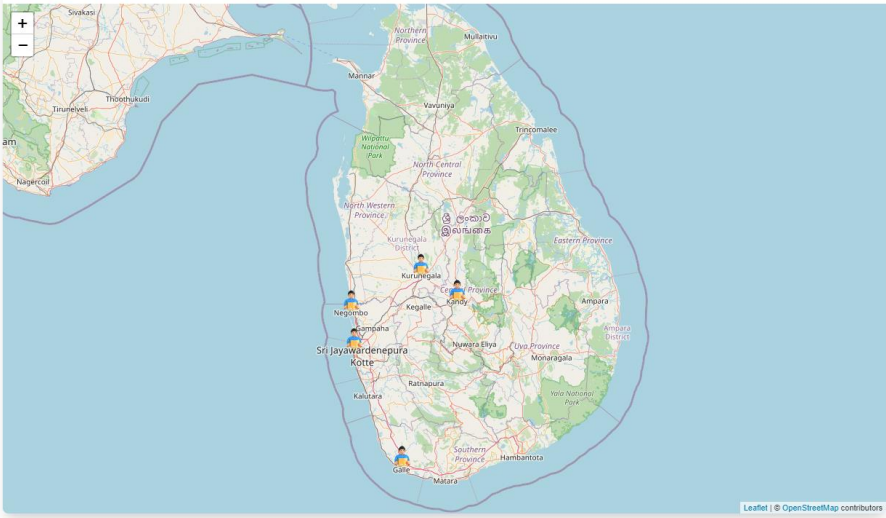
📞 Customer Phonebook

User locations

👤 profile management


Logout

Registered Users Location by:cities



5.11.Address Book (Screenshot + Feature Description)

LIVRE.



Admin

Livre - Your best crm solution

🏠 Dashboards

👤 User Management

📊 Stocks Management

📦 Orders management

📞 Customer Phonebook

📍 User Locations

👥 profile management

Logout

Search by Customer Name

Search

Customer Phone book

Showing 1 to 10 of 16 results

<

1


2

>

CUSTOMER ID	CUSTOMER NAME	CUSTOMER EMAIL	CUSTOMER ADDRESS	CUSTOMER PHONE NUMBER
47	Aidan Simpson	vafuqeno@mailinator.com	Itaque quis perspici	+1 (996) 143-8486
48	Aidan Simpson	vafuqeno@mailinator.com	Itaque quis perspici	+1 (996) 143-8486
49	Janna Garrison	xohym@mailinator.com	Rem mollitia non har	+1 (177) 623-4057
50	Janna Garrison	xohym@mailinator.com	Rem mollitia non har	+1 (177) 623-4057
51	Janna Garrison	xohym@mailinator.com	Rem mollitia non har	+1 (177) 623-4057
52	Janna Garrison	xohym@mailinator.com	Rem mollitia non har	+1 (177) 623-4057
53	Wendy Lott	mugyla@mailinator.com	Sed veniam sit fug	+1 (329) 293-2152
54	Wendy Lott	mugyla@mailinator.com	Sed veniam sit fug	+1 (329) 293-2152
55	Josiah May	lexijol@mailinator.com	Est quasi ducimus n	+1 (198) 679-9386
56	Josiah May	lexijol@mailinator.com	Est quasi ducimus n	+1 (198) 679-9386

5.13.Profile (Screenshot + Design Description)

LIVRE.



Admin

Livre - Your best crm solution

🏠 Dashboards

👤 User Management

📊 Stocks Management

📦 Orders management

📞 Customer Phonebook

📍 User Locations


👥 profile management

Logout

Profile Information

Update your account's profile information and email address.

Photo



SELECT A NEW PHOTO

REMOVE PHOTO

Name

admin

Email

admin@gmail.com

SAVE

Update Password

Ensure your account is using a long, random password to stay secure.


Current Password

New Password

Confirm Password

SAVE

5.14.Mailtrap (Screenshot + Design Description)



Home

Email Testing

Inboxes

Email Sending

Email Marketing

Billing

Settings

Help

Inboxes > crm_inbox > Your Order Has Been Shipped

Search...

Your Order Has Been Shipped

to: <duhydaw@mailinator.com> a few seconds ago

Your Checkout Is Successful

to: <duhydaw@mailinator.com> 6 minutes ago

Your Checkout Is Successful

to: <duhydaw@mailinator.com> 6 minutes ago

Your Checkout Is Successful

to: <duhydaw@mailinator.com> 6 minutes ago

Your Checkout Is Successful

to: <duhydaw@mailinator.com> 6 minutes ago

Your Checkout Is Successful

to: <vyneqoteg@mailinator.com> 33 minutes ago

Your Checkout Is Successful

to: <vyneqoteg@mailinator.com> 33 minutes ago

Your Checkout Is Successful

to: <qyqeq@mailinator.com> 35 minutes ago

Your Checkout Is Successful

to: <qyqeq@mailinator.com> 35 minutes ago

Your Checkout Is Successful

to: <zoydyogyf@mailinator.com> 36 minutes ago

Your Checkout Is Successful

to: <zoydyogyf@mailinator.com> 36 minutes ago

Your Checkout Is Successful

to: <zoydyogyf@mailinator.com> 36 minutes ago

Your Checkout Is Successful

to: <zoydyogyf@mailinator.com> 36 minutes ago

Your Checkout Is Successful

to: <cibuc@mailinator.com> 42 minutes ago

Your Checkout Is Successful

Your Order Has Been Shipped

From: Example <hello@example.com>

To: <duhydaw@mailinator.com>

Show Headers

HTML

HTML Source

Text

Raw

Spam Analysis

HTML Check

Tech Info

Hello!

Your order will be delivered soon.

Thank you for choosing us!

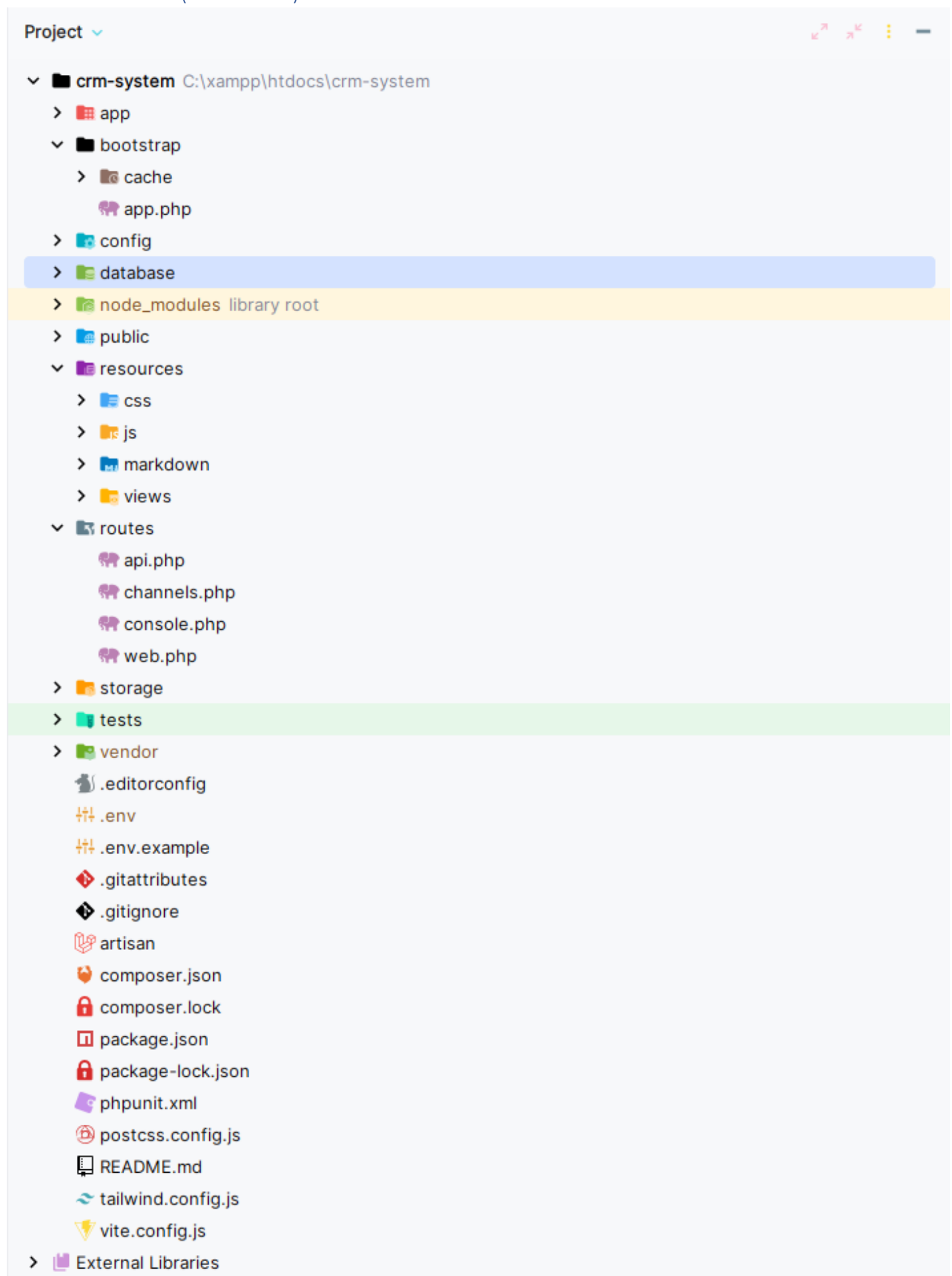
Regards,

Laravel

© 2023 Laravel. All rights reserved.

6.Code Structure

6.1.Mvc Structure (Screenshot)



6.2.Code Structure(Example Screenshot)

```
@extends('layouts\admin')

@section('content')
    <div class="py-12">
        <div class="max-w-7xl mx-auto sm:px-6 lg:px-8">
            <div class="bg-white overflow-hidden shadow-xl sm:rounded-lg">
                <div class="container">

                    <div class="container">
                        <h2>Add Stock</h2>
                        <form action="{{ route('stocks.store') }}" method="POST">
                            @csrf
                            <div class="form-group">
                                <label for="book_id">Book name :</label>
                                <select name="book_id" id="book_id" class="w-full rounded-lg border-gray-300 focus:outline-none focus:border-teal-400">
                                    @foreach($books as $book)
                                        <option value="{{ $book->id }}">{{ $book->title }}</option>
                                    @endforeach
                                </select>
                                <div class="form-group">
                                    <label for="quantity_in_stock">Quantity in Stock:</label>
                                    <input type="number" name="quantity_in_stock" class="form-control" required>
                                </div>
                                <button type="submit" class="btn btn-primary">Create</button>
                            </form>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
@endsection
```

6. Testing

6.1 Functional Testing

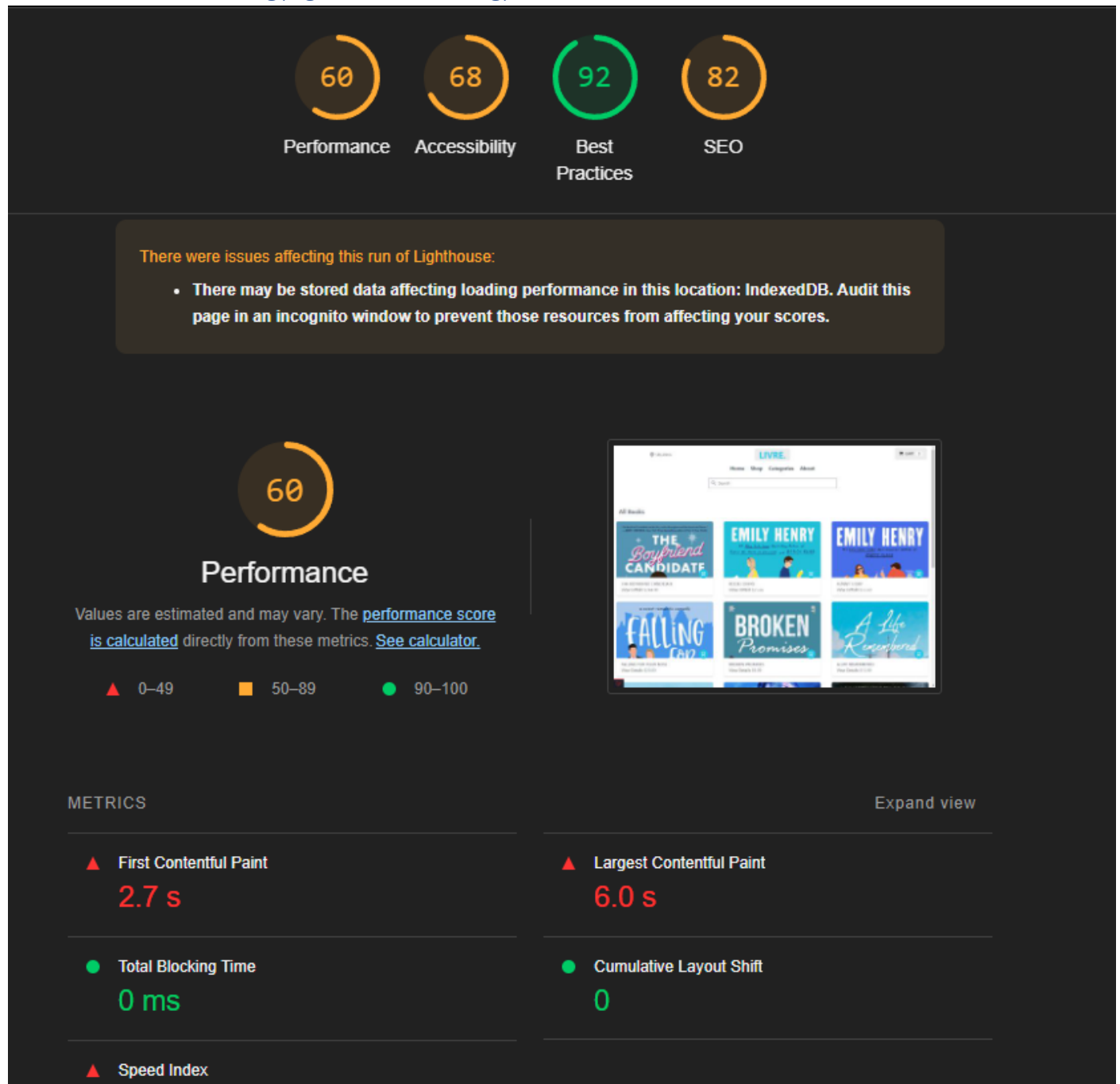
Test case ID	Description	Test inputs	Expected output	Actual output	Result
T01	Verify that a user can successfully add a book to the shopping cart.	1.Navigate to the e-commerce website. 2.Search for a book and click "Add to Cart."	The book is added to the shopping cart.	The book is added to the shopping cart.	Pass
T01	Test the checkout process by placing an order.	1.Add multiple books to the cart. 2.Proceed to checkout, fill in shipping information, and complete the order.	The order is placed successfully, and the user receives an order confirmation.	The order is placed successfully, and the user receives an order confirmation.	Pass

T03	Verify that the CRM can update book stock levels correctly	1.Access the CRM. 2.Select a book and update its stock quantity.	The stock quantity is updated in the database.	The stock quantity is updated in the database.	Pass
T04	Verify that can search for a user in the phone book	1.Access the CRM 2.Search for a user by their name	The search results show up	The search results show up	Pass
T05	Verify the accuracy of the analytics data.	1.Access the analytics section of the CRM. 2. Check the user count, revenue, and most purchased book data.	The analytics data is accurate and up-to-date.	The analytics data is accurate and up-to-date.	Pass

6.2 Usability Testing

Test case ID	Description	Test inputs	Expected output	Actual output	Result
T01	Test the ease of user registration	1.Navigate to the registration page. 2.Fill in registration details.	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	Pass
T01	Test the ease of user registration.	1.Navigate to the registration page. 2.Fill in registration details.	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	Pass
T03	Test the ease of user login	1.Navigate to the login page. Fill in login details.	User login is intuitive and straightforward.	User login is intuitive and straightforward.	Pass
T04	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	Pass
T05	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	User registration is intuitive and straightforward.	Pass

6.3 Performance Testing(Light House Testing)



6.4. Quality Assurance Review for Testcases (Why It Was Created, And A Deep Analysis.)

1. Introduction

The Quality Assurance Review for Test Cases is conducted to ensure the effectiveness and reliability of the test cases developed for the CRM and e-commerce website. This review aims to provide an in-depth analysis of why these test cases were created and assess their overall quality in terms of functionality and usability testing.

2. Purpose and Objectives

The primary purpose of creating these test cases is to validate the functionality and usability of the CRM and e-commerce website. The objectives of this review include:

1. Determine if the test cases adequately cover critical functionality and usability aspects.
2. Assess the clarity and completeness of the test case descriptions.
3. Evaluate whether the test inputs are representative of real-world scenarios.
4. Verify that the expected and actual outcomes are well-defined and measurable.
5. Identify any potential issues or gaps in the test cases.

3. Test Case Creation

The test cases were created to ensure the following:

Functionality Test Cases:

1. The core features of the website, such as adding items to the cart and checking out, are tested thoroughly.
2. The CRM system can manage book stocks and contacts effectively.
3. Analytics data is accurate and reflects the actual performance of the website.

Usability Test Cases:

1. The user registration process is user-friendly and straightforward.
2. Error messages during login are clear and informative.
3. The website is responsive and provides a consistent experience across different devices.
4. The search functionality helps users find books efficiently.
5. The checkout process is intuitive and user-friendly.

4. Deep Analysis

A. Test Case Coverage: The test cases appear to provide comprehensive coverage of both functionality and usability aspects of the CRM and e-commerce website. Key functionalities such as adding items to the cart, checking out, managing book stocks, and analyzing user data are well-represented.

B. Clarity and Completeness: The descriptions of the test cases are clear and concise, making it easy to understand the purpose of each test. However, it is essential to ensure that the test steps are detailed enough to be executed effectively.

C. Real-world Scenarios: The test inputs provided in the test cases should closely mimic real-world scenarios. It is crucial to verify that the test inputs encompass a wide range of potential user interactions to ensure the website's robustness.

5. Recommendations

1. Complete the test cases by filling in the "Actual Output" and "Result" sections after test execution to provide clear Pass/Fail results.
2. Consider adding an "Expected Issues" section in the test cases to identify potential areas of concern.
3. Ensure that test inputs encompass various real-world scenarios to improve test coverage.
4. Review and validate the test steps to ensure they are detailed enough for execution.
5. Continuously update and expand the test suite as new features are added or changes are made to the

Conclusion The Quality Assurance Review for Test Cases has highlighted the strengths and areas for improvement in the test case suite. By addressing the recommendations provided, the test cases can become a valuable tool for ensuring the functionality and usability of the CRM and e-commerce website. Regular reviews and updates will contribute to maintaining high-quality testing processes.

6. Future-Proofing

7.1 Future Upgrade Plan

In our future upgrade plan, we aim to enhance the CRM and e-commerce website by implementing several key improvements. These include integrating AI-driven recommendation systems for personalized book suggestions, expanding payment options to support cryptocurrencies, optimizing mobile app versions for better user experiences, and incorporating advanced data analytics for more detailed customer insights. Additionally, we plan to strengthen security measures to ensure customer data protection and privacy.

7.2 SaaS Expansion Plan(500 Words Explanation)

Introduction

In today's digital age, Software as a Service (SaaS) has revolutionized the way businesses operate by offering flexible and cost-effective software solutions. As we embark on our SaaS expansion journey, our primary goal is to empower businesses with a broader range of scalable and efficient tools. This expansion plan outlines our strategy for growth, focusing on market analysis, product development, customer engagement, and infrastructure scalability.

Market Analysis

1. **Identifying Target Markets:** Our first step is to identify specific industries and sectors that would benefit most from our SaaS offerings. We will conduct in-depth market research to understand the pain points and needs of potential customers.
2. **Competitive Analysis:** Analyzing competitors will help us identify gaps in the market and fine-tune our product offerings to outperform existing solutions. We will emphasize differentiation through innovation and superior customer support.

Product Development

1. **Feature Enhancement:** We will continuously improve and expand our existing SaaS products to meet evolving customer demands. This includes adding new features, improving user interfaces, and enhancing performance.
2. **New Product Offerings:** In addition to improving existing products, we will develop new SaaS applications that address emerging trends and technological advancements. These may include AI-driven tools, blockchain-based solutions, and industry-specific applications.
3. **User Feedback Integration:** Customer feedback is invaluable. We will actively seek input from our user base to identify pain points and opportunities for product enhancement. Regular updates and feature releases will be based on this feedback.

Customer Engagement

1. **Customer Support and Training:** Exceptional customer support is a cornerstone of our expansion plan. We will invest in robust customer support teams and develop comprehensive training resources to ensure our customers can maximize the value of our SaaS solutions.

2. **Community Building:** We will establish online communities and forums where users can connect, share experiences, and provide feedback. Building a sense of belonging among our customers will foster loyalty and advocacy.
3. **Pricing Flexibility:** To cater to a diverse customer base, we will offer flexible pricing plans, including tiered subscriptions, pay-as-you-go options, and custom enterprise solutions. This approach ensures that our SaaS offerings are accessible to businesses of all sizes.

Infrastructure Scalability

1. **Cloud Infrastructure:** We will invest in cloud infrastructure that can scale dynamically to accommodate increasing demand. This ensures that our SaaS applications remain reliable and responsive, even during periods of high usage.
2. **Security Measures:** Data security is paramount. We will continually enhance our security protocols to protect customer data from evolving threats. Regular security audits and compliance certifications will be part of our strategy.

Marketing and Promotion

1. **Content Marketing:** We will produce high-quality, educational content that demonstrates the value of our SaaS solutions. This will include blog posts, whitepapers, webinars, and video tutorials.
2. **Digital Advertising:** Leveraging digital advertising channels such as Google Ads and social media platforms, we will target specific customer segments and regions to maximize our reach.
3. **Partnerships:** Collaborating with strategic partners, including software integrators and industry influencers, will help us expand our market presence and reach new audiences.

Financial Planning

1. **Budget Allocation:** A significant portion of our financial resources will be allocated to product development, customer support, and marketing. We will maintain a balanced budget to ensure sustainable growth.
2. **Revenue Diversification:** While subscription fees will be a primary revenue source, we will explore additional monetization avenues, such as licensing technology, data analytics services, and premium support packages.

Conclusion

Our SaaS expansion plan is built on the foundation of customer-centricity, innovation, and scalability. By identifying target markets, continuously improving our products, prioritizing customer engagement, and investing in infrastructure and marketing, we are confident in our ability to empower businesses with the best-in-class SaaS solutions. This expansion will not only benefit our company but also drive digital transformation and efficiency in the industries we serve.

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