



# Outfithub

A Modular Clothing E-commerce Application

Team Members

Seng Chaokhun • Thou Laiheng • Ang Panha • Kham Veasna • Cheng Sakda

# Building the Future of E-commerce

Outfithub is a modern, modular clothing e-commerce application designed to deliver a maintainable, responsive, and scalable single-page application experience.

## Modern Stack

Vue 3, TypeScript, Vite

## Modular Architecture

Scalable & maintainable

## Responsive SPA

Seamless user experience

## Fast Development

HMR & type safety

# The Frontend



## Vue 3

Composition API, reactive data binding, component-based architecture



## Pinia

Intuitive state management with TypeScript support



## Tailwind CSS

Utility-first CSS framework for rapid UI development



## Vitest

Blazing fast unit testing with Vue support

# The Backend & Database

## Node.js

JavaScript runtime for server-side execution

## Express

Minimal, flexible web application framework

## MySQL

Reliable relational database management

## Bcryptjs

Secure password hashing for authentication

RESTful API • JSON Data Format • CRUD Operations

# System Architecture

## Modular Design

Feature-based folder structure with clear separation of concerns

## Multi-Layout System

Dedicated layouts for auth, admin, and user experiences

## Collocated Dev

Frontend & backend in single repo for streamlined development

Layout System: Auth Layout → Admin Layout → User Layout

# Core Features

## Browse & Search

Intuitive product browsing with search functionality and category filtering

## Authentication

Secure user registration and login with session management

## Account Management

Users can update their profile information and preferences

## Admin Dashboard

Comprehensive admin panel for product and user management

4+ Core Modules • 20+ Components • 3 User Roles

# Authentication & Security



## Security Highlights:

- Password hashing with bcryptjs
- Secure session state via Pinia stores
- Protected routes with navigation guards

# Development Workflow

## Component-Driven

Reusable UI components built in isolation  
with clear props interfaces

## ESLint & Prettier

Consistent code style and quality  
enforcement across the codebase

## Type Safety

Full TypeScript coverage with vue-tsc for  
build-time validation

```
package.json scripts
```

```
dev: vite | build: vue-tsc && vite build | lint: eslint | test:  
vitest
```



# UI/UX Philosophy

## Clean & Minimal

Focus on content with purposeful whitespace and subtle interactions

## Responsive Design

Fluid layouts that adapt seamlessly from mobile to desktop

## User-Centric Navigation

Intuitive information architecture and clear call-to-actions

# Challenges & Limitations

[HIGH]

## Payment Gateway

No integrated payment processing (Stripe, PayPal) yet implemented

[HIGH]

## Checkout Flow

Cart and order history features are not yet complete

[MED]

## Accessibility

WCAG compliance and screen reader support need improvement

WHAT'S NEXT

# Future Roadmap

Phase 1

## Payment Integration

Stripe & PayPal for seamless checkout

Phase 2

## Full Admin Controls

Complete CRUD operations for all entities

Phase 3

## CI/CD Pipeline

Automated testing and deployment



# Conclusion

Outfithub represents a solid foundation for modern e-commerce development, ready for future enhancements.

## Key Achievements

- ✓ Modern Vue 3 + TypeScript architecture
- ✓ Secure authentication system
- ✓ Modular, maintainable codebase
- ✓ Responsive, user-friendly interface



## Questions & Discussion

Thank you for your attention!