



Outfithub

A Modular Clothing E-commerce Application

Team Members

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

EXECUTIVE SUMMARY

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

Colocated Dev

Frontend & backend in single repo for streamlined development

Layout System: Auth Layout → Admin Layout → User Layout

FEATURES

Core Features

Browse & Search

Intuitive product browsing with search functionality and category filtering

Authentication

Secure user registration and login with session management

Account Management

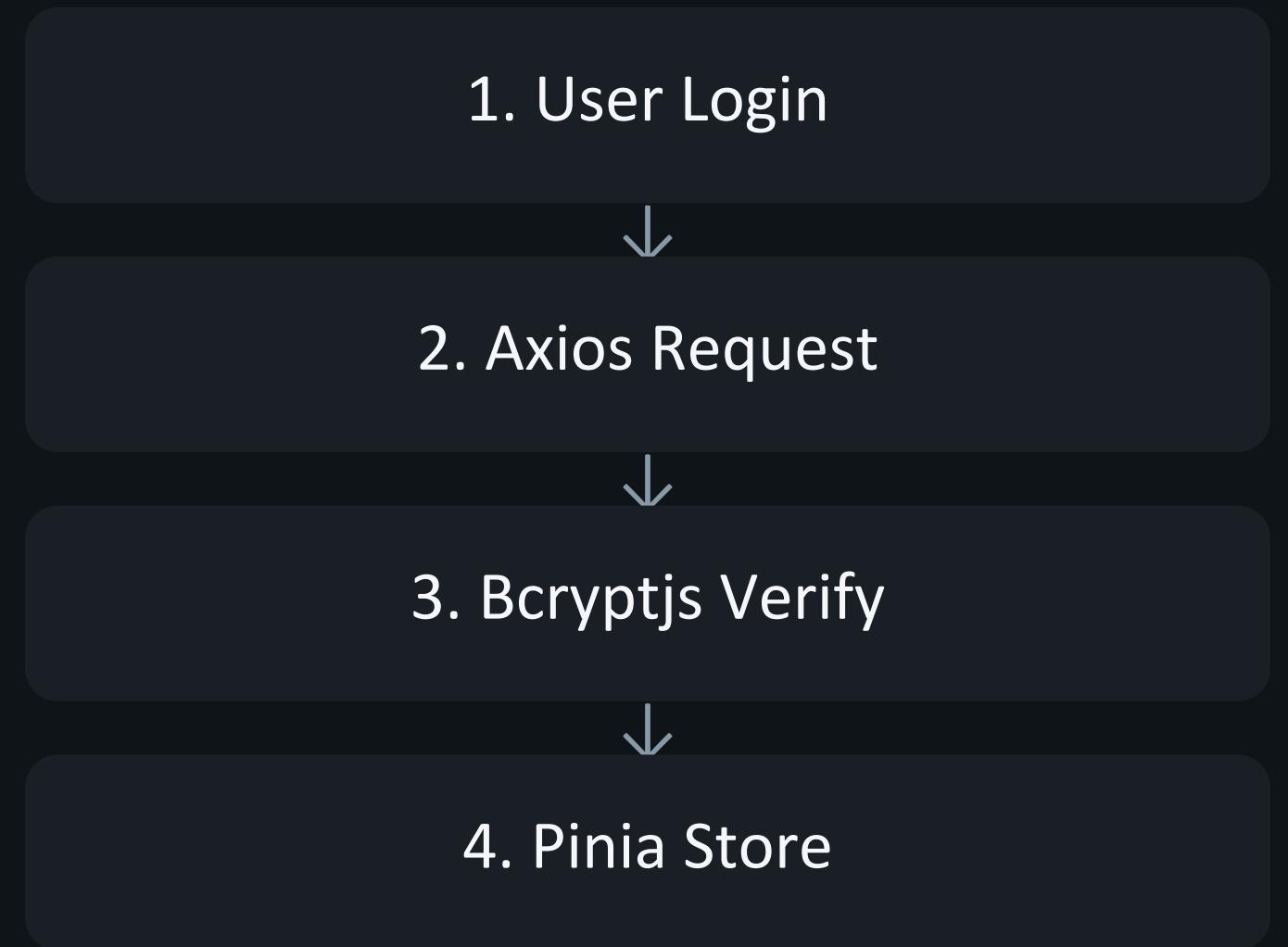
Users can update their profile information and preferences

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

Tailwind CSS • CSS Variables • Mobile-First

Challenges & Limitations

Payment Gateway

[HIGH]

No integrated payment processing (Stripe, PayPal) yet implemented

Checkout Flow

[HIGH]

Cart and order history features are not yet complete

Accessibility

[MED]

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!