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## GitHub Organisation Link for the Details Documentation

[GitHub Organisation Documentation](#)

## Peer-to-Peer Marketplace

In today's digital economy, a **Peer-to-Peer (P2P) Marketplace** serves as a dynamic platform where users can seamlessly transition between the roles of buyers and sellers. This application empowers individuals to **offer services** such as freelance jobs and **sell digital assets**, providing a flexible and efficient ecosystem for both professionals and creators.

Whether you're a freelancer looking to offer your expertise or a digital creator seeking to monetize your work, this platform enables direct interactions, secure transactions, and a streamlined experience without the need for intermediaries. With a user-driven approach, the marketplace fosters a **collaborative and thriving digital economy** where opportunities are limitless.

## Flow of the Application

### 1. User Registration & Account Setup

- Users sign up on the platform and create an account.
- Users must complete **Know Your Customer (KYC)** verification to enhance security and trust.
- Every user has the ability to act as both a **buyer** and a **seller**.

### 2. Browsing & Searching

- Users can search for **freelance services** and **digital assets** using filters and categories.
- Sellers can list their services or digital assets with detailed descriptions and pricing.

### 3. Buying & Selling

- Buyers can browse listings, check reviews, and purchase services or assets.
- Sellers receive order notifications and can manage transactions through their dashboard.

### 4. Payments & Transactions

- Payments are processed securely via **Stripe** or other integrated payment gateways.
- Funds are held in escrow until the transaction is successfully completed to ensure buyer and seller protection.

### 5. Order Completion & Delivery

- **For freelance services:** Sellers complete and deliver the work to the buyer.
- **For digital assets:** Buyers get instant access to the purchased assets.

### 6. Reviews & Ratings

- After order completion, both buyers and sellers can leave **ratings and reviews**.
- This helps establish credibility, trust, and a reliable marketplace.

### 7. P2P Real-Time Chat

- Buyers and sellers can communicate directly through a **real-time chat feature**.
- This enhances collaboration and allows users to discuss project details efficiently.

### 8. Check the Authenticity of the review on the Chain

- Before making the purchasing and choosing the service, user can copy the transaction ID of the review and services History on the chain Scanner

# Blockchain Integration for Trust & Transparency

To ensure authenticity and prevent fraudulent activities, **key marketplace records** will be stored on the **blockchain**, ensuring **immutability and transparency**.

- **Immutable Record Keeping:** Every action, including **reviews, work submissions, and transaction history**, will be **stored across decentralized nodes**.
- **Fraud Prevention:** This prevents **fake reviews and bot-generated postings**, ensuring a **genuine user-driven experience**.
- **Decentralized Trust System:** Since records are distributed across the blockchain network, no single entity can manipulate or alter user reviews or transaction history.

By leveraging blockchain, the platform guarantees **trust, security, and authenticity**, making it a **reliable and fraud-resistant P2P marketplace**.

## Tech Stack

### Frontend Tech Stack

Category	Technologies/Tools
Framework	Next.js (SSR/SSG)
Form Handling	React Hook Form + Zod Validation
UI Components	ShadCN/UI, Radix UI (Primitives)
Animations	Framer Motion
Authentication	Auth.js (Session Management, OAuth)
State Management	React Context API / Zustand (Implicit via Next.js & Auth.js)
Styling	Tailwind CSS (Implied by ShadCN/UI)
Component Documentation	Storybook.js
Testing	Component Tests (Jest/React Testing Library), Accessibility (Axe), Visual Regression
Design Collaboration	Figma (Final UI Design Pending)
Backend Communication	Next.js API Routes + Prisma ORM (Database Interaction)

### Key Features

1. **Performance & SEO:** SSR/SSG via Next.js.
2. **Validation:** Client-side validation with Zod + React Hook Form.
3. **Dynamic UI:** Modular components (ShadCN/UI) + animations (Framer Motion).
4. **Authentication:** Secure session management with Auth.js.
5. **Documentation:** Component library in Storybook.js.
6. **Testing:** Focus on accessibility and visual consistency.

### Backend Tech Stack

Category	Technologies/Tools
Language	Go (Golang)
API Framework	RESTful API (Standard HTTP/JSON)
Microservices Communication	gRPC (High-performance RPC framework)
Primary Database	PostgreSQL (Structured metadata storage)
Blob/File Storage	Supabase Storage (For files, images, etc.)

Category	Technologies/Tools
Chat Data Storage	MongoDB (NoSQL for unstructured chat messages)
Caching	Redis (Session caching, rate limiting, etc.)
Containerization	Docker (Service isolation, scalability)
Real-Time Communication	WebSocket (Chat application bidirectional messaging)
ORM	GORM (Go Object-Relational Mapping for PostgreSQL)
Authentication	JWT/OAuth2 (Integrated with Auth.js on frontend)
Documentation	OpenAPI documentaion (Swagger UI)
hashicorp vault	Storing the Secert Key (JWT_Serect)

## Key Features

- Scalability:** Microservices architecture with gRPC for inter-service communication.
- Performance:** Go’s concurrency model + Redis caching for low-latency responses.
- Data Diversity:**
  - PostgreSQL for structured metadata (users, orders, profiles).
  - MongoDB for flexible chat message storage.
  - Supabase for scalable blob/file storage.
- Real-Time Chat:** WebSocket integration for instant messaging.

# Peer-to-Peer Marketplace - Agile User Stories

## 1. User Registration

ID	US-001
Title	User Account Setup
As a	New user
I want	To register with an email and password
So that	I can create an account on the platform
Acceptance Criteria	- Users can sign up with an email and password. - The system verifies and approves the registration.
Priority	High
Story Points	3

## 2. KYC Verification

ID	US-002
Title	KYC Verification
As a	Registered user
I want	To complete KYC verification by submitting identity proof
So that	I can securely participate in the marketplace

ID	US-002
Acceptance Criteria	<ul style="list-style-type: none"><li>- KYC verification requires identity proof submission.</li><li>- The system verifies and approves accounts before allowing transactions.</li></ul>
Priority	High
Story Points	2

### 3. Listing Digital Assets & Services

ID	US-003
Title	Sell Digital Assets and Services
As a	Seller
I want	To list my services or digital assets with descriptions and pricing
So that	Buyers can discover and purchase them
Acceptance Criteria	<ul style="list-style-type: none"><li>- Sellers can create listings with images, descriptions, and prices.</li><li>- Listings are categorized and searchable.</li><li>- Sellers can update or remove listings.</li></ul>
Priority	High
Story Points	4

### 4. User Profile Management

ID	US-004
Title	Manage Your Profile
As a	User
I want	To manage my profile information
So that	I can update my details and preferences
Acceptance Criteria	<ul style="list-style-type: none"><li>- Users can edit their profile details.</li><li>- The system updates the profile information.</li><li>- Users can change their password.</li></ul>
Priority	Medium
Story Points	3

### 5 . Searching and Filtering Listings

ID	US-005
Title	Discover Services and Assets
As a	Buyer
I want	To search and filter listings
So that	I can easily find the services or assets that match my needs
Acceptance Criteria	<ul style="list-style-type: none"><li>- Buyers can search by keywords, categories, and price range.</li><li>- The system displays relevant results with sorting options.</li><li>- Users can save favorites for later.</li></ul>
Priority	Medium
Story Points	3

## 6. Secure Payment Processing

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ID	US-006
Title	Payment Processing
As a	Buyer
I want	I want to securely process payments through the platform and the crypto Payment Gateway
So that	I feel secure when making transactions
Acceptance Criteria	- Payments are processed via <b>Stripe</b> or another gateway. - User can Scan the QR code of the USDT wallet address.
Priority	High
Story Points	5

## 7. Order Completion & Delivery

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ID	US-007
Title	Order Delivery System
As a	Seller
I want	To complete and deliver orders through the platform
So that	Buyers receive their purchases efficiently
Acceptance Criteria	- Sellers mark the order as <b>delivered</b> upon completion. - Buyers receive notifications and can review the delivery. - The order is marked as <b>completed</b> when the buyer accepts.
Priority	High
Story Points	4

## 8. Reviews & Ratings

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ID	US-008
Title	Trust-Based Review System
As a	User
I want	To leave and read reviews after a transaction
So that	I can make informed decisions based on past experiences
Acceptance Criteria	- Users can rate transactions from 1 to 5 stars. - Reviews must be linked to completed orders. - The system prevents fake reviews through blockchain storage.
Priority	Medium
Story Points	3

## 9. Accessibility Support

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ID	US-009
Title	Accessibility Support
As a	User with disabilities
I want	To use accessibility features like screen readers, keyboard navigation, and high contrast modes
So that	I can effectively use the platform despite visual or motor impairments
Acceptance Criteria	<ul style="list-style-type: none"><li>- Platform complies with WCAG 2.1 AA standards.</li><li>- Screen reader compatibility for all core functions.</li><li>- Keyboard navigation for all interactive elements.</li><li>- Adjustable text size and contrast options.</li></ul>
Priority	High
Story Points	5

## 10. Responsive Design

ID	US-010
Title	Mobile-Responsive Interface Support
As a	Mobile user
I want	The platform to adapt seamlessly to my mobile device
So that	I can browse, buy, and sell services on the go
Acceptance Criteria	<ul style="list-style-type: none"><li>- All pages render correctly on mobile devices of various sizes.</li><li>- Touch-friendly UI elements with appropriate spacing.</li><li>- Simplified navigation menu for mobile screens.</li><li>- Mobile-optimized payment process.</li></ul>
Priority	High
Story Points	4

## 11. Language Preferences

ID	US-011
Title	Language Preferences
As a	International user
I want	To change the language of the application
So that	I can use the platform in my preferred language
Acceptance Criteria	<ul style="list-style-type: none"><li>- Language selector in the header/footer.</li><li>- Support for at least 5 major languages.</li><li>- All UI elements, notifications, and emails are translated.</li><li>- Persistent language preference across sessions.</li></ul>
Priority	Medium
Story Points	4

## 12. Dark Mode Theme

ID	US-012
Title	Dark Mode Theme

ID	US-012
As a	User
I want	To toggle between light and dark mode
So that	I can reduce eye strain and save battery life
Acceptance Criteria	<ul style="list-style-type: none"><li>- Easily accessible theme toggle in the UI.</li><li>- Consistent color scheme across all pages in dark mode.</li><li>- Persistent preference saved to user profile.</li><li>- Automatic detection of system preferences.</li></ul>
Priority	Low
Story Points	3

### 13. Service Preview

ID	US-013
Title	Service Preview
As a	Buyer
I want	To see detailed previews of services with images and examples
So that	I can better understand what I'm purchasing
Acceptance Criteria	<ul style="list-style-type: none"><li>- Gallery view for multiple images/examples per service.</li><li>- Lightbox for enlarged image viewing.</li><li>- Sample previews for digital assets where applicable.</li><li>- Video embedding support for service demonstrations.</li></ul>
Priority	Medium
Story Points	3

### 14. Notification Settings

ID	US-014
Title	Notification Settings
As a	User
I want	To customize which notifications I receive and how
So that	I can manage platform communications based on my preferences
Acceptance Criteria	<ul style="list-style-type: none"><li>- Granular control over notification types (orders, messages, promotions).</li><li>- Options for email, push, and in-app notifications.</li><li>- Ability to set quiet hours.</li><li>- One-click unsubscribe from email notifications.</li></ul>
Priority	Low
Story Points	2

### 15. In-app Messaging

ID	US-015
Title	In-app Messaging
As a	User

ID	US-015
I want	To communicate with other users through an in-app chat system
So that	I can discuss service details before making a purchase
Acceptance Criteria	<ul style="list-style-type: none"><li>- Real-time messaging with typing indicators.</li><li>- Ability to share images and files.</li><li>- Chat history persistence.</li><li>- Notification for new messages.</li><li>- Online status indicators.</li></ul>
Priority	Medium
Story Points	4

## 16. Crypto Wallet Connection

ID	US-016
Title	Crypto Wallet Connection
As a	User
I want	To connect my cryptocurrency wallet to the platform
So that	I can easily make and receive payments
Acceptance Criteria	<ul style="list-style-type: none"><li>- Support for major wallet providers (MetaMask, Trust Wallet, etc.).</li><li>- Wallet connection status visible in UI.</li><li>- One-click payment from connected wallet.</li><li>- Transaction history viewable in user dashboard.</li></ul>
Priority	High
Story Points	5

## 17. Platform Onboarding

ID	US-017
Title	Platform Onboarding
As a	New user
I want	To see interactive tutorials explaining how to use the platform
So that	I can quickly learn how to navigate and use all features
Acceptance Criteria	<ul style="list-style-type: none"><li>- First-time user walkthrough.</li><li>- Context-sensitive help tooltips.</li><li>- Dismissible and resumable tutorials.</li><li>- Video tutorials for complex features like crypto payments.</li></ul>
Priority	Low
Story Points	3

## 18. Compare Services

ID	US-018
Title	Compare Services
As a	Buyer



ID	US-018
I want	To compare multiple services side by side
So that	I can make an informed decision on which to purchase
Acceptance Criteria	<ul style="list-style-type: none"> <li>- Select up to 4 services for comparison.</li> <li>- Visual comparison of key features and pricing.</li> <li>- Highlight differences between services.</li> <li>- Save comparison for later review.</li> </ul>
Priority	Medium
Story Points	3

## 19. Personalized Dashboard

ID	US-019
Title	Personalized Dashboard
As a	User
I want	To see a dashboard with my recent activity and personalized recommendations
So that	I can quickly access relevant information and services
Acceptance Criteria	<ul style="list-style-type: none"> <li>- Overview of active orders and earnings.</li> <li>- Quick access to favorite services and sellers.</li> <li>- Personalized service recommendations.</li> <li>- Crypto market trends and conversion rates.</li> </ul>
Priority	Medium
Story Points	4

## 20. Portfolio Display

ID	US-020
Title	Portfolio Display
As a	Seller
I want	To showcase my previous work in a visually appealing portfolio
So that	Potential buyers can see examples of my skills and quality
Acceptance Criteria	<ul style="list-style-type: none"> <li>- Dedicated portfolio section on seller profile.</li> <li>- Customizable layout and organization.</li> <li>- Support for various media types (images, videos, documents).</li> <li>- Option to highlight featured work.</li> </ul>
Priority	Medium
Story Points	3

## 21. Report of the User (Both Seller and Buyer Activities Statement)

ID	US-021
Title	User Activity Report
As a	Platform User (Seller or Buyer)
I want	To generate a report of my activities, including transactions and interactions

ID	US-021
So that	I can review my past activities, track performance, and manage my business effectively
Acceptance Criteria	<ul style="list-style-type: none"> <li>- Ability to view a detailed report of transactions and interactions.</li> <li>- Filter options by date range and activity type.</li> <li>- Export report as PDF or CSV.</li> </ul>
Priority	High
Story Points	5

## 22. Copy Transaction ID and Check on Block Scanner

ID	US-022
Title	Copy Transaction ID and Check on Block Scanner
As a	Platform User (Seller or Buyer)
I want	To copy my transaction ID and check its status on a blockchain explorer
So that	I can verify the transaction details and ensure it has been processed successfully
Acceptance Criteria	<ul style="list-style-type: none"> <li>- Display transaction ID in order details.</li> <li>- "Copy" button for easy copying.</li> <li>- Direct link to a block explorer (Our Own BlockChain)</li> </ul>
Priority	High
Story Points	3

## 23. User Manual

ID	US-023
Title	User Manual
As a	Platform User (Seller or Buyer)
I want	A comprehensive user manual that guides me on how to use the application effectively
So that	I can easily navigate and utilize all features without confusion
Acceptance Criteria	<ul style="list-style-type: none"> <li>- Step-by-step instructions with screenshots.</li> <li>- Covers key features (registration, transactions, messaging, etc.).</li> <li>- Available in multiple formats (PDF, web, in-app help).</li> <li>- Searchable FAQ section.</li> </ul>
Priority	Medium
Story Points	4

## 24. Customer Support (Automated, Rule-Based)

ID	US-024
Title	Automated Customer Support
As a	User (Seller or Buyer)
I want	To get instant assistance through an automated support system without human intervention
So that	I can quickly resolve my queries based on predefined responses and decision trees
Acceptance Criteria	<ul style="list-style-type: none"> <li>- No human agents involved.</li> <li>- Responses based on a predefined decision tree.</li> </ul>

ID	US-024
	- Supports common queries like orders, payments, shipping. - Available 24/7. - Option to provide feedback if the response was helpful.
Priority	High
Story Points	5

## Sorted User Stories by Story Points

### Story Points 5

1. **US-004:** Secure Payment Processing
2. **US-007:** Accessibility Support
3. **US-014:** Crypto Wallet Connection
4. **US-021:** User Activity Report
5. **US-024:** Automated Customer Support

### Story Points 4

6. **US-002:** Listing Digital Assets & Services
7. **US-005:** Order Completion & Delivery
8. **US-009:** Responsive Design
9. **US-009:** Language Preferences
10. **US-013:** In-app Messaging
11. **US-017:** Personalized Dashboard
12. **US-023:** User Manual

### Story Points 3

13. **US-001:** User Registration
14. **US-003:** User Profile Management
15. **US-003:** Searching and Filtering Listings
16. **US-006:** Reviews & Ratings
17. **US-010:** Dark Mode Theme
18. **US-011:** Service Preview
19. **US-015:** Platform Onboarding
20. **US-016:** Compare Services
21. **US-018:** Portfolio Display
22. **US-022:** Copy Transaction ID

### Story Points 2

23. **US-002:** KYC Verification
24. **US-012:** Notification Settings

## Total Story Points

- **5 points:** 5 stories × 5 = **25**
- **4 points:** 7 stories × 4 = **28**
- **3 points:** 10 stories × 3 = **30**
- **2 points:** 2 stories × 2 = **4**

**Grand Total:** 87 story points.

