# **Cryptoverse - Project Documentation**

### Introduction

Project Title: Cryptoverse

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### **Project Overview**

Purpose:

Cryptoverse is a platform for real-time cryptocurrency data, analysis, and insights.

#### Features:

- Live cryptocurrency price tracking
- Historical price data visualization
- Interactive charts and graphs
- User authentication
- News updates

#### **Architecture**

Component Structure:

- Header: Navigation bar

- Dashboard: Live market data

- Crypto Details: Individual cryptocurrency info

- Portfolio: User holdings tracking

- News Section: Real-time updates

State Management:

Using Redux Toolkit

Routing:

React Router with paths: Home (/), Crypto Details (/crypto/:id), Portfolio (/portfolio), News (/news)

### **Setup Instructions**

Prerequisites:

# **Cryptoverse - Project Documentation**

- Node.js
- npm or yarn
- React.js
- Redux Toolkit

#### Installation:

- 1. Clone repository: git clone https://github.com/your-repo/cryptoverse.git
- 2. Install dependencies: npm install
- 3. Configure environment variables

### **Folder Structure**

### /cryptoverse

- ??? /src
- ? ??? /components
- ? ??? /pages
- ? ??? /redux
- ? ??? /utils
- ? ??? /assets
- ??? package.json
- ??? README.md

# **Running the Application**

To start development server:

npm start

## **Component Documentation**

### **Key Components:**

- CryptoCard: Cryptocurrency overview

- PriceChart: Historical price data

- NewsFeed: Crypto news

### Reusable Components:

- Button: Customizable

- Loader: Loading animations

# **Cryptoverse - Project Documentation**

# **State Management**

Global State: Managed using Redux Toolkit Local State: Managed with React?s useState

## **Styling**

Using Tailwind CSS with a custom theme for a modern UI

### **Testing**

Testing Strategy:

- Unit Testing: Jest & React Testing Library

- Integration Testing: Cypress for E2E tests

### **Screenshots and Demo**



### **Known Issues**

API rate limits may affect updates.

Dark mode support in progress.

### **Future Enhancements**

Future Plans:

- Push notifications for price alerts
- Al-driven price predictions
- Staking feature for rewards