

Cryptify

Crypto + Simplify

Release 1 Presentation
Team 20

Release Retrospective

Current Epics

- Project Infrastructure
- Authentication and Authorization
- Transaction Tagging
- Budget Management
- Transaction Analytics
- Transaction History and Reporting
- Wallet Management
- Alerts and Notifications Infrastructure
- User Management



Completed Tasks - Sprint 1

- CRYP-96 Create mockup for account settings page
- CRYP-93 Create mockup for sign out
- CRYP-84 Create mockup for navigation tab bars
- CRYP-67 Create mockup for adding new wallet input
- CRYP-66 Create mockup for wallets page
- CRYP-65 Create mockup for sign in page
- CRYP-64 Create mockup for sign up page
- CRYP-61 Create architecture diagram for system
- CRYP-56 Create basic ER Diagram of the system
- CRYP-55 Create device support guidelines
- CRYP-54 Create user personas for the application

- CRYP-19 Setup frontend unit testing framework
- CRYP-17 Setup backend unit testing framework
- CRYP-11 Setup Docker and Docker Compose for project
- CRYP-10 Setup backend base API
- CRYP-9 Setup frontend base package using React Native

Completed User Stories - Sprint 1

 CRYP-22 As a User, I want to be able to sign in, so that I can access my account

 CRYP-21 As a User, I want to sign up for an account, so that I can access the application's features

Completed Tasks - Sprint 2

- CRYP-165 Create mockup for filtering a Bitcoin wallet transactions list
- CRYP-161 Create mockups for Bitcoin transactions list page
- CRYP-113 Create class diagram for system
- CRYP-109 Create mockup for sharing a Bitcoin and Ethereum wallet addresses
- CRYP-107 Create component diagram for system
- CRYP-103 Create mockup for the welcome page
- CRYP-102 Create mockup for the home screen
- CRYP-89 Create mockup for Bitcoin and Ethereum wallet details page
- CRYP-88 Create mockup for sorting an Ethereum wallet transactions list
- CRYP-87 Create mockup for filtering an Ethereum wallet transactions list
- CRYP-86 Create mockup for viewing an Ethereum transaction details page
- CRYP-85 Create mockup for Ethereum transactions list page

- CRYP-72 Setup EthEdge package and API
- CRYP-70 Insert new ethereum transactions for users wallets using webhook
- CRYP-69 Backfill ethereum wallet transactions in add to wallet flow
- CRYP-18 Setup backend integration testing framework
- CRYP-13 Setup CI/CD pipeline for project

Completed User Stories - Sprint 2

- CRYP-95 As a User, I want an account settings page, so that I can make changes to my account or personalize my app experience
- CRYP-94 As a User, I want a navigation tab bars, so that I can navigate around the app
- CRYP-27 As a User, I want to view a list of all my Bitcoin and Ethereum wallets, so that I can see their details in a single place
- CRYP-24 As a User, I want to add a Bitcoin or Ethereum wallet to my account, so that I can keep track of them in a single place
- CRYP-23 As a User, I want to sign out of my account, so that I can delete my session

Completed Tasks - Sprint 3

- CRYP-184 Refactor UI component custom themes to use the custom typography
- CRYP-183 Implement UI mockup style guide typography
- CRYP-182 Create mockup for tags list
- CRYP-181 Create mockup for editing tags from the tags list
- CRYP-176 Create mockup for deleting a tag from the tags list
- CRYP-173 Create mockup for removing a Bitcoin wallet from a user account
- CRYP-159 Refactor eth-edge backfill to parallelize calls to alchemy
- CRYP-125 Write system tests for Sprint 1 and Sprint 2 stories
- CRYP-124 Create mockup for creating new tags

- CRYP-123 Create mockup for adding tags to an Ethereum transaction
- CRYP-116 Refactor gateways to use abstract gateway pattern with request method
- CRYP-115 Refactor edge gateways to use strategy and factory patterns
- CRYP-114 Refactor api folder structure to by file type instead of by domain
- CRYP-106 Setup code quality measurements through SonarQube
- CRYP-90 Create mockup for removing an Ethereum wallet from a user account
- CRYP-20 Setup system testing framework

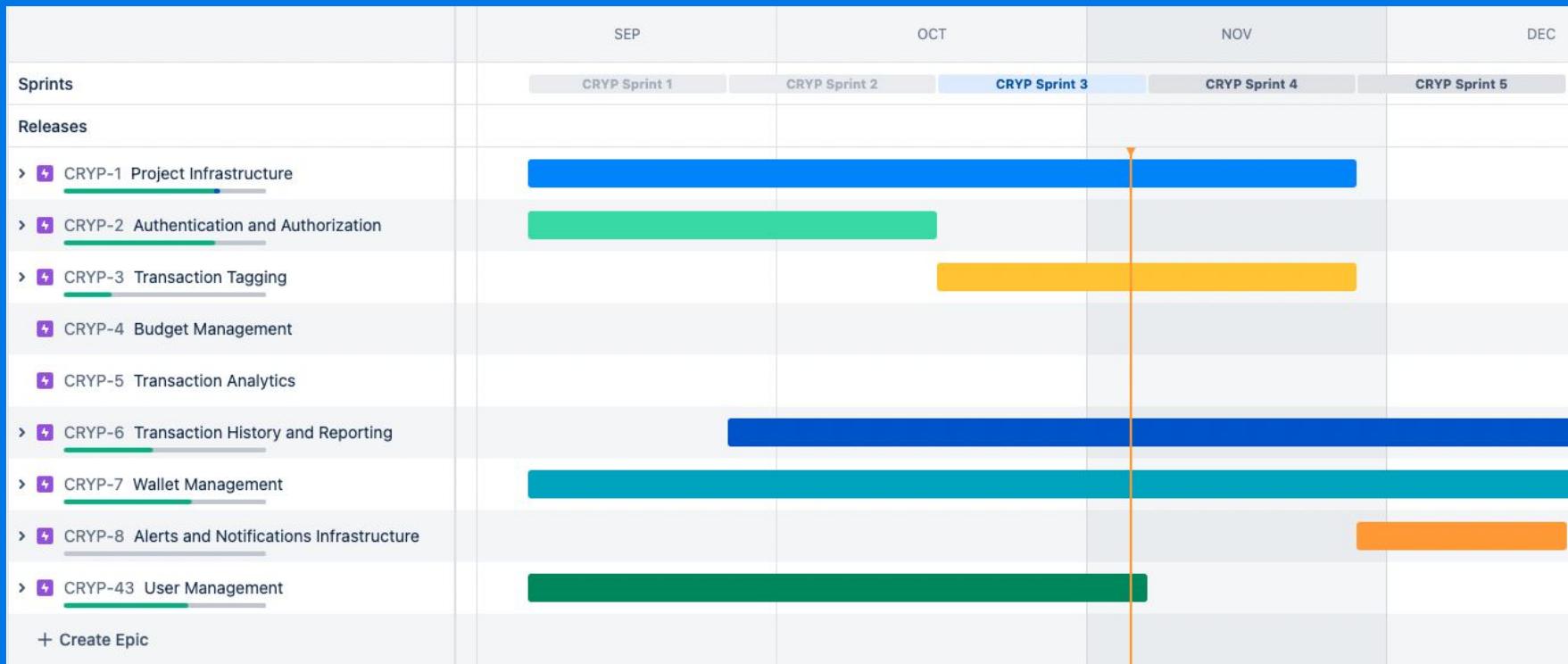
Completed User Stories - Sprint 3

- CRYP-108 As a User, I want to share my Ethereum wallet address, so that others can easily send me crypto without inputting my wallet address incorrectly
- CRYP-101 As a User, I want a home page, so that I can view all my wallets immediately after signing in
- CRYP-100 As a User, I want a welcome page when I open the app and I'm not signed in, so that I can either sign up for an account or sign in to my account
- CRYP-30 As a User, I want to view a details page for each Ethereum transaction, so that I can get more information about it
- CRYP-28 As a User, I want to view a list of all transactions associated to each of my Ethereum wallets, so that I can see who I have transacted with
- CRYP-26 As a User, I want to view the details for each of my Ethereum wallets, so that I can see all associated information available on the blockchain

Completed Bugs - Sprint 3

- CRYP-207 Adding Ethereum wallet unsuccessful with a valid wallet address
- CRYP-187 Transactions date formatting incorrectly on Android

Roadmap Progress



Problems faced

Problems

We should have a clear deadline on when the code should be ready.

Having clear internal deadlines for each task

likes 5 comments 0

Handoff between UI mockups and front end dev

Respecting the UI prototypes

Focus on attention to detail for the frontend, make sure they are covering all the detailed parts of the frontend (error messages, colors, spacing, etc)

likes 4 comments 0

even though we only have one deadline individual tasks should be done faster to avoid blocking other people or doing things at the last minute

Knowing who is doing what tasks

likes 8 comments 0

Actions

Create a code freeze deadline 3 days before the end of the sprint, all pull requests must be merged by EOD on the code freeze day

likes 0 comments 0

@Dom to give quick presentation on internal components and figma specifications

likes 0 comments 0

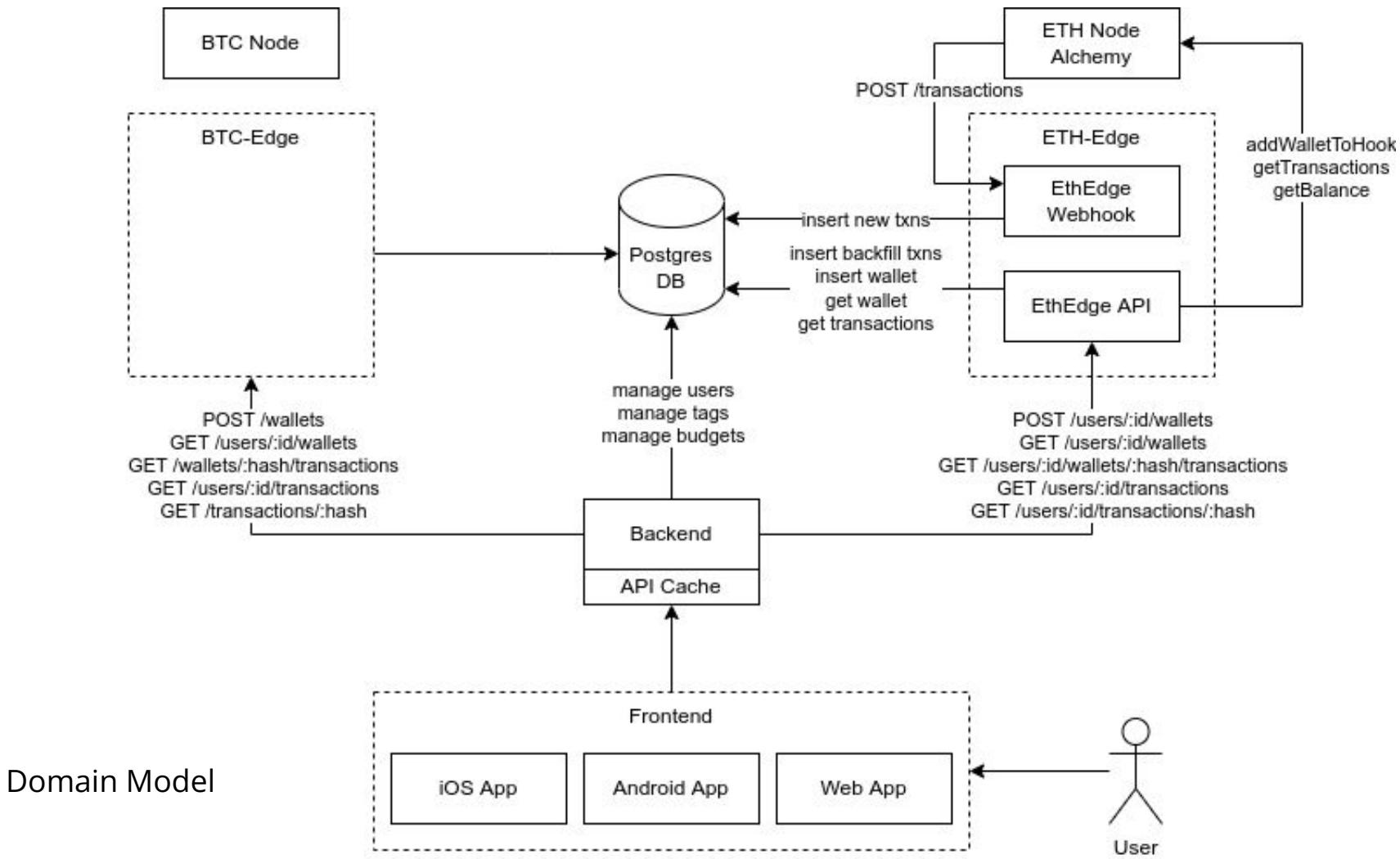
@everyone moving forward 1 person per user story / task / bug / spike and the number of pull requests is up to the person

likes 0 comments 0

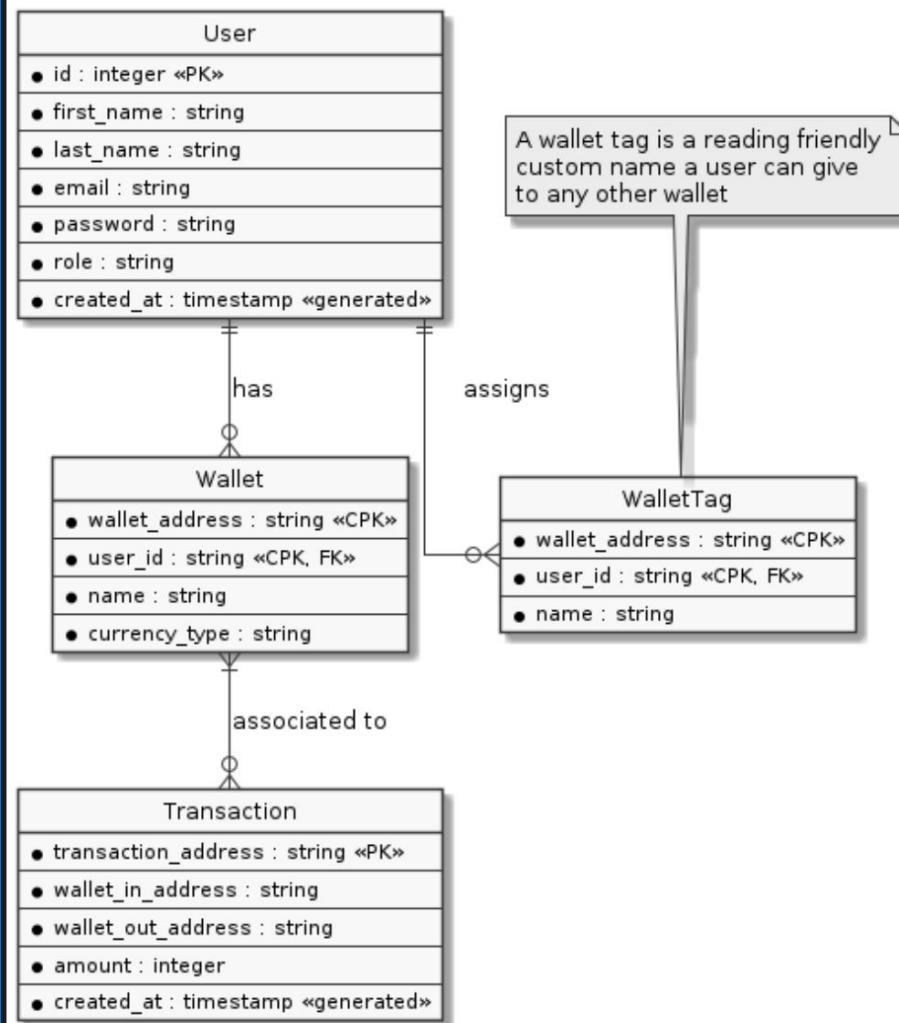
Architecture

High Level Architecture

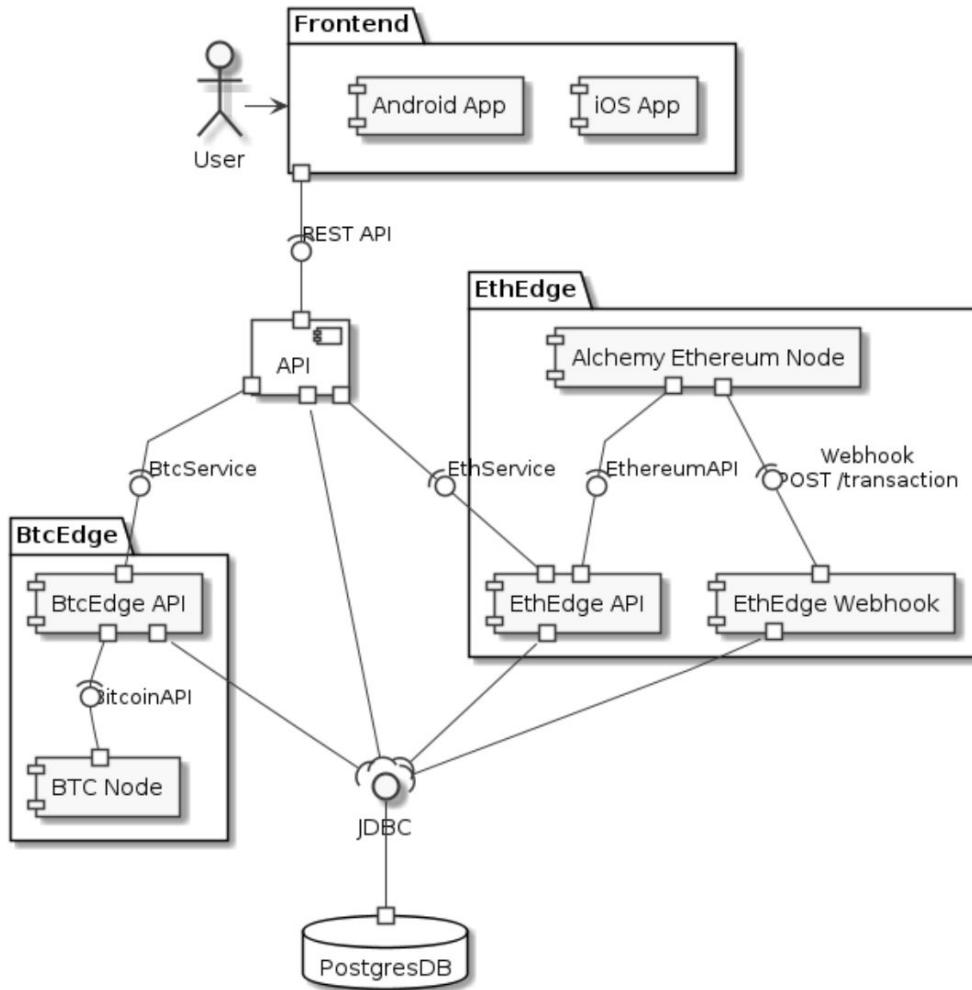
- frontend client written in React Native, builds for
 - iOS
 - Android
 - Web (not our main focus)
- Backend API written in NestJs
- Edge services for each of our crypto blockchain integrations
 - EthEdge
 - BtcEdge
- PostgreSQL DB handling all persistent storage
- backend and web is in Docker



Cryptify ER Diagram

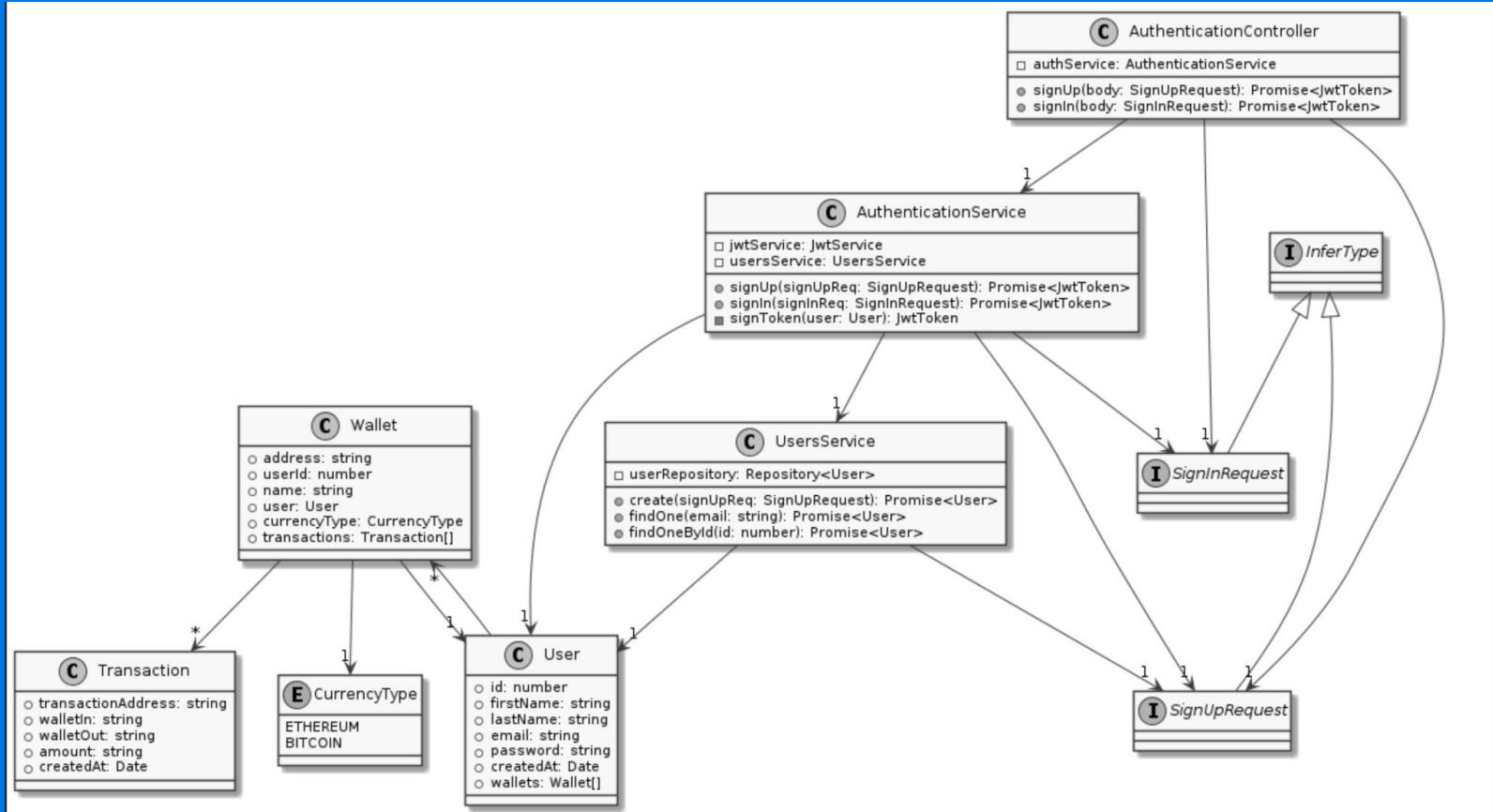


Cryptify Component Diagram

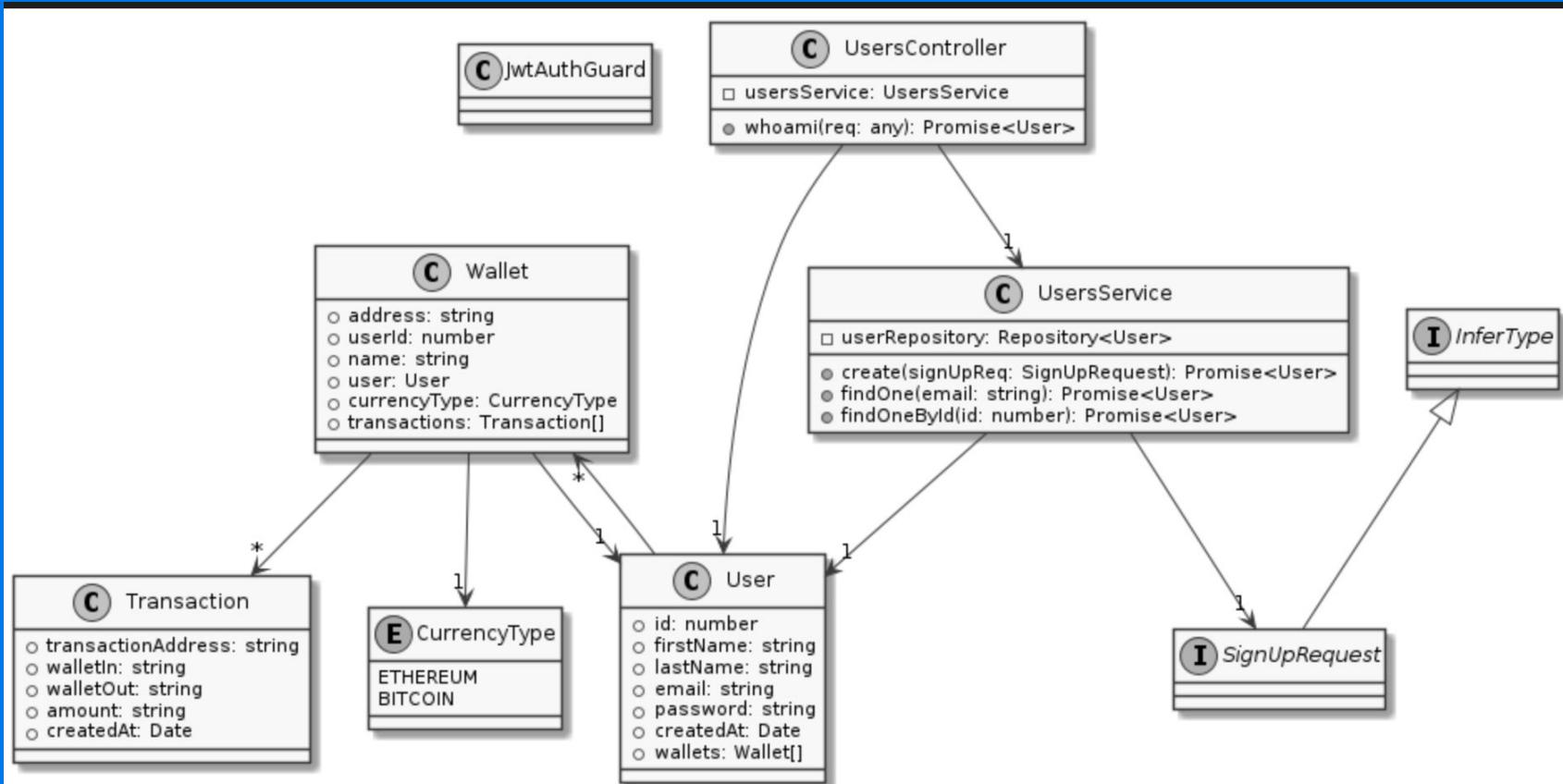


Class Diagrams

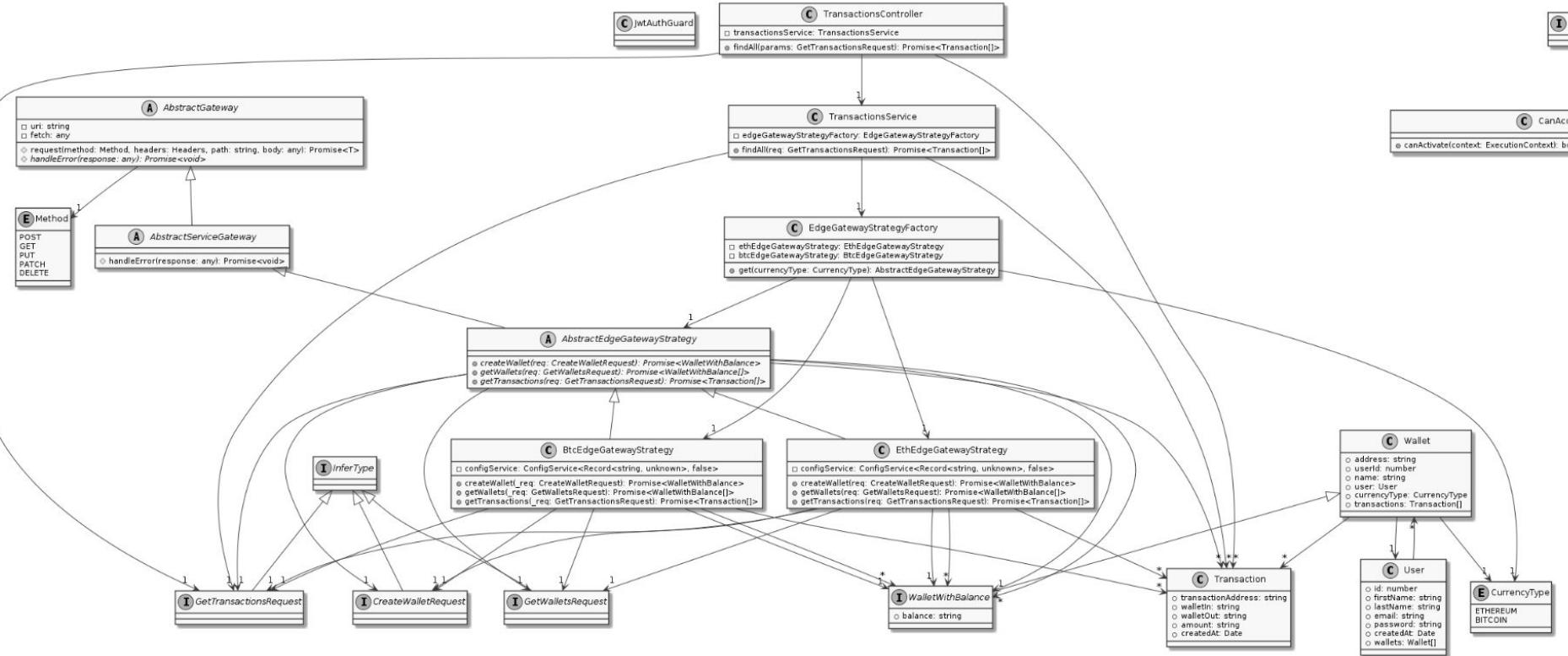
Authentication API



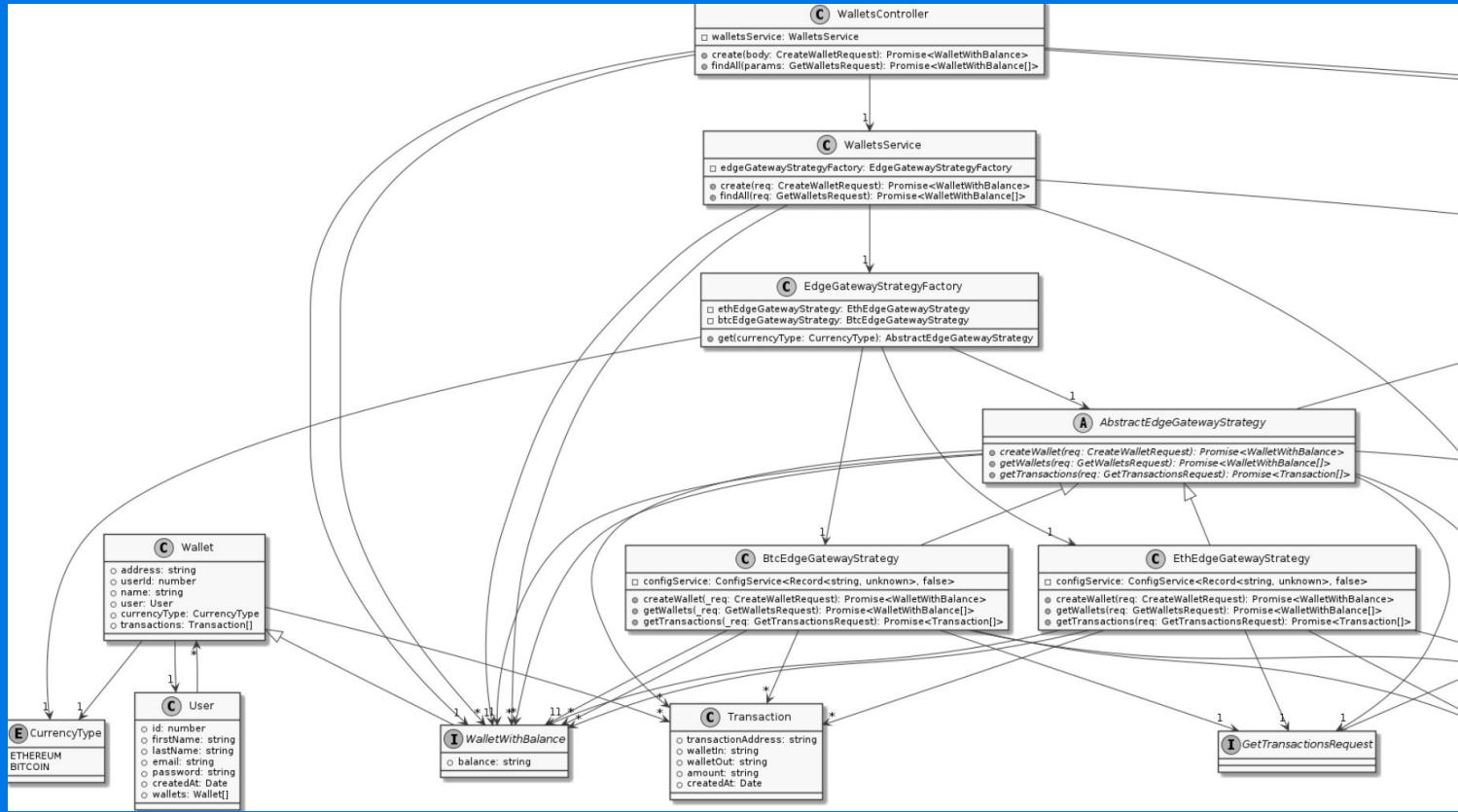
User API



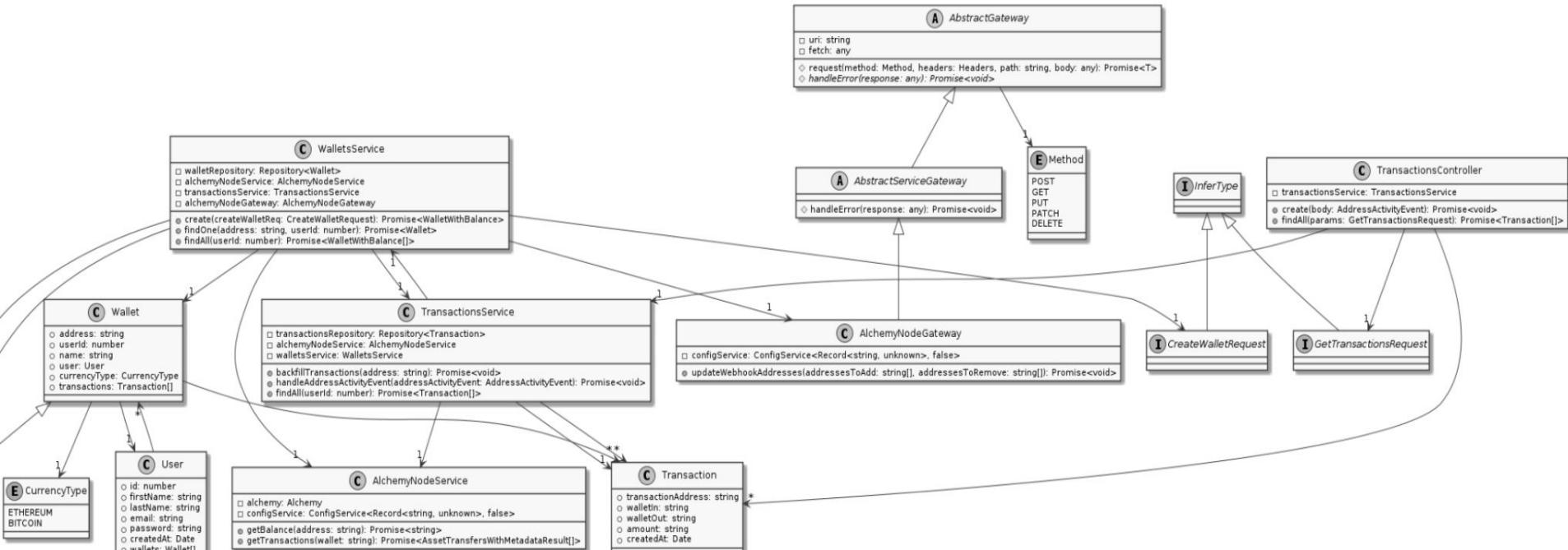
Transactions API



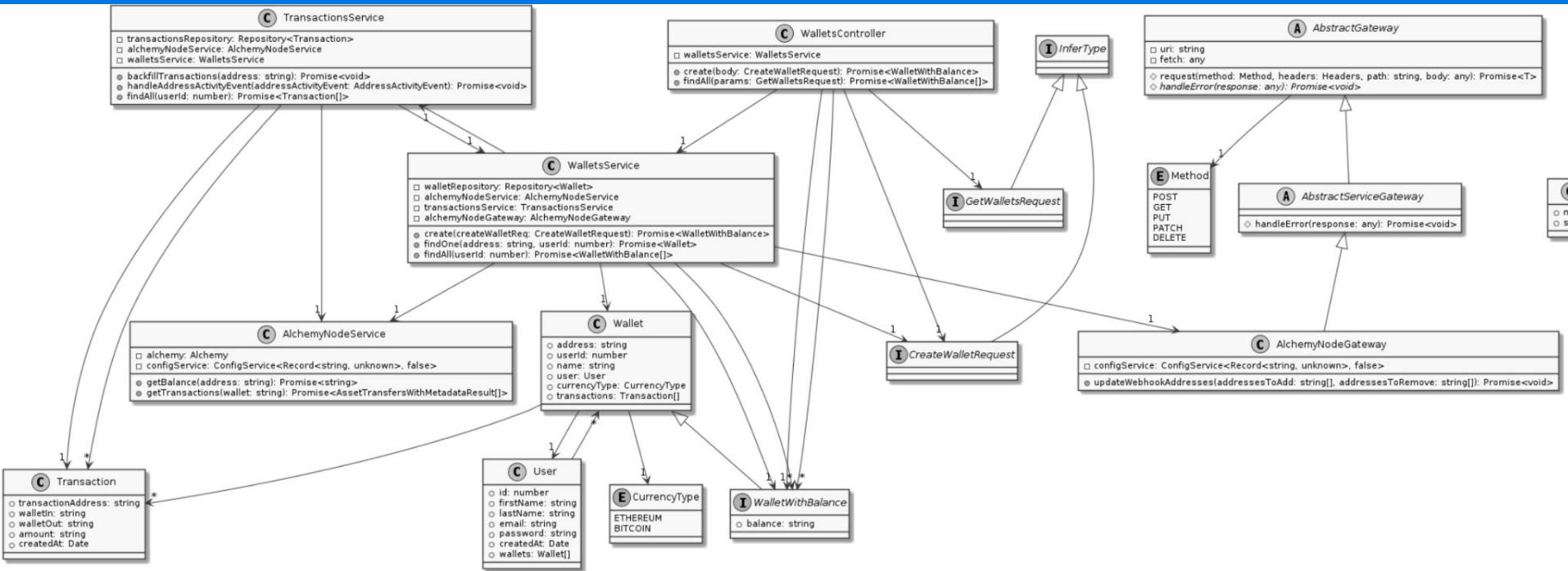
Wallets API



Transaction EthEdge



Wallet EthEdge



Design Patterns

Design Pattern - Controller

- Handles incoming request
 - Guards is a service provided by Nestjs, determines if request will be handled
- Validates data
 - Yup schema with inferred type
- Calls the service

Design Pattern - Service

- Handles business logic
- Calls
 - Services
 - Repositories
 - gateways

Design Pattern - Repository / Data Mapper

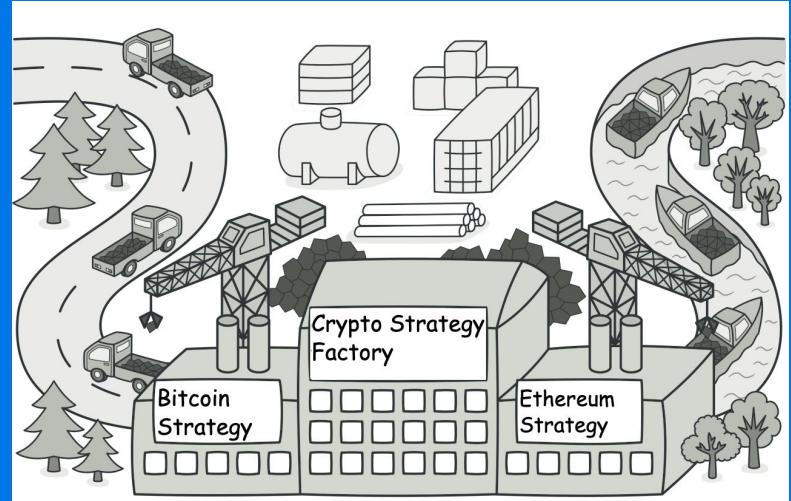
- typeORM
- For each entity we have a repository
 - Logic to communicate with the database
- Follows the Data Mapper pattern
 - Create
 - Read
 - Update
 - delete

Design Pattern - Gateway

- Used for outgoing http request
 - Builds request url
 - Sends the request
 - Returns the response
- Client has an Api Gateway
- Api has a Eth-Edge Gateway

Design Pattern - Abstract Factory / Strategy

- Since we will support different cryptocurrencies we need a strategy for each one because the logic will be different
- And each currency will have its own node service
- We have a factory that will decide what strategy should be used based on the wallet address



Personas

The Beginner

Alex Roy



AGE 18
EDUCATION High School
STATUS Single
OCCUPATION Sandwich Artist
LOCATION New York City
CRYPTO LITERATE Beginner

“ I wish I learned about crypto in school.

Personality

Adventurous Risk-taker
Studious

Bio

He currently lives in New York City. He is about to finish high school and is currently planning for university. He bought a small amount of Bitcoin in 2020 after being introduced to it by friends. He considers his crypto literacy as beginner because he was only recently introduced to the topic.

Core needs

- A way to specify the owner of a crypto wallet address
- A simple way to see and understand crypto transactions
- An application that breaks down crypto verbiage to something more familiar

Frustrations

- Difficult to remember someone's crypto wallet address
- When looking at transaction history on the blockchain, it is nearly impossible to know the owner of a crypto wallet address that transacted with his wallet address
- The language used in crypto to describe similar banking terms is somewhat verbose

Brands

Google TikTok YouTube Instagram adidas

Payment medium

Cash

Platform

Website Mobile App

The Intermediate



Alexandra Shmidtt

AGE 28
EDUCATION MBA
STATUS In a relationship
OCCUPATION Sales Manager
LOCATION Brazil
CRYPTO LITERATE Intermediate

Bio
She lives in Sao Paulo, Brazil with her boyfriend. She spends most of her time reading books and exploring new topics. She got interested in crypto a few years ago and is well versed in it from an economic perspective after reading many books. She considers her crypto literacy as intermediate because she is very comfortable discussing various crypto topics and dabbles with various cryptocurrencies.

Core needs

- A way to categorize crypto transactions
- An app that provides basic crypto asset management capabilities
- Wants to be notified when a crypto transaction occurs with one of her wallets

Frustrations

- Being unable to categorize crypto transactions makes asset management difficult
- Most crypto apps focus on buying and selling crypto
- Has to look at the blockchain to see if her crypto wallets have any new transactions

Personality

Adaptable Thinker
Empathy

Brands

Scholastic Penguin Pearson

Payment medium

Cash/Cheque Digital Payment

Platform

Website Mobile App

The Expert

Samira Saeed



AGE 24
EDUCATION Software Engineering, BE
STATUS Single
OCCUPATION UI/UX Designer
LOCATION Egypt
CRYPTO LITERATE Expert

Not your keys, not your coins.

Personality
Passionate Curious
Creative

Bio
She works as a UI/UX freelancer. She has been a creative person since a young age. She was introduced to crypto at 16 years old and has been enamoured with it ever since. She owns many cryptocurrencies. She is extremely knowledgeable in crypto and is the person all her friends and family go to with crypto-related questions as she is the most knowledgeable. She has even convinced many of them to start buying Bitcoin over the years. She despises not having access to her wallet's private keys and refuses to use apps that restrict access to such keys. She considers her crypto literacy as an expert.

Core needs

- A crypto related app that focuses on privacy and security
- An app that centralizes crypto holdings located across different platforms and products
- An app that provides advanced crypto asset management capabilities

Frustrations

- All crypto apps that allow you to create/have a wallet do not give you access to the wallets private key
- Crypto apps either poorly integrate or refuse to integrate third-party crypto wallets
- Financial management apps consider crypto as another type of investment asset class and therefore do not provide asset management capabilities tailored to crypto

Brands



Payment medium
 Cash/Cheque  Digital Payment

Platform
 Website  Mobile App

UI Mockups

Sprint 1

Sign Up

User Stories:

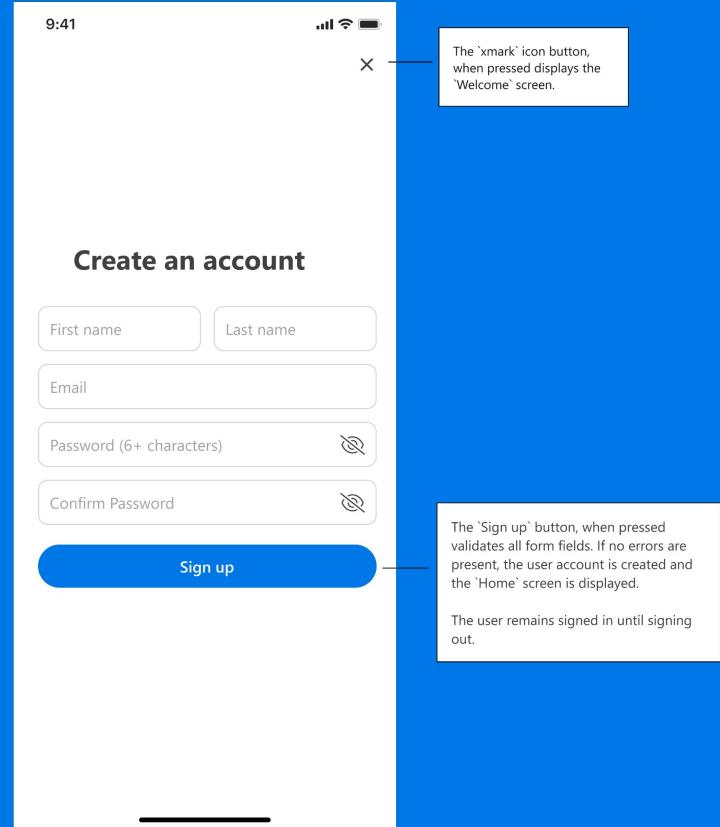
- CRYP-21: As a User, I want to sign up for an account, so that I can access the application's features

Personas:

- The Beginner
- The Intermediate
- The Expert

"The sign up page is up to standard."

- Product Owner



Sign Up cont.

The image displays two versions of a mobile application's sign-up screen, labeled "Create an account".

Left Screenshot (Initial State):

- Text Inputs:** First name (John), Last name (Doe), Email (johndoe@hotmail.com), Password (Password1).
- Buttons:** A blue "Sign up" button at the bottom.
- Icons:** Eye icon next to the password input field.
- Annotations:**
 - The "Sign up" button is highlighted with a black border.
 - An annotation points to the eye icon with the text: "The 'eye' icon button, when pressed hides the password input text (i.e. show black dots) and the icon changes to the 'eye-slash' icon."
 - An annotation points to the password input field with the text: "By default, all password text inputs are hidden (i.e. 'eye-slash' icon is displayed)."
 - An annotation points to the eye icon with the text: "The 'eye slash' icon button, when pressed displays the password input text (i.e. remove black dots) and the icon changes to the 'eye' icon."

Right Screenshot (Validation State):

- Text Inputs:** First name (highlighted in red), Last name (highlighted in red), Email (highlighted in red), Password (highlighted in red), Confirm Password (highlighted in red).
- Buttons:** "Sign up" button at the bottom.
- Icons:** Eye icons next to the password and confirm password inputs.
- Annotations:**
 - "First name" error messages:
 - "Enter a first name."
 - "First name must only contain alphabetic characters."
 - "First name must be 32 characters or less."
 - "Email" error messages:
 - "Enter a valid email!"
 - "This email address is already associated with another account."
 - "Email must be 50 characters or less."
 - "Password" error messages:
 - "Enter a password."
 - "Password must be between 6 and 20 characters"
 - "Password must contain at least 1 upper case, 1 lower case letter, 1 number, and 1 special character."
 - "Confirm Password" error messages:
 - "Confirm your password."
 - "The passwords you entered do not match."
 - "Last name" error messages:
 - "Enter a last name."
 - "Last name must only contain alphabetic characters."
 - "Last name must be 32 characters or less."

Sign In

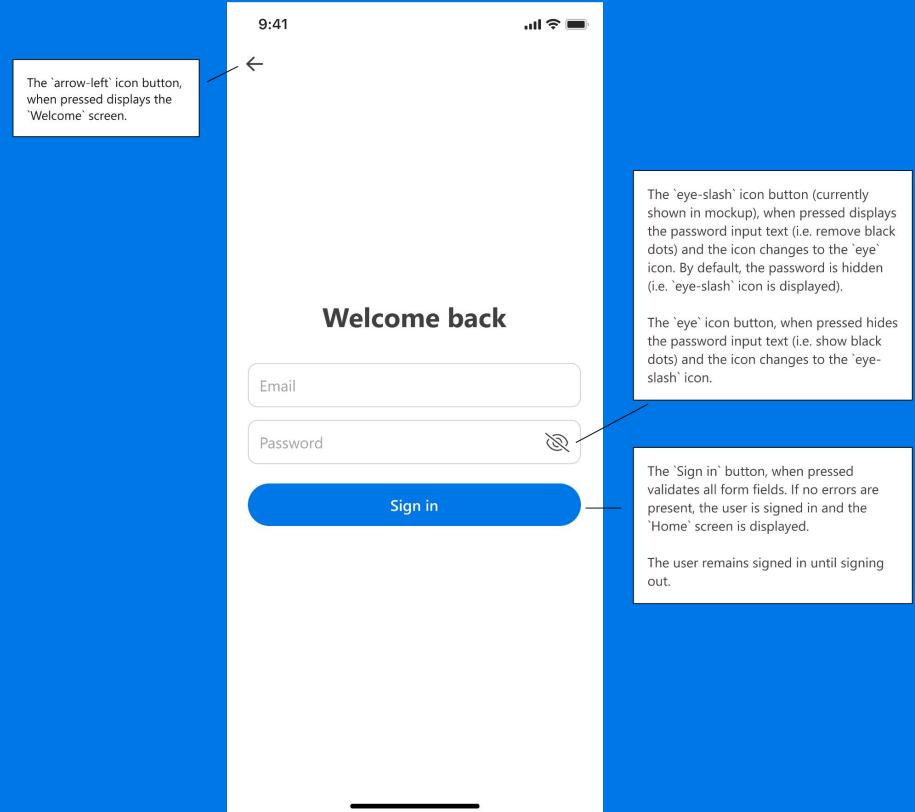
User Stories:

- CRYP-22: As a User, I want to be able to sign in, so that I can access my account

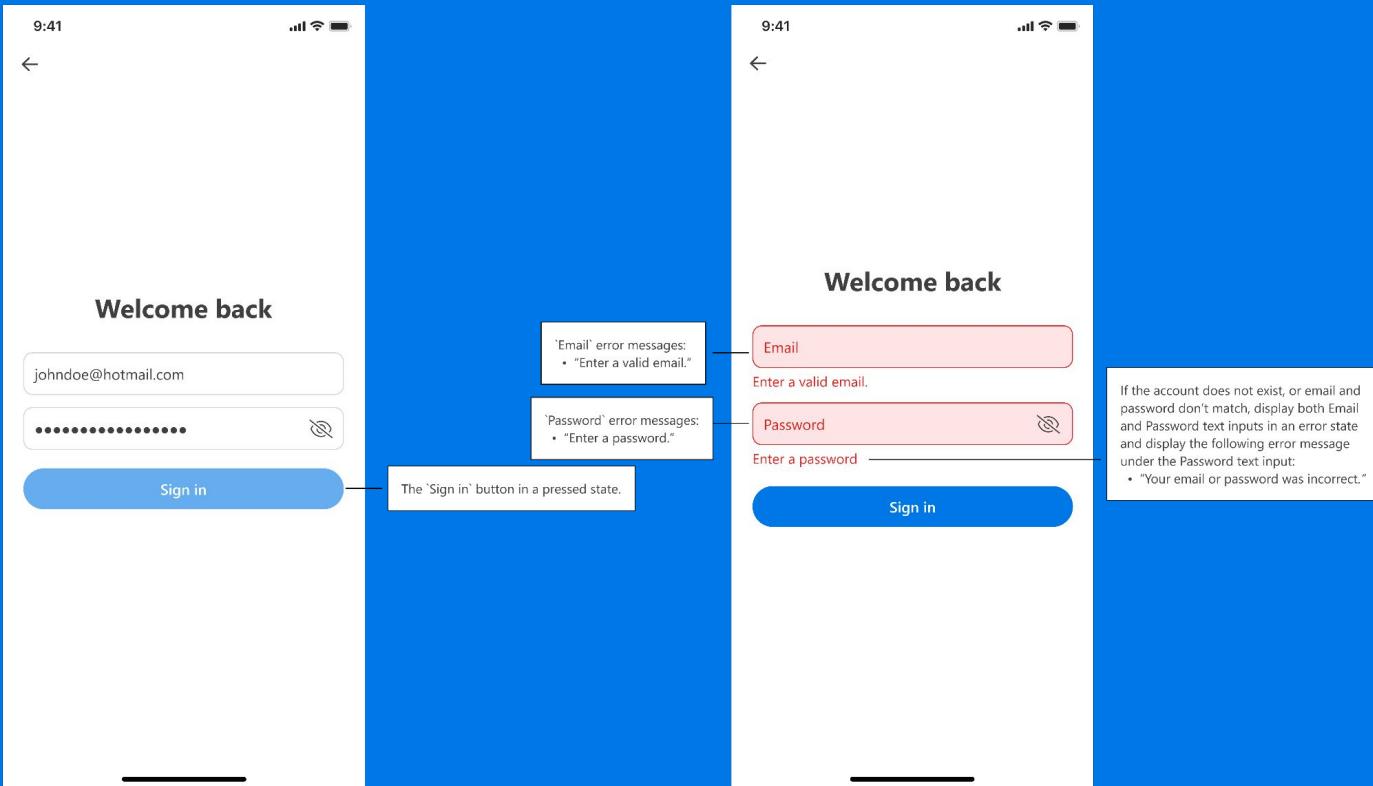
Personas:

- The Beginner
- The Intermediate
- The Expert

"The sign in page is up to standard."
- Product Owner



Sign In cont.



UI Mockups

Sprint 2

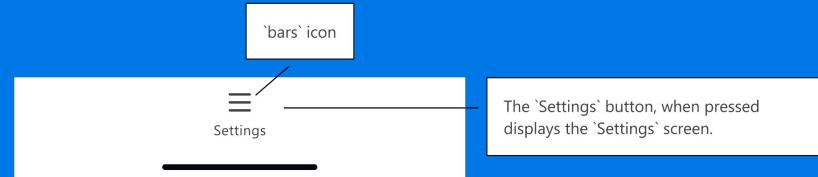
Navigation Tab Bars

User Stories:

- CRYP-94: As a User, I want a navigation tab bars, so that I can navigate around the app
- CRYP-95: As a User, I want an account settings page, so I make changes to my account or personalize my app experience

Personas:

- The Beginner
- The Intermediate
- The Expert



“Looks good, coding can start.”
- Product Owner

Settings

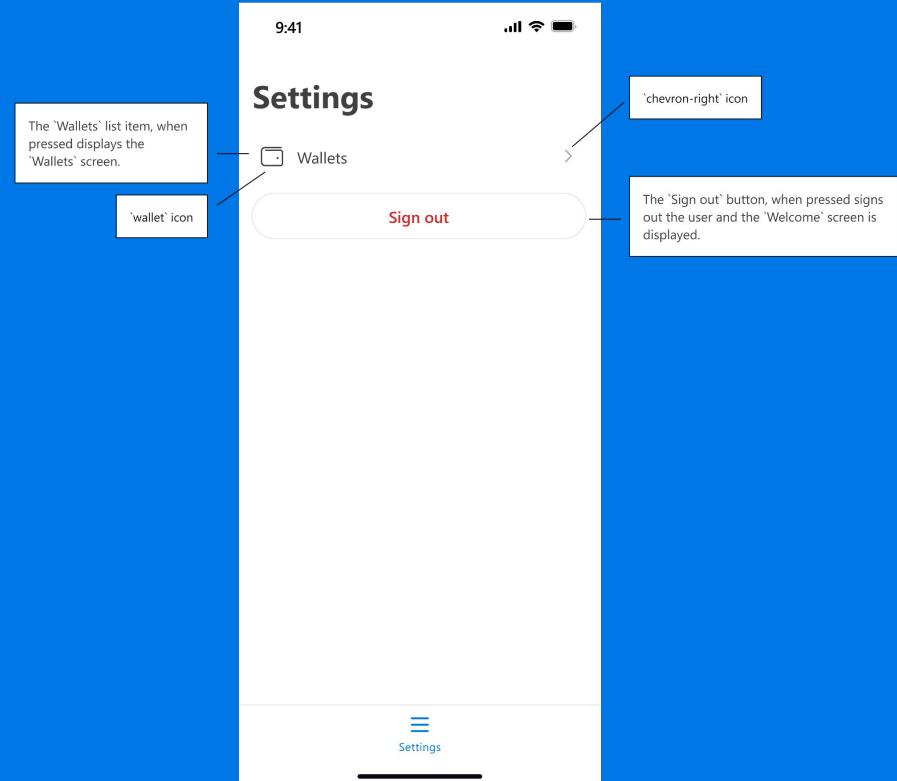
User Stories:

- CRYP-23: As a User, I want to sign out of my account, so that I can delete my session
- CRYP-27: As a User, I want to view a list of all my Bitcoin and Ethereum wallets, so I can see their details in a single place
- CRYP-95: As a User, I want an account settings page, so I make changes to my account or personalize my app experience

Personas:

- The Beginner
- The Intermediate
- The Expert

"Looks good, coding can start."
- Product Owner



Settings / Wallets

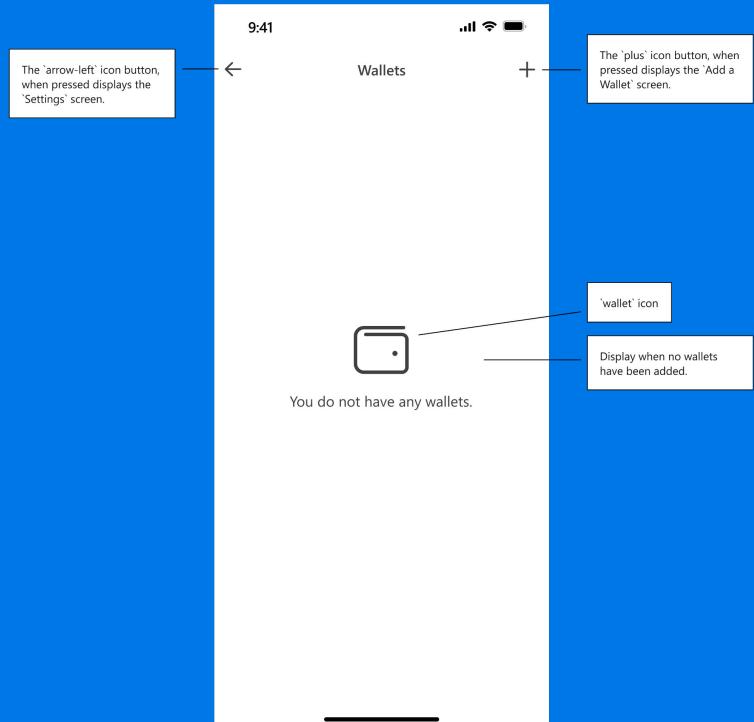
User Stories:

- CRYP-27: As a User, I want to view a list of all my Bitcoin and Ethereum wallets, so I can see their details in a single place

Personas:

- The Beginner
- The Intermediate
- The Expert

"Very detailed, I like it. Approved for development."
- Product Owner



Settings / Wallets cont.

The 'arrow-left' icon button, when pressed displays the 'Settings' screen.

Display only the wallet accordion that has at least 1 wallet added (i.e. do not display Ethereum if only a Bitcoin wallet has been added).

When the 'Wallets' screen is initially displayed, accordions are collapsed.

The 'plus' icon button, when pressed displays the 'Add a Wallet' screen.

A wallet accordion, when pressed expands and displays all associated wallets. The associated 'chevron-right' icon is also replaced with a 'chevron-down' icon.

Order the wallets in alphabetical order by wallet name.

Wallet address format:

- <first 6 digits><ellipsis><last 4 digits>

9:41

Wallets

+

Bitcoin

Ethereum

9:41

Wallets

+

Bitcoin

Bitcoin Chequing
bc1asd...maha

5 BTC

Bitcoin Savings
ba3asd...zahd

900.00000001 BTC

Ethereum

Ethereum Chequing
0x2sld...gzal

99 ETH

Ethereum Savings
0x1spd...mzhd

001 ETH

Wallet name

Wallet balance (latest)

Add a Wallet

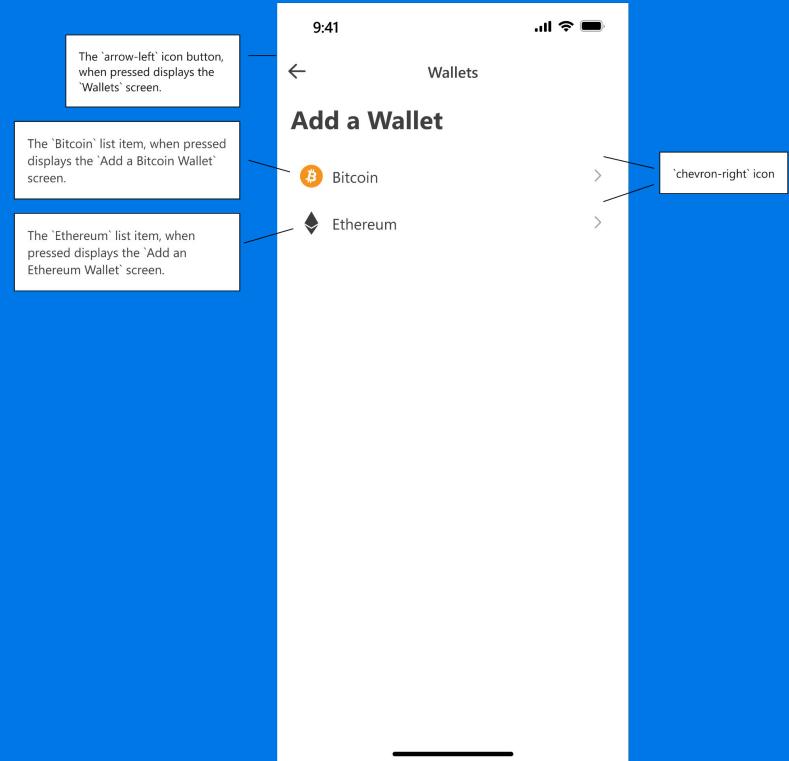
User Stories:

- CRYP-24: As a User, I want to add a Bitcoin or Ethereum wallet to my account, so I can keep track of them in a single place

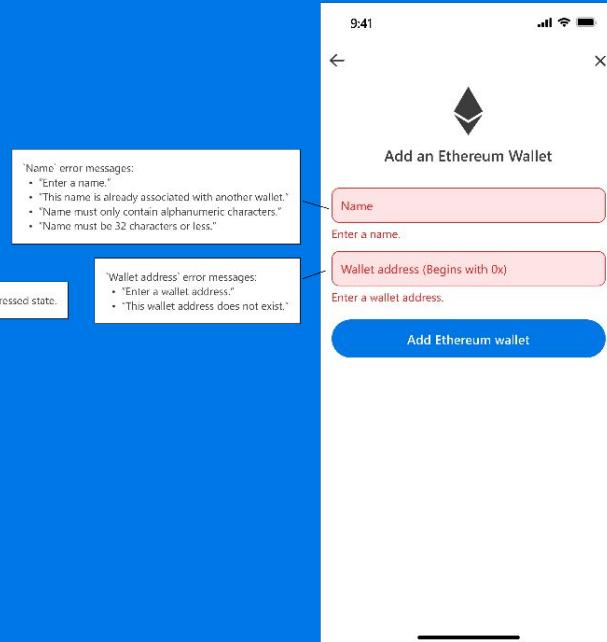
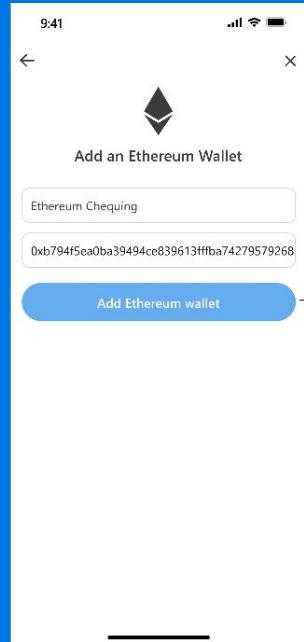
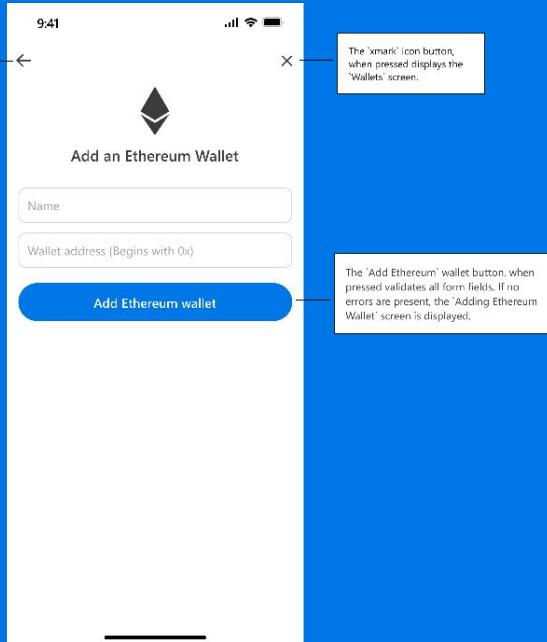
Personas:

- The Beginner
- The Intermediate
- The Expert

"Approved for development."
- Product Owner



Add a Wallet cont.



Add a Wallet cont.

The image displays three screenshots of a mobile application interface for adding an Ethereum wallet, arranged horizontally. Each screenshot includes callout boxes with descriptive text and icon labels.

Screenshot 1: Adding Ethereum Wallet

- Icon:** A small diamond icon with a downward arrow.
- Text:** "Adding Ethereum Wallet".
- Image:** A large blue circular spinner icon.
- Text Callout:** "The spinner represents the current progress for getting all information from the blockchain for the associated Ethereum wallet (i.e. transactions, wallet details, etc.)".
- Text Callout:** "If no errors occur during this process then display the 'Added Ethereum Wallet' screen upon completion. If an error occurs during this process then display the 'Could Not Add Ethereum Wallet' screen."
- Text Callout:** "Even if all information is obtained extremely quickly (i.e. in ms), rotate the spinner for at least 2 seconds. This artificial time slowing is required to provide users feedback on backend processes."

Screenshot 2: Added Ethereum Wallet

- Icon:** A green circle containing a white checkmark icon labeled "circle-check" icon.
- Text:** "Added Ethereum Wallet" and "Ethereum Chequing".
- Text Callout:** "Ethereum wallet name (From 'Add an Ethereum Wallet' form)".
- Text Callout:** "The 'Add another Ethereum wallet' button, when pressed displays the 'Add an Ethereum Wallet' screen."
- Text Callout:** "The 'Back to wallets' link, when pressed displays the 'Wallets' screen."

Screenshot 3: Could Not Add Ethereum Wallet

- Icon:** A red circle containing a white X icon labeled "circle-xmark" icon.
- Text:** "Could Not Add Ethereum Wallet" and "Ethereum Chequing".
- Text Callout:** "Ethereum wallet name (From 'Add an Ethereum Wallet' form)".
- Text Callout:** "The 'Try again' button, when pressed displays the 'Add an Ethereum Wallet' screen with all the previous form data inputted."
- Text Callout:** "The 'Back to wallets' link, when pressed displays the 'Wallets' screen."

UI Mockups

Sprint 3

Welcome

User Stories:

- CRYP-100: As a User, I want a welcome page when I open the app and I'm not signed in, so I can either sign up for an account or sign in to my account

Personas:

- User
 - The Beginner
 - The Intermediate
 - The Expert

"Love the design of the main page. The subtle logos in the background are a nice touch."

- Product Owner



On app startup, only display the 'Splash Screen' if any app resources need to be loaded (i.e. fonts, images, etc.).

After the 'Splash Screen' (whether displayed or not), display one of the following screens:

- Display the 'Home' screen if the user is already signed in
- Display the 'Welcome' screen if the user is not currently signed in

Dev Note: <https://docs.expo.dev/vendors/latest/sdk/splash-screen/>

The 'Sign in' button, when pressed displays the 'Sign In' screen.



Static 'Welcome Screen Background' image. Image contains the following cryptocurrencies:

- Bitcoin
- Ethereum
- Litecoin
- Solana
- Dogecoin
- XRP
- Cardano
- Tether

Dev Note: The background image can be found attached in the associated Jira ticket.

The 'Sign up' button, when pressed displays the 'Sign Up' screen.

Home

User Stories:

- CRYP-101: As a User, I want a home page, so I can view all my wallets immediately after signing in

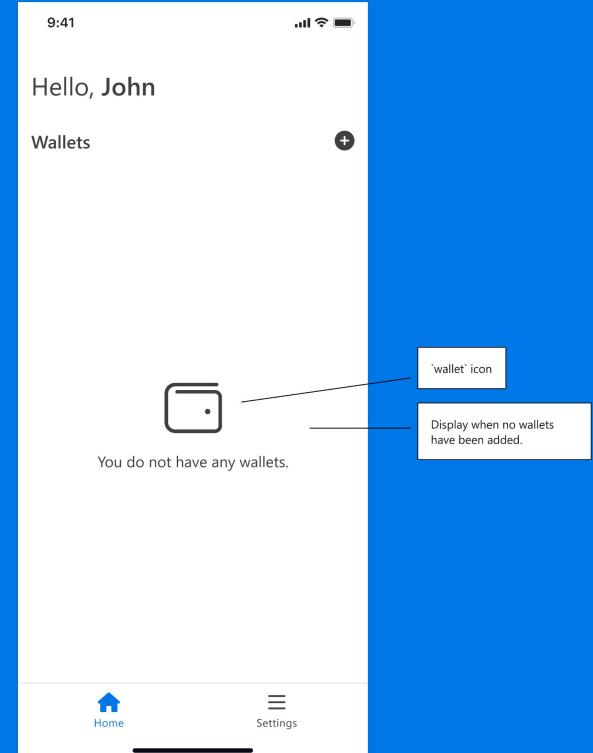
Personas:

- User
 - The Beginner
 - The Intermediate
 - The Expert

"The blue to indicate it is the home page is a nice touch. I also like the simplicity of the home page where you can see your wallets.

Are there any plans to add other things to the home page in future releases?"

- Product Owner



Home cont.

Account first name. If first name is too long then it should be on a new line
Dev Note: Figma should provide the proper styling for this component behavior under the 'Inspect' sidebar menu.

Display only the wallet accordion that has at least 1 wallet added (i.e. do not display Ethereum if only a Bitcoin wallet has been added).

When the 'Home' screen is initially displayed (on sign in), accordions are collapsed. Accordions must maintain their current state (collapsed or expanded) until the user signs out. (i.e. if one of the accordions is open and the user either leaves the app or changes screens, once returned the same accordion that was previously manipulated must remain open).

The 'circle-plus' icon button, when pressed displays the 'Add a Wallet' screen.

A wallet accordion, when pressed expands and displays all associated wallets. The associated 'chevron-right' icon is also replaced with a 'chevron-down' icon.

If the wallet name is too long to fit on a single line or the balance overlaps it, wrap the wallet name on a new line.

Order the wallets in alphabetical order by wallet name.

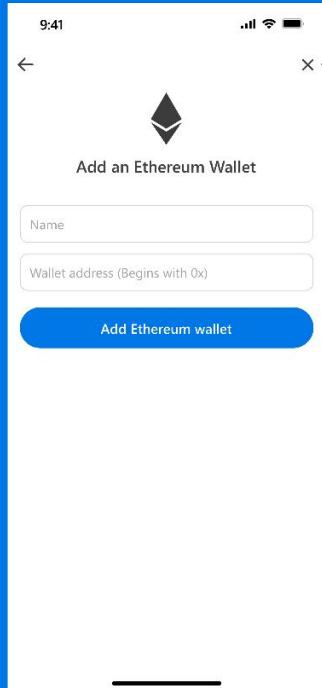
A Bitcoin wallet accordion item, when pressed displays the 'Bitcoin Wallet Overview'.

An Ethereum wallet accordion item, when pressed displays the 'Ethereum Wallet Overview'.

Wallet address format:
• <first 6 digits><ellipsis><last 4 digits>

Wallet balance (latest) format:
• Always display all digits before the decimal point
• Remove any trailing 0 digits after the decimal point
• Example:
 • 1,000.0000 -> 1,000
 • 1,000.0001 -> 1,000.0001
• If the balance does not display within a single line do the following:
 • Add an ellipsis at the end of the balance
 • Keep at least 1 digit after the decimal point and remove as many trailing digits (after the decimal point) necessary until the balance, ellipsis and currency type remain on a single line
 • Example:
 • 1,000.000.04832 ETH -> 1,000.000...ETH

Add a Wallet updates



The 'xmark' icon button, when pressed either displays the 'Wallets' or 'Home' screen depending on which screen the 'Add a Wallet' process started from.



The 'Back to home' link, when pressed displays the 'Home' screen.



The 'Back to home' link, when pressed displays the 'Home' screen.

Home / Wallets / Ethereum / Wallet Overview

User Stories:

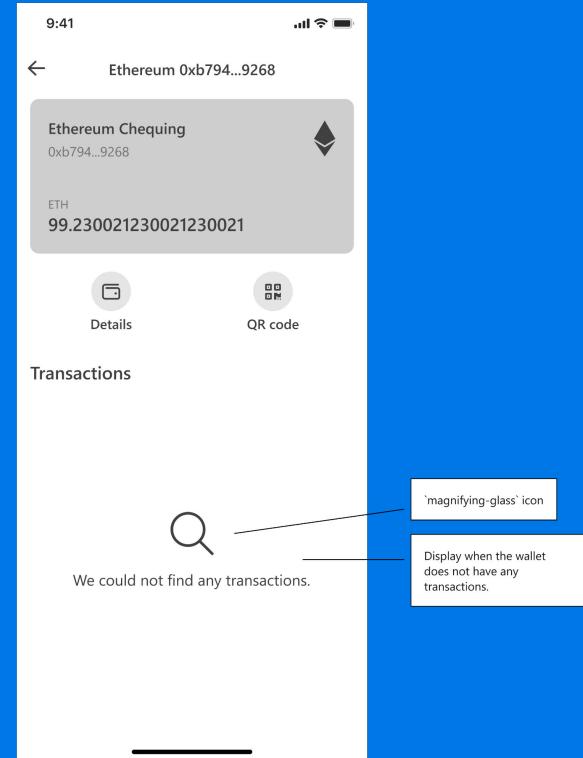
- CRYP-26: As a User, I want to view the details for each of my Ethereum wallets, so that I can see all associated information available on the blockchain
- CRYP-28: As a User, I want to view a list of all transactions associated to each of my Ethereum wallets, so that I can see who I have transacted with
- CRYP-108: As a User, I want to share my Ethereum wallet address, so that others can easily send me crypto without inputting my wallet address incorrectly

Personas:

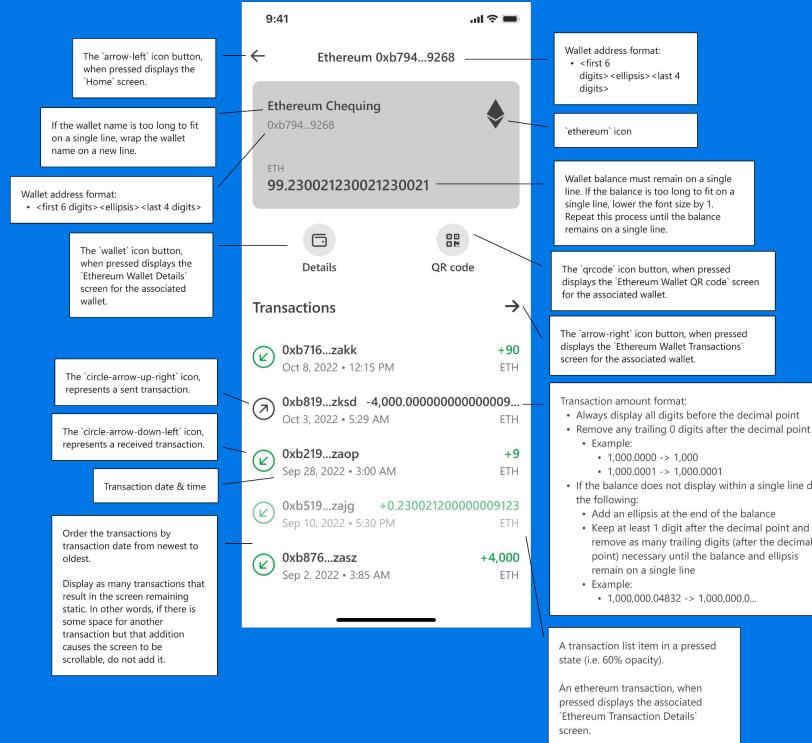
- User
 - The Beginner
 - The Intermediate
 - The Expert

"The wallet looks good."

- Product Owner



Home / Wallets / Ethereum / Wallet Overview cont.



Home / Wallets / Ethereum / Wallet Overview cont.

Product Owner Feedback

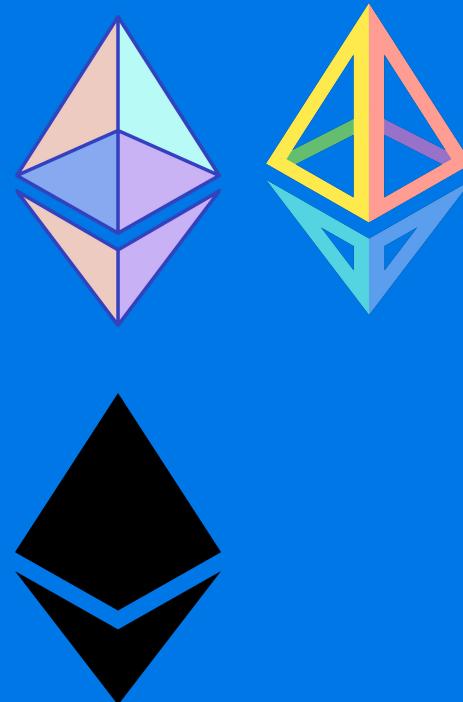
"ETH is moving away from the grey color scheme towards a more blue tone. Could we try and represent that in the eth logos and the backdrop color? Let me know your thought."

- Product Owner

After research and discussions with Product Owner, no changes made

Reasons for not changing current color scheme

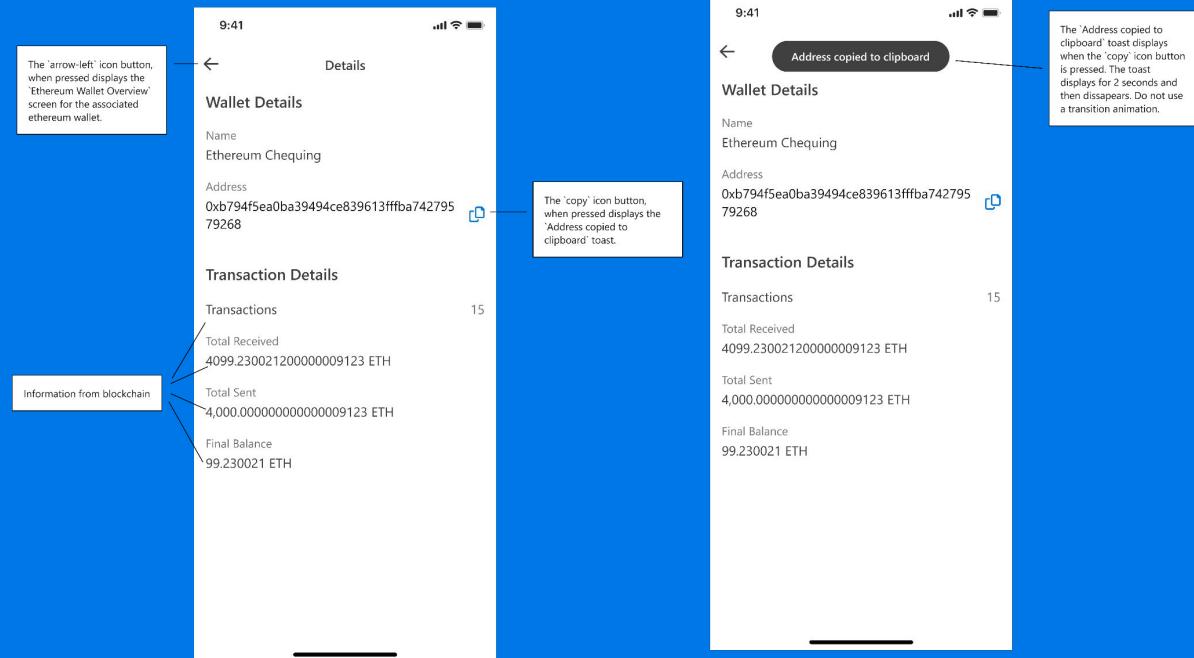
1. Most crypto apps still use the black & grey color scheme
2. Maintain sense of familiarity and cohesiveness for users when switching between Cryptify and other crypto apps (i.e. Coinbase, Binance, Crypto.com)



Home / Wallets / Ethereum / Wallet Details

User Stories:

- CRYP-26: As a User, I want to view the details for each of my Ethereum wallets, so that I can see all associated information available on the blockchain
 - CRYP-108: As a User, I want to share my Ethereum wallet address, so that others can easily send me crypto without inputting my wallet address incorrectly



“Good to go for coding.”

- Product Owner

Home / Wallets / Ethereum / Wallet QR Code

User Stories:

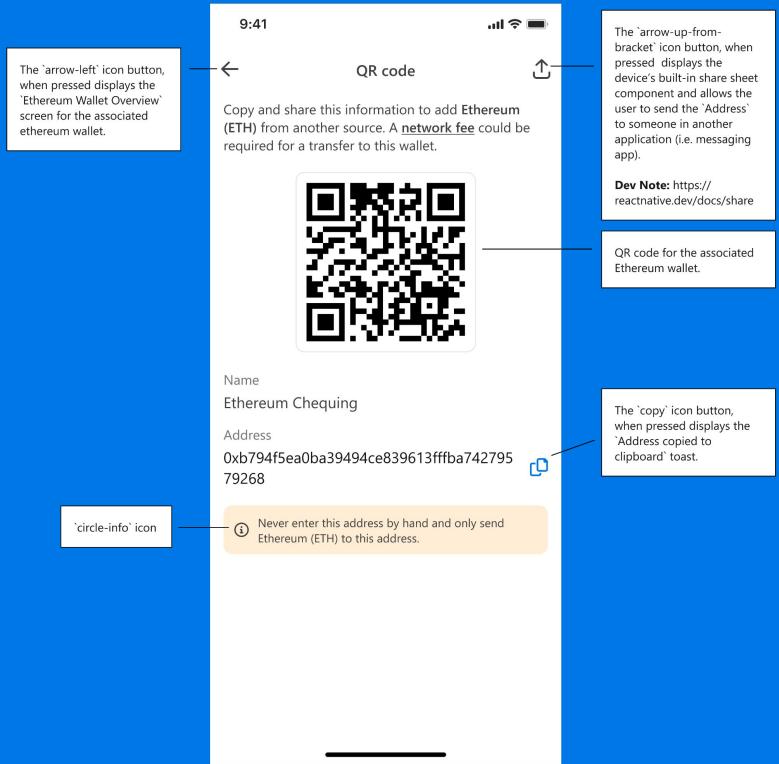
- CRYP-108: As a User, I want to share my Ethereum wallet address, so that others can easily send me crypto without inputting my wallet address incorrectly

Personas:

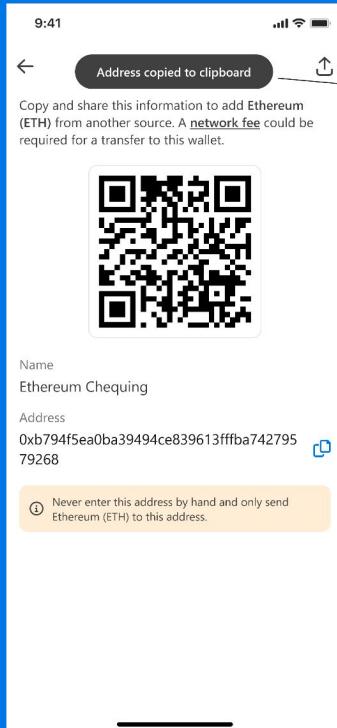
- User
 - The Beginner
 - The Intermediate
 - The Expert

"Really good idea with the qr code and the simplicity of sharing them."

- Product Owner

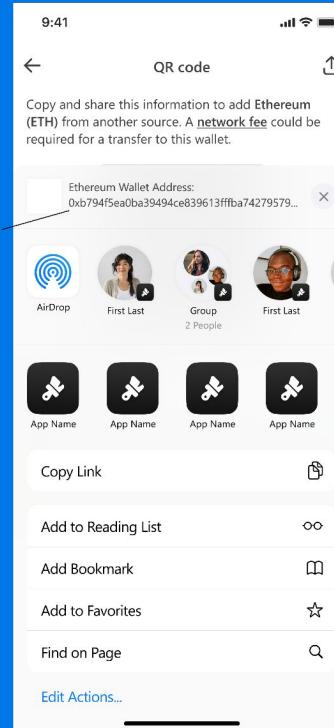


Home / Wallets / Ethereum / Wallet QR Code cont.



The 'Address copied to clipboard' toast displays when the 'copy' icon button is pressed. The toast displays for 2 seconds and then disappears. Do not use a transition animation.

Message format:
• Ethereum Wallet
Address: \r\n<Address>



The device's built-in share sheet component is displayed when the 'arrow-up-from-bracket' icon button is pressed.

Dev Note: <https://reactnative.dev/docs/share>

Home / Wallets / Ethereum / Wallet Transactions

User Stories:

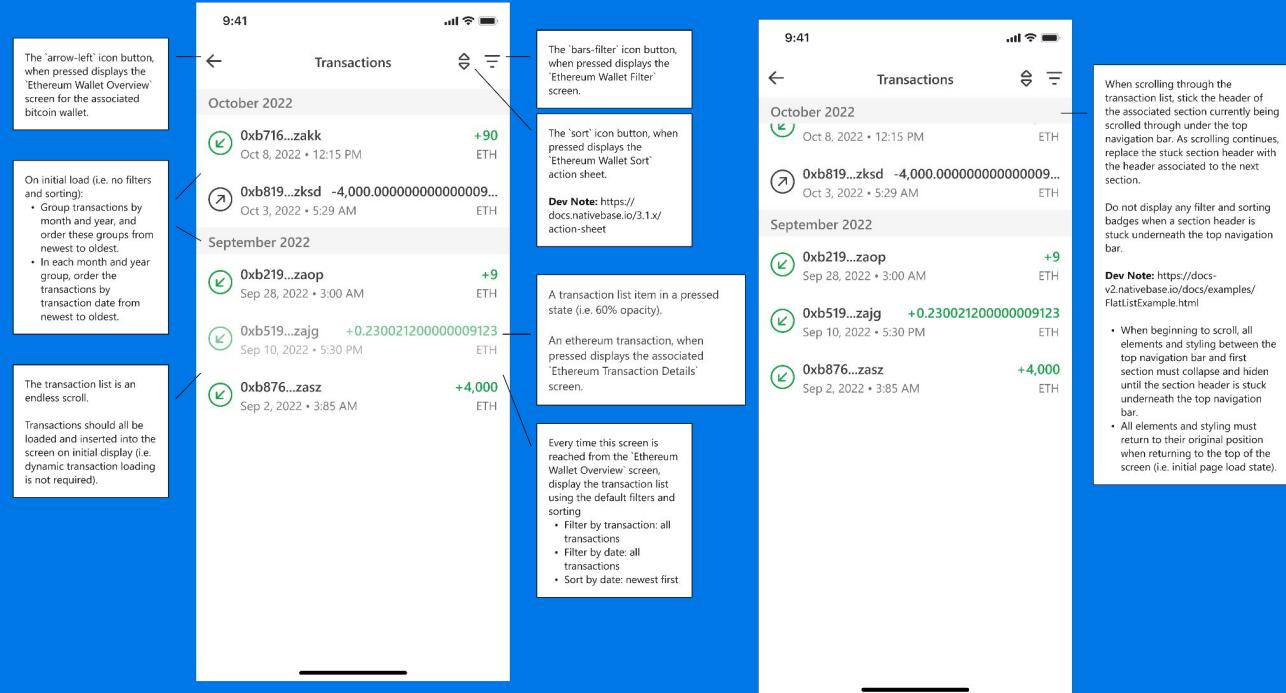
- CRYP-28: As a User, I want to view a list of all transactions associated to each of my Ethereum wallets, so that I can see who I have transacted with

Personas:

- User
 - The Beginner
 - The Intermediate
 - The Expert

"Good to go for coding."

- Product Owner



Home / Wallets / Ethereum / Transaction Details

User Stories:

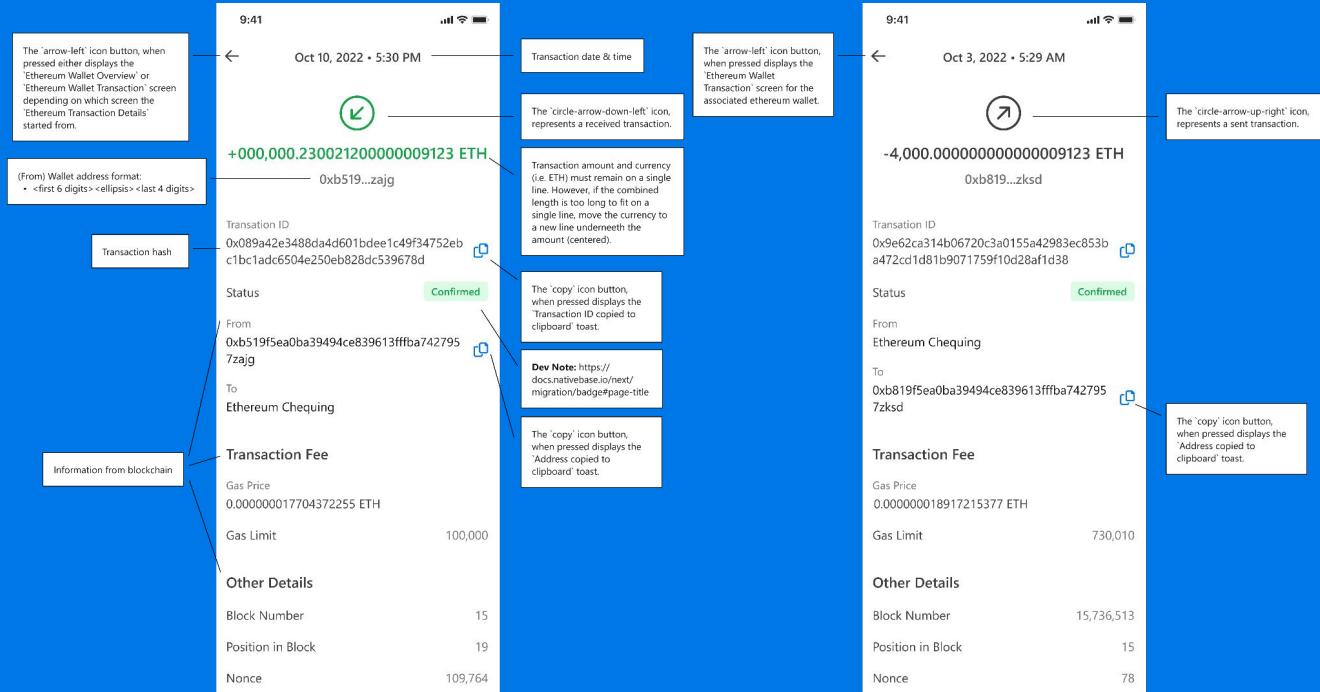
- CRYP-30: As a User, I want to view a details page for each Ethereum transaction, so I can get more information about it

Personas:

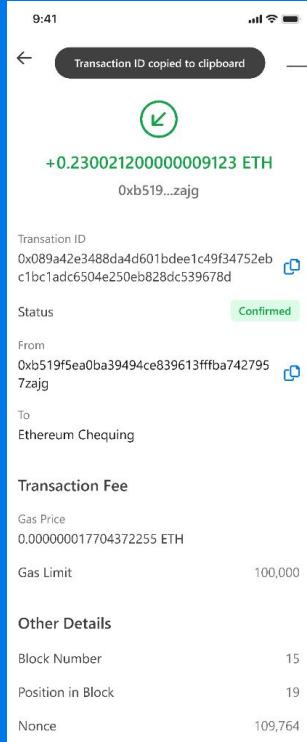
- User
 - The Beginner
 - The Intermediate
 - The Expert

"Good to go for coding."

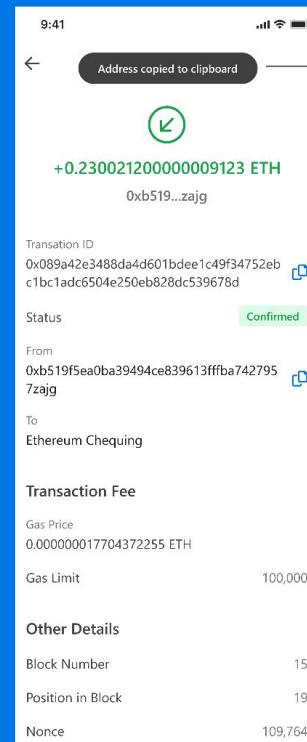
- Product Owner



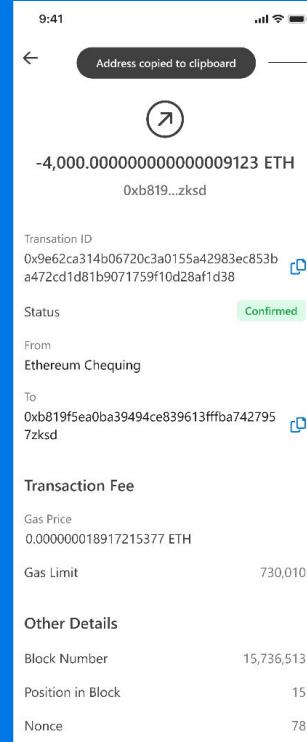
[Home](#) / [Wallets](#) / [Ethereum](#) / Transaction Details cont.



The 'Transaction ID copied to clipboard' toast displays when the 'copy' icon button associated to 'Transaction ID' is pressed. The toast displays for 2 seconds and then disappears. Do not use a transition animation.



The 'Address copied to clipboard' toast displays when the 'copy' icon button associated to 'From' is pressed. The toast displays for 2 seconds and then disappears. Do not use a transition animation.



A screenshot of the Microsoft Edge browser. The address bar at the top contains the URL "1-800-222-2222/000000000000123-ETL". In the top right corner, there is a small circular icon with a white arrow pointing up and to the right, representing the clipboard. A tooltip above this icon says "Address copied to clipboard".

UI Mockups

Backlog

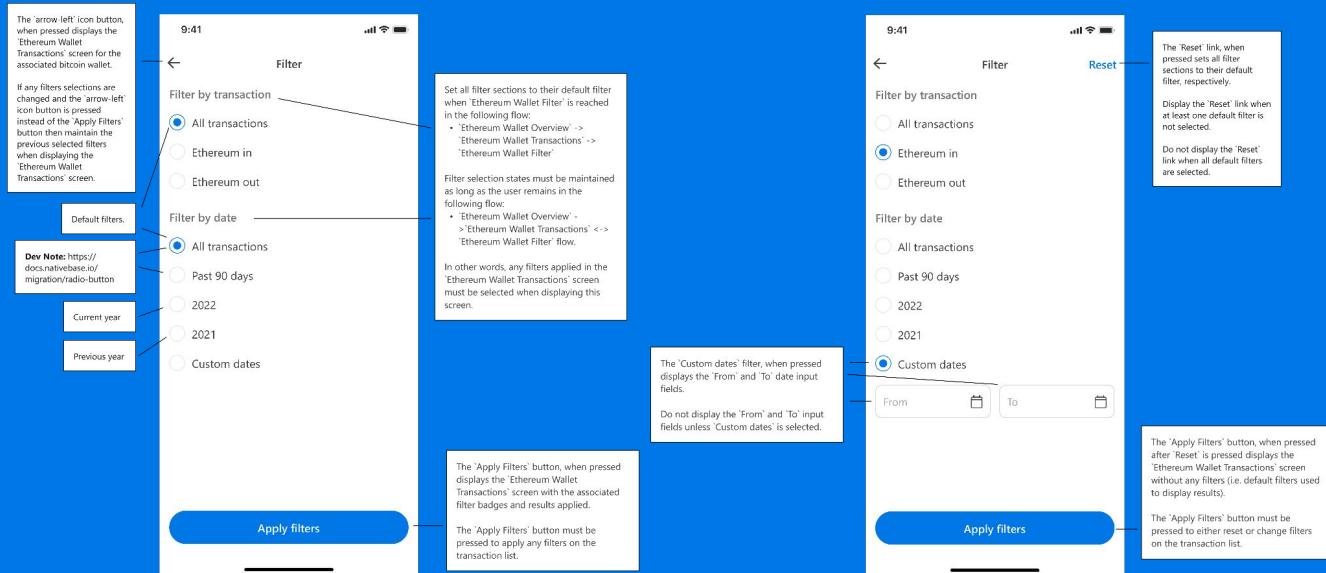
Home / Wallets / Ethereum / Wallet Transactions / Filter

User Stories:

- CRYP-29: As a User, I want to filter my Ethereum transactions list, so I can search for specific transaction characteristics

Personas:

- User
 - The Beginner
 - The Intermediate
 - The Expert



"Good to go for coding."

- Product Owner

Home / Wallets / Ethereum / Wallet Transactions / Filter cont.

The screenshots illustrate the 'Filter by transaction' and 'Filter by date' sections of a mobile application interface.

Filter by transaction:

- All transactions**: Unselected radio button.
- Ethereum in**: Selected radio button.
- Ethereum out**: Unselected radio button.

Filter by date:

From date input field: Displays '22-09-01'. Dev Note: <https://github.com/react-native-datetimepicker/datetimepicker>

To date input field: Displays '22-10-10'. Dev Note: <https://github.com/react-native-datetimepicker/datetimepicker>

Calendar Components:

- Month View:** Shows September 2022. The 1st is selected (blue). Buttons for 'Switch between month and year.' and 'Go back or forward one month at a time.' are shown above the calendar.
- Day View:** Shows the days of October 2022. The 10th is selected (blue). Buttons for 'Select date.' and 'Unselectable date.' are shown below the calendar.
- Current Day:** Shows the current day's date (October 10, 2022) with a blue background and white number.
- Future Date:** Shows a future date (October 11, 2022) with a light gray background.

Buttons:

- Apply filters**: Located at the bottom of the first two screens.
- Apply Filters**: Located at the bottom of the third screen.

Text Labels:

- The 'From' date in a selected state.
- The 'From' date input field, when pressed displays the device's built-in calendar component.
 - A future date cannot be selected
 - 'From' date must be before the 'To' date
- Dev Note: <https://github.com/react-native-datetimepicker/datetimepicker>
- Switch between month and year.
- Go back or forward one month at a time.
- Selectable date.
- Unselectable date.
- The 'To' date in a pressed and selected state.
- Current day's date. If the current day's date is selected then maintain blue background but change number to the color white (represent the current day is selected).
- The 'To' date input field, when pressed displays the device's built-in calendar component.
 - A future date cannot be selected
 - 'To' date must be after the 'From' date
- Dev Note: <https://github.com/react-native-datetimepicker/datetimepicker>
- 'From' date input field format
 - 'YY-MM-DD'
- 'To' date input field format
 - 'YY-MM-DD'
- The 'Apply filters' button in a pressed state.

Home / Wallets / Ethereum / Wallet Transactions Filter and Sort Results

The image displays three screenshots of a mobile application's Ethereum wallet transactions screen, illustrating various filtering and sorting features.

Screenshot 1: Ethereum in Filter

Shows transactions from Sep 1, 2022 - Oct 10, 2022. A badge indicates 'Ethereum in'.

- Filter by transaction -> Ethereum in**: Filter applied and associated badge.
- Filter by date -> Custom dates**: Filter applied and associated badge. Format: 'From' - 'To'.
- Badge area**: Horizontal scrollable when there is not enough space to display all the badges (i.e. go past the device screen).
- Dev Note**: <https://docs.nativebase.io/react/migration/badge#page-title>

Screenshot 2: Ethereum out Filter

Shows transactions from Oct 1, 2022 - Feb 1, 2022. A badge indicates 'Ethereum out'.

- Filter by transaction -> Ethereum out**: Filter applied and associated badge.

Screenshot 3: No Results

Shows a search bar and a message: "We could not find any transactions matching your filters." A link "Choose another filter" is present.

- 'magnifying-glass' icon**: Search icon.
- Display when there aren't any transactions that match the filters applied.**
- Choose another filter**: Link to another filter screen.
- The 'Choose another filter' link**: When pressed displayed the Bitcoin Wallet Filter screen.

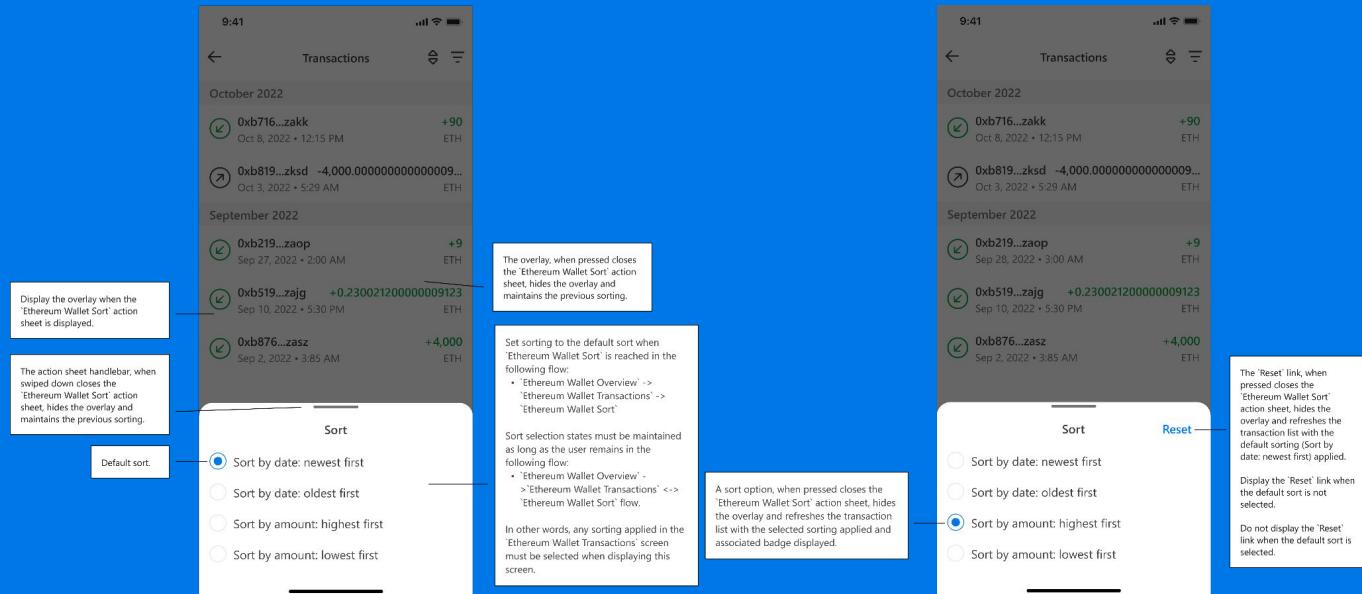
Home / Wallets / Ethereum / Wallet Transactions / Sort

User Stories:

- CRYP-31: As a User, I want to sort my Ethereum transactions list, so I can order my transactions differently

Personas:

- User
 - The Beginner
 - The Intermediate
 - The Expert



"Good to go for coding."

- Product Owner

Home / Wallets / Ethereum / Wallet Transactions Filter and Sort Results

The screenshots illustrate the interface and functionality of a mobile application for managing Ethereum wallet transactions.

Left Screenshot (Initial State):

- Sort by date: oldest first sorting applied and associated badge
 - Order the transactions by transaction date from oldest to newest.
- The 'circle-mark' icon button, when pressed removes the associated filter from the transactions list. As such, the transaction list may display the transaction list without said filter applied.
- Dev Note: <https://docs.nativebase.io/react/migration/badge#page-title>

Middle Screenshot (Sort by Amount: highest first):

- Sort by amount: highest first sorting applied and associated badge
 - Order the transactions by largest transaction amount to smallest.

Right Screenshot (Sort by Amount: lowest first):

- Sort by amount: lowest first sorting applied and associated badge
 - Order the transactions by smallest transaction amount to largest.

Common UI Elements:

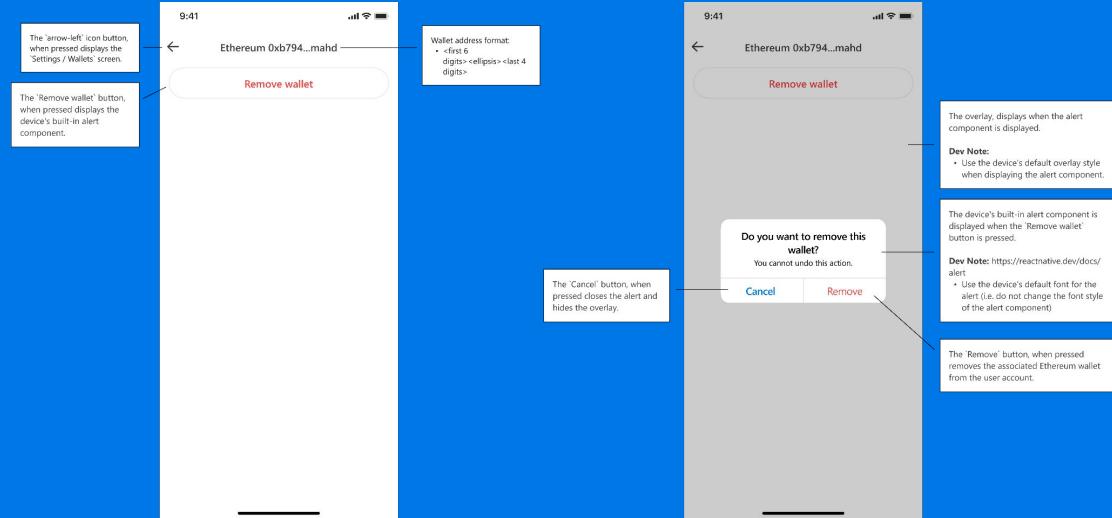
- Transactions list header with sorting and filtering buttons.
- Transaction items showing address, timestamp, amount (with badge), and token type (ETH).
- Horizontal scrollable badge area.
- Badge order: sorting first, filters second.

Date	Address	Timestamp	Amount	Token
September 2022	0xb876...zasz	Sep 2, 2022 • 3:85 AM	+4,000	ETH
September 2022	0xb519...zajg	Sep 10, 2022 • 5:30 PM	+0.230021200000009123	ETH
September 2022	0xb219...zaop	Sep 28, 2022 • 3:00 AM	+9	ETH
October 2022	0xb716...zakk	Oct 8, 2022 • 12:15 PM	+90	ETH
September 2022	0xb876...zasz	Sep 2, 2022 • 3:85 AM	+4,000	ETH
September 2022	0xb519...zajg	Sep 10, 2022 • 5:30 PM	+0.230021200000009123	ETH
October 2022	0xb819...zksd	Oct 3, 2022 • 5:29 AM	-4,000,000000000000000009...	ETH

Settings / Wallets / Ethereum / Remove Wallet

User Stories:

- CRYP-90: Create mockup for removing an Ethereum wallet from a user account



"Good to go for coding."

- Product Owner

Settings / Tags

User Stories:

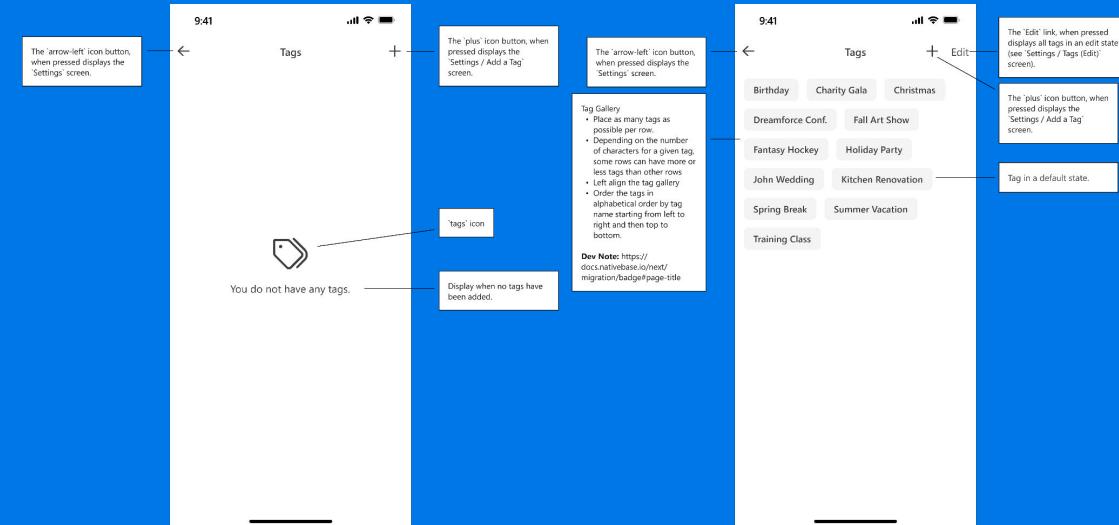
- CRYP-177: As a User, I want to view a list of all my tags, so that I can see all the tags that have been added in a single place

Personas:

- The Beginner
- The Intermediate
- The Expert

"Good to go for coding."

- Product Owner



Settings / Tags / Add a Tag

User Stories:

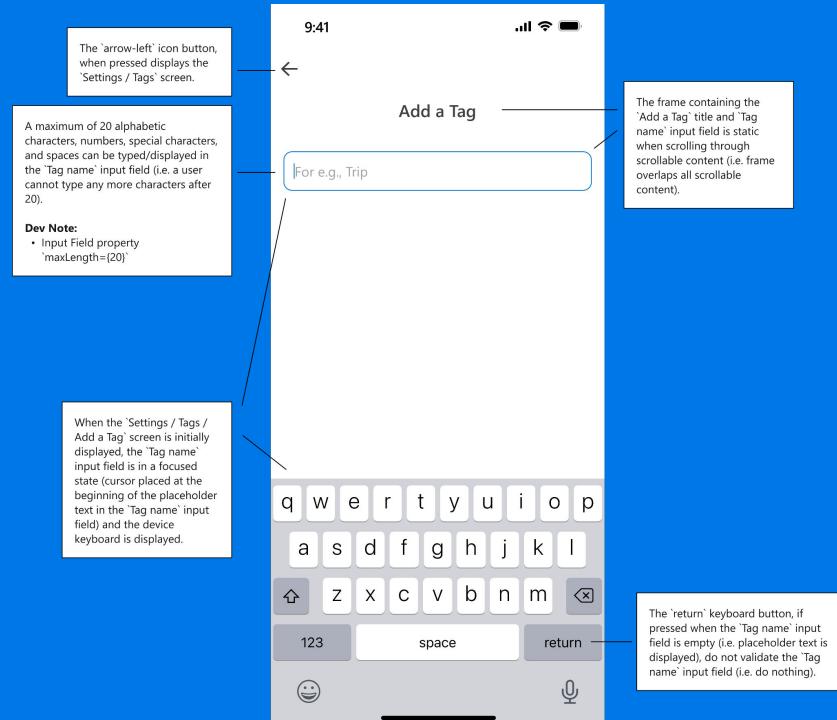
- CRYP-35: As a User, I want to create new tags, so that I can add them to transactions for classification

Personas:

- The Beginner
- The Intermediate
- The Expert

"Very intuitive and simple."

- Product Owner



Settings / Tags / Add a Tag cont.

The screenshots show the 'Add a Tag' screen and the 'Tags Added' screen.

Add a Tag Screen:

- The top section shows a text input field with the placeholder 'For e.g., Trip'.
- The bottom section shows a 'Tags Added' grid with several tags: Birthday, Charity Gala, Christmas, Dreamforce Conf., Fall Art Show, Fantasy Hockey, Holiday Party, John Wedding, and Kitchen Renovation.
- A keyboard is visible at the bottom.

Annotations for the Add a Tag screen:

- The 'Tags Added' section is described as being displayed only when at least one tag has been successfully added.
- The 'Tags Added' section is scrollable.
- In other words, whenever a user enters the 'Settings / Tags / Add a Tag' screen, a new session is 'created'.
- Each tag that is successfully added in a given session is displayed in the 'Tags Added' tag gallery.
- Tag Gallery
 - Place as many tags as possible per row.
 - Depending on the number of characters for a given tag, some rows can have more or less tags than other rows.
 - Left align the tag gallery.
 - Order the tags in alphabetical order by tag name starting from left to right and then top to bottom.
- The 'return' keyboard button, when pressed validates all form fields. If no errors are present, the tag is saved in the database and displayed in the 'Tags Added' section (see 'Settings / Tags / Add Tag (Tags Added)' screen).

Annotations for the Tags Added screen:

- The frame containing the 'Add a Tag' title and 'Tag name' input field is intact when scrolling through scrollable content (i.e. frame overlaps all scrollable content such as the 'Tags Added' section).
- When a tag is successfully added (saved in the database), the tag is displayed in the 'Tags Added' section: the Tag name input field is emptied, and the input field remains in a focused state. The keyboard likewise remains displayed.

Annotations for the error message screen:

- 'Tag name' error messages:
 - Display the following error message if the tag already exists and is *not displayed* in the 'Tags Added' section:
 - "This tag already exists."
 - Display the following error message if the tag already exists and is displayed in the 'Tags Added' section:
 - "This tag has already been added."
- "Tag must be 20 alphanumeric characters and spaces or less."
- "Tag must contain at least 1 alphanumeric character."
- "Tag must only contain alphabetic characters, numbers, special characters, and spaces."
- Dev Note:** Validate tag with ASCII

Annotations for the final error message screen:

- This tag has already been added.

Settings / Tags / Edit Tag

User Stories:

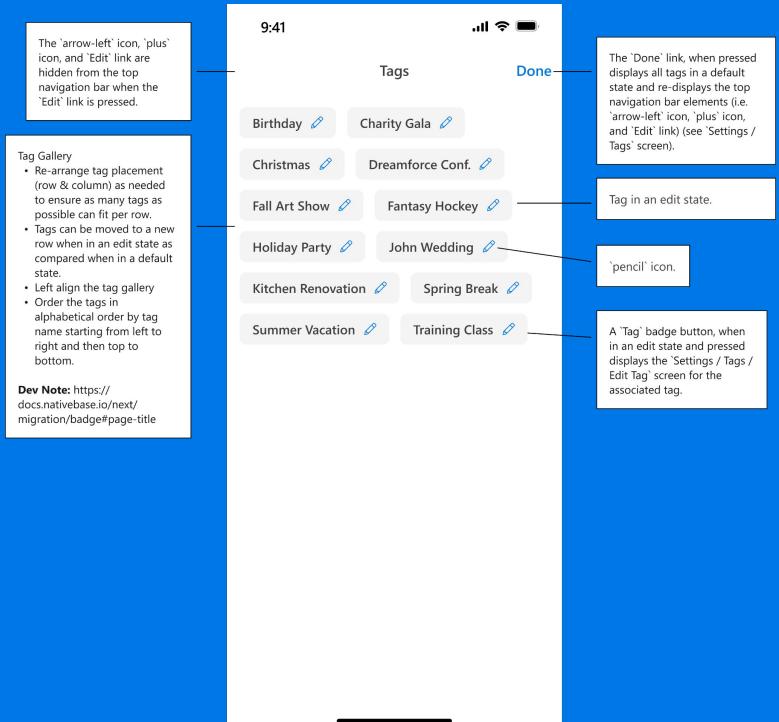
- CRYP-178: As a User, I want to edit a tag, so that I can fix any typos present after creation

Personas:

- The Beginner
- The Intermediate
- The Expert

"Should we tell the user that changing a tag will propagate in all places the tag was used?"

- Product Owner



Settings / Tags / Edit Tag cont.



The 'Delete' icon, when pressed displays the device's built-in alert component.

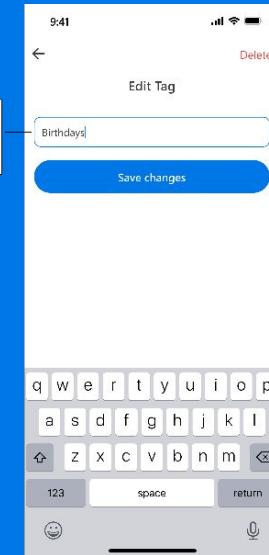
The 'Save changes' button state is determined based on the following scenarios:

- Disabled:
 - Whenever the 'Tag name' input field value has not been modified (i.e. current tag name does not match the most recent saved tag name).
 - When the 'Tag name' input field is empty.
 - Default (by possibility):
 - The 'Save changes' button is produced when the 'Tag name' input field value is modified to a tag value that is not the recently saved tag name.

Example Steps:

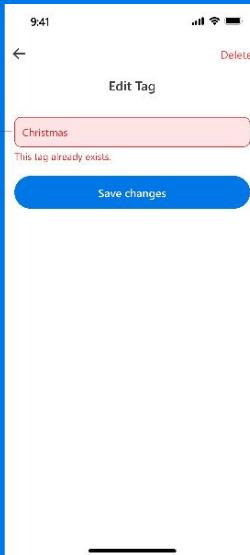
- 'Edit tag' screen initially displayed
1. Input Birthday > Button Enabled
2. Input Birthday > Button Disabled
3. Input Birthday > Button Enabled
4. 'Save changes' not pressed
5. Input Birthday > Button Disabled

When the 'Settings / Tags / Edit Tag' screen is initially displayed, the 'Tag name' input field is in a focused state (indicated by the red border) and after the last character in the 'Tag name' input field and the device's keyboard is displayed.



The 'Save changes' button is in a disabled state.
The 'Tag name' input field value has been modified (i.e. current tag name does not match the most recent saved tag name).

The 'Save changes' button is in a disabled state.
The 'Tag name' input field value has been modified to a tag value that is not the recently saved tag name.



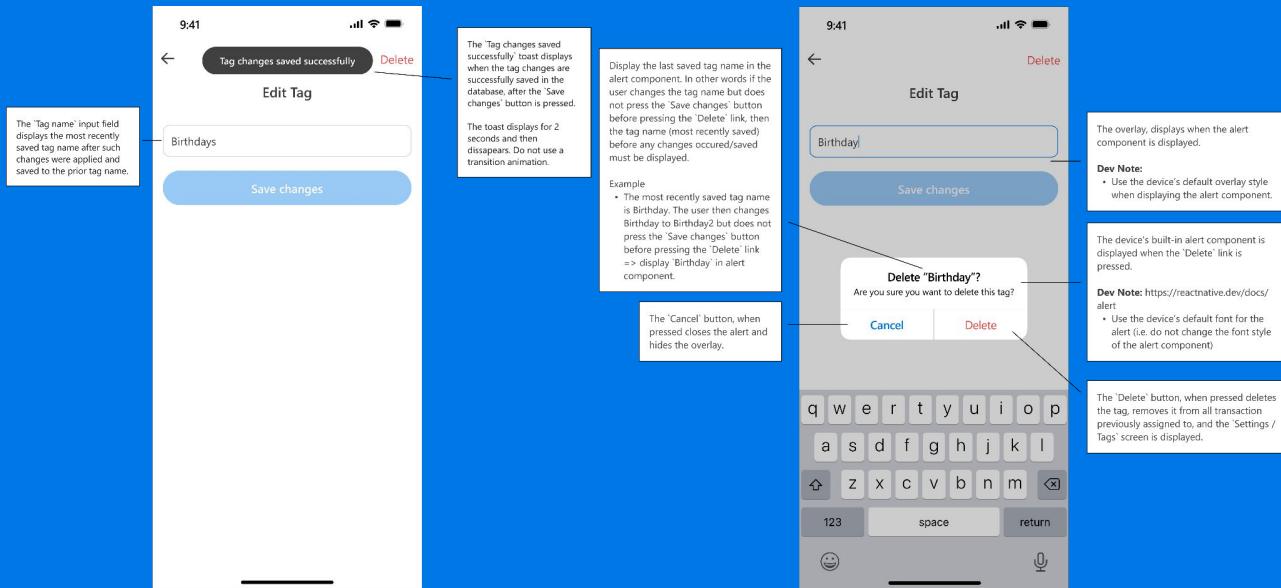
Settings / Tags / Delete Tag

User Stories:

- CRYP-175: As a User, I want to delete a tag from my tags list, so that it is no longer an available option when tagging transactions

Personas:

- The Beginner
- The Intermediate
- The Expert



"It is nice that we give the user the ability to change their mind before deleting the tag forever."

- Product Owner

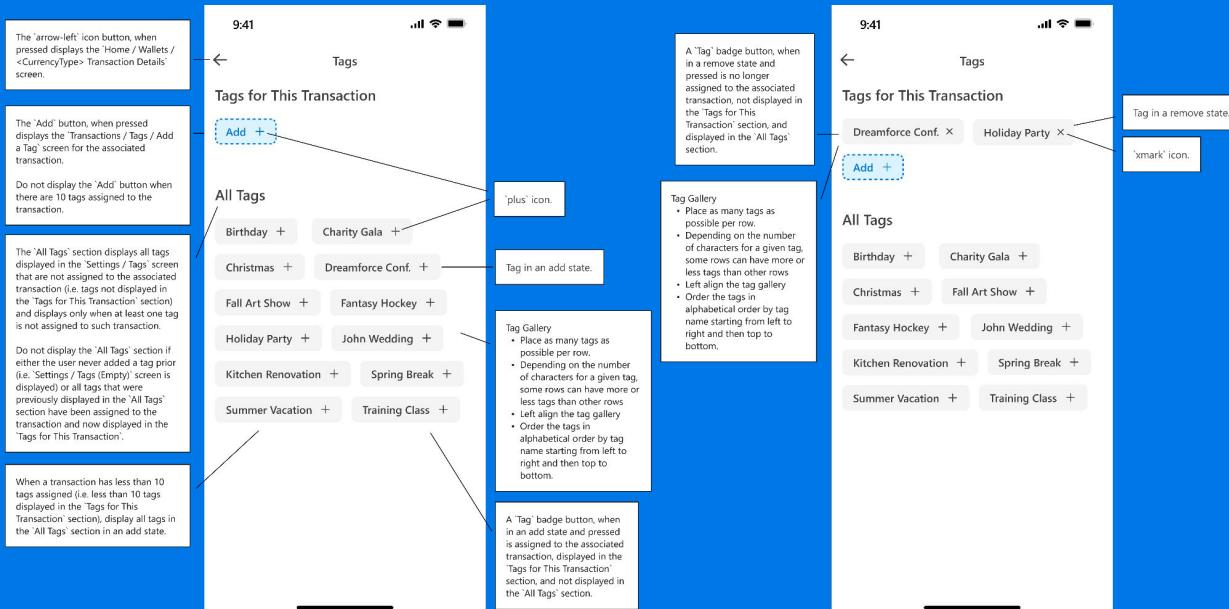
Transactions / Tags / Add a Tag

User Stories:

- CRYP-33: As a User, I want to add tags to an Ethereum transaction, so that I can classify it with keywords

Personas:

- The Beginner
- The Intermediate
- The Expert



"It is nice that we give the user the ability to change their mind before deleting the tag forever."

- Product Owner

Transactions / Tags / Add a Tag cont.

Screenshot 1: Initial State

The screen shows the 'Add a Tag' interface. The 'Tag name' input field contains 'For e.g., Trip'. Below the input field, the 'Tags Added' section lists 'Dreamforce Conf.' and 'Holiday Party'. A note states: 'A maximum of 20 alphabetic characters, numbers, special characters, and spaces can be typed/displayed in the "tag name" input field (i.e. a user cannot type any more characters after 20). Dev Note: Input Field property "max length[20]"'.

Screenshot 2: After Typing 'Charity Gala'

The 'Tag name' input field now contains 'Charity Gala'. The 'Tags Added' section still shows 'Dreamforce Conf.' and 'Holiday Party'. A note states: 'The frame containing the "Add a Tag" title and "Tag name" input field is static while scrollable content (i.e. scrollable content) overlaps all scrollable content such as the "Tags Added" section.'

Screenshot 3: After Adding 'Charity Gala'

The 'Tag name' input field now contains 'Charity Gala'. The 'Tags Added' section now includes 'Charity Gala', 'Christmas', and 'Holiday Party'. A note states: 'After each typed character in the "Tag name" input field, search for and suggest similar tags (i.e. autocomplete) from list of tags added by the user displayed in the "Settings / Tags" screen.'

Annotations for Screenshot 1:

- The 'Tags Added' section displays all tags assigned to the associated transaction, and displays only when at least one tag is assigned to such transaction. This section is scrollable.
- The 'Tag name' input field is in a focused state (cursor placed at the beginning of the text) and in the top-left corner field and the dev note keyboard is displayed.
- The 'return' keyboard button, if pressed on the 'Tag name' input field, is empty (i.e. placeholder text is displayed), do not validate the 'Tag name' input field (i.e. do nothing).

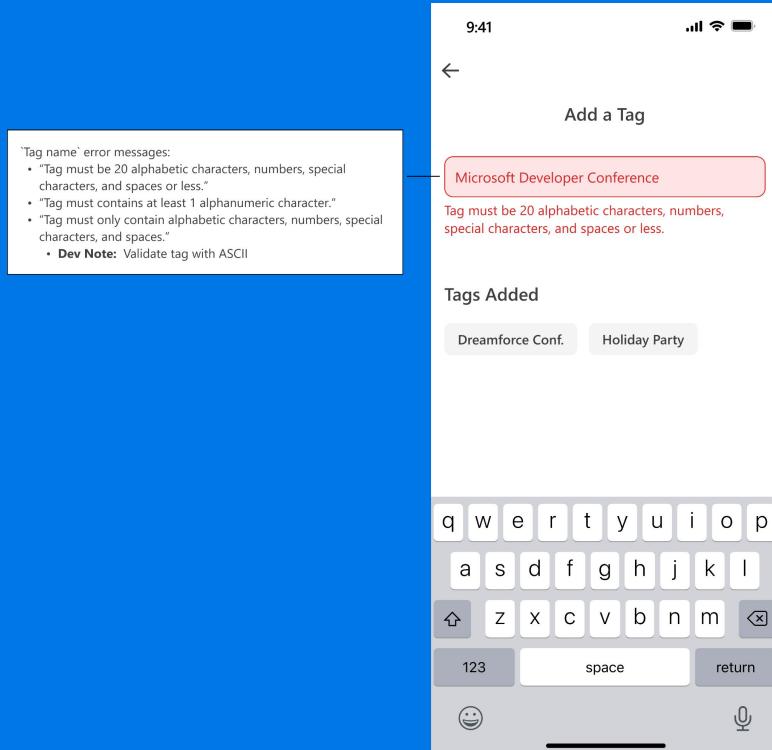
Annotations for Screenshot 2:

- The 'Tags Added' section displays all tags assigned to the associated transaction, and displays only when at least one tag is assigned to such transaction. This section is scrollable.
- The 'Tag name' input field is in a focused state (cursor placed at the beginning of the text) and in the top-left corner field and the dev note keyboard is displayed.
- The 'return' keyboard button, if pressed on the 'Tag name' input field, is empty (i.e. placeholder text is displayed), do not validate the 'Tag name' input field (i.e. do nothing).

Annotations for Screenshot 3:

- The 'Tags Added' section displays all tags assigned to the associated transaction, and displays only when at least one tag is assigned to such transaction. This section is scrollable.
- The 'Tag name' input field is in a focused state (cursor placed at the beginning of the text) and in the top-left corner field and the dev note keyboard is displayed.
- The 'return' keyboard button, if pressed on the 'Tag name' input field, is empty (i.e. placeholder text is displayed), do not validate the 'Tag name' input field (i.e. do nothing).

Transactions / Tags / Add a Tag cont.



Home / Wallets / Ethereum / Transaction Details updates

The image displays two screenshots of an Ethereum transaction details screen, illustrating updates to the 'Add Tags' feature.

Screenshot 1 (Left): Shows a transaction from Oct 10, 2022, at 5:30 PM. The transaction ID is +000,000.230021200000009123 ETH, sent from 0xb519...zajg to Ethereum Chequing. The status is Confirmed. The 'Add Tags' section is visible. A callout box notes: "The 'Add Tags' list item, when pressed displays the 'Transactions / Tags' screen. Only display this list item (title) if the Ethereum transaction does not have any assigned tags. A transaction will initially not be assigned any tags."

Screenshot 2 (Right): Shows a transaction from Oct 3, 2022, at 5:29 AM. The transaction ID is -4,000,0000000000000000009123 ETH, sent from 0xb819f5ea0ba39494ce839613ffba7427957 zksd to Ethereum Chequing. The status is Confirmed. The 'Add Tags' section is visible. A callout box notes: "The 'Tags' list item, when pressed displays the 'Transactions / Tags' screen. Only display this list item (title and tags) if the Ethereum transaction has at least one tag assigned. Tags: • Place as many tags as possible on the single row. • Order the tags in alphabetical order by tag name."

Common UI Elements:

- Header:** Shows the date and time (e.g., Oct 10, 2022 • 5:30 PM or Oct 3, 2022 • 5:29 AM).
- Back Arrow:** Located at the top left of each screen.
- Transaction ID:** Shown above the recipient address.
- Status:** Shown in a green box with the word "Confirmed".
- From:** Shows the sender's address and name.
- To:** Shows the recipient's address and name.
- Transaction Fee:** Shows Gas Price and Gas Limit.
- Other Details:** Shows Block Number, Position in Block, and Nonce.
- Tags:** A section showing assigned tags (e.g., Charity Gala, Dreamforce Conf.) and a numerical value (+1) indicating missing tags.
- Callout Boxes:** Provide detailed explanations for the 'Add Tags' and 'Tags' sections.

Testing

Testing

White Box Testing

Unit Test

- Tests are used in areas of the code base where the code has many paths or is very complex, this allows us to quickly test many different inputs

Integration Test

- Test the services e2e including integrations with the HTTP endpoint and the database but mocks out the integrations with other services

Black Box Testing

System Test

- Detox automated tool
- Runs on iOS and Android emulator
- Tests a feature e2e using the entire system and all 3rd party services and integrations

Acceptance Test

- Run one per user story based on the definition of done and acceptance criteria
- Run manually by the stakeholder

Unit Tests

API

- 5 Test Suites 10 Tests

```
# yarn run test:unit
$ NODE_ENV=test jest --config jest-config-unit.json --verbose
PASS  test/unit/base/base.controller.spec.ts (5.926 s)
  BaseController
    BaseController::find
      ✓ should return process details with all keys and correct types (17 ms)

PASS  test/unit/wallets/wallets.controller.spec.ts (6.077 s)
  WalletsController
    WalletsController::create
      ✓ should return a WalletWithBalance if the request is valid (22 ms)
      ✓ should throw a BadRequestException if name contains special characters (14 ms)
    WalletsController::findAll
      ✓ should return a list of WalletWithBalance (5 ms)

PASS  test/unit/transactions/transactions.controller.spec.ts (6.281 s)
  TransactionController
    TransactionController::findall
      ✓ should return list of transactions (21 ms)

PASS  test/unit/authentication/authentication.controller.spec.ts (6.974 s)
  AuthenticationController
    AuthenticationController::signUp
      ✓ should return an access token if user data is valid (23 ms)
      ✓ should throw a BadRequestException if email is missing from request body (13 ms)
    AuthenticationController::signIn
      ✓ Should return an access token if the user can sign in (12 ms)
      ✓ Should throw a BadRequestException if password is missing from request body (4 ms)

PASS  test/unit/users/users.controller.spec.ts (7.053 s)
  UsersController
    UsersController::whoami
      ✓ should return user found by id in token (16 ms)

Test Suites: 5 passed, 5 total
Tests:       10 passed, 10 total
Snapshots:  0 total
Time:        7.467 s, estimated 8 s
Ran all test suites.
Done in 8.10s.
```

Eth-edge

- 5 Test Suites 10 Tests

```
# yarn run test:unit
$ NODE_ENV=test jest --config jest-config-unit.json --verbose
PASS  test/unit/base/base.controller.spec.ts
  BaseController
    BaseController:: find
      ✓ should return process details with all keys and correct types (17 ms)

PASS  test/unit/transactions/transactions.controller.spec.ts (5.753 s)
  TransactionController
    TransactionController::findAll
      ✓ should return list of transactions (15 ms)

PASS  test/unit/wallets/wallets.controller.spec.ts (5.884 s)
  WalletsController
    WalletsController::create
      ✓ should return a WalletWithBalance if the request is valid (12 ms)
      ✓ should throw a BadRequestException if name contains special characters (8 ms)
    WalletsController::findAll
      ✓ should return a list of WalletWithBalance (3 ms)

Test Suites: 3 passed, 3 total
Tests:       5 passed, 5 total
Snapshots:  0 total
Time:        6.199 s
Ran all test suites.
Done in 6.77s.
```

Integration Tests

API

- 4 Test Suites 9 Tests

```
PASS test/integration/base_api.spec.ts (11.236 s)
Base
  GET /
    ✓ should return system process details (22 ms)

Files ✓ should return system process details (22 ms)

PASS test/integration/wallet_api.spec.ts (11.341 s)
Wallets
  POST /users/:id/wallets
    ✓ should create the wallet and return the wallet with the balance (41 ms)
  GET /users/:id/wallets
    ✓ should return a list of users wallets (8 ms)

PASS test/integration/user_api.spec.ts (11.512 s)
Users
  GET /users/whoami
    ✓ should return a signed token when sign up is successful (108 ms)

PASS test/integration/auth_api.spec.ts (11.963 s)
Authentication
  POST /auth/signup
    ✓ should return a signed token when sign up is successful (209 ms)
    ✓ should return a 400 status code if user with email already exists (143 ms)
  POST /auth/signin
    ✓ should return a signed token when sign in is successful (113 ms)
    ✓ should return a 403 status code if user email is not found (62 ms)
    ✓ should return a 403 status code if password does not match email (114 ms)
```

Eth-edge

- 2 Test Suites 2 Tests

```
PASS test/integration/base_api.spec.ts (9.46 s)
Base
  GET /
    ✓ should return system process details (19 ms)

PASS test/integration/transaction_api.spec.ts (9.913 s)
Transactions
  POST /transactions
    ✓ should insert all matching transactions from the incoming event (367 ms)
```

Test Coverage

Cryptify - API

94.85% Statements 258/272 58.33% Branches 7/12 86.66% Functions 39/45 94.22% Lines 212/225

File	Statements	Branches	Functions	Lines
src/controllers	98.43%	63/64	0%	11/11
src/gateways/edge-gateway	91.3%	42/46	100%	8/11
src/guards	86.95%	20/23	40%	2/2
src/modules	100%	60/60	100%	2/2
src/services	91.17%	62/68	75%	14/17
src/strategies	100%	10/10	100%	2/2
test/fixtures	100%	1/1	100%	0/0

Cryptify - Eth-Edge

79.51% Statements 132/166 50% Branches 2/4 59.37% Functions 19/32 78.57% Lines 110/140

File	Statements	Branches	Functions	Lines
src/controllers	100%	35/35	100%	7/7
src/gateways	69.23%	9/13	100%	1/2
src/modules	100%	39/39	100%	3/3
src/services	61.53%	48/78	50%	8/20
test/fixtures	100%	1/1	100%	0/0

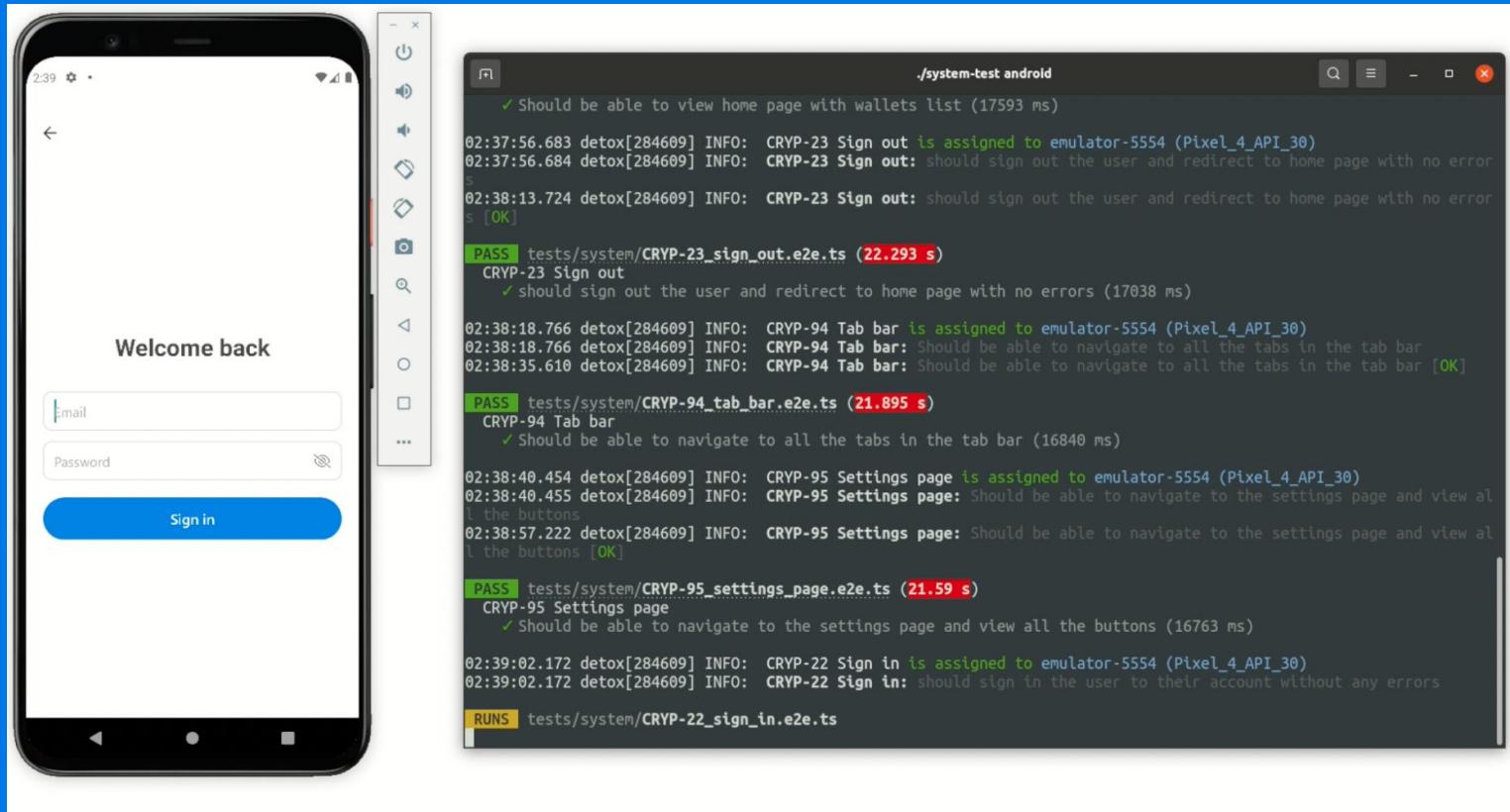
Acceptance Test

- For each user story there is an Acceptance test
- They have been approved by our stakeholder
- We have 13 Acceptance tests as of now

AT-1	CRYP-21 - As a User, I want to sign up for an account, so that I can access the application's features		
Preconditions	New user without an account is accessing the website		
Acceptance Criteria	Expected Result	Input Data	
GIVEN I am on the sign up page	Sign up page should be displayed		
AND I input all required fields with valid data on the Account page	No form errors should be displayed	- First name - Last name - Email - Password - Confirm Password	
WHEN I click the Sign Up button			
THEN my account should be created			
AND I should be logged in			
AND I should be redirected to the main screen.			
Result	PASS		

AT-13	CRYP-108 - As a User, I want to share my Ethereum wallet address, so that others can easily send me crypto without inputting my wallet address incorrectly		
Preconditions	User is logged in on the site and has at least one ETH wallet registered		
Acceptance Criteria	Expected Result	Input Data	
GIVEN that I am on my wallet overview screen	All wallet information needs to be displayed		
AND I am logged in			
AND I have a wallet registered			
AND I press the QR code button			
THEN I should be redirected to the QR code details screen			
AND I should see my QR code	I should be able to copy the QR code to my clipboard		
Result	PASS		
AT-5	CRYP-26 - As a User, I want to view the details for each of my Ethereum wallets, so that I can see all associated information available on the blockchain		
Preconditions	User is logged in on the site and has an ETH wallet registered		
Acceptance Criteria	Expected Result	Input Data	
GIVEN that I am on the home page	Home page should be displayed		
AND I am logged in	My name should be displayed at the top and my wallets should display		
AND I press my wallet	I should see my wallet with recent transactions		
AND I press the details button			
THEN I should be redirected to the wallet details page	I should see all relevant information about my wallet		
Result	PASS		

System Tests



The image shows a mobile application interface on the left and a terminal window on the right.

Mobile Application (Left):

- Time: 2:39
- Screen: Welcome back
- Fields: Email (placeholder), Password (placeholder)
- Button: Sign in

Terminal Window (Right):

```
./system-test android

✓ Should be able to view home page with wallets list (17593 ms)
02:37:56.683 detox[284609] INFO: CRYP-23 Sign out is assigned to emulator-5554 (Pixel_4_API_30)
02:37:56.684 detox[284609] INFO: CRYP-23 Sign out: should sign out the user and redirect to home page with no error
02:38:13.724 detox[284609] INFO: CRYP-23 Sign out: should sign out the user and redirect to home page with no error
s [OK]

PASS tests/system/CRYP-23_sign_out.e2e.ts (22.293 s)
CRYP-23 Sign out
✓ should sign out the user and redirect to home page with no errors (17038 ms)

02:38:18.766 detox[284609] INFO: CRYP-94 Tab bar is assigned to emulator-5554 (Pixel_4_API_30)
02:38:18.766 detox[284609] INFO: CRYP-94 Tab bar: Should be able to navigate to all the tabs in the tab bar
02:38:35.610 detox[284609] INFO: CRYP-94 Tab bar: Should be able to navigate to all the tabs in the tab bar [OK]

PASS tests/system/CRYP-94_tab_bar.e2e.ts (21.895 s)
CRYP-94 Tab bar
✓ Should be able to navigate to all the tabs in the tab bar (16840 ms)

02:38:40.454 detox[284609] INFO: CRYP-95 Settings page is assigned to emulator-5554 (Pixel_4_API_30)
02:38:40.455 detox[284609] INFO: CRYP-95 Settings page: Should be able to navigate to the settings page and view all the buttons
02:38:57.222 detox[284609] INFO: CRYP-95 Settings page: Should be able to navigate to the settings page and view all the buttons [OK]

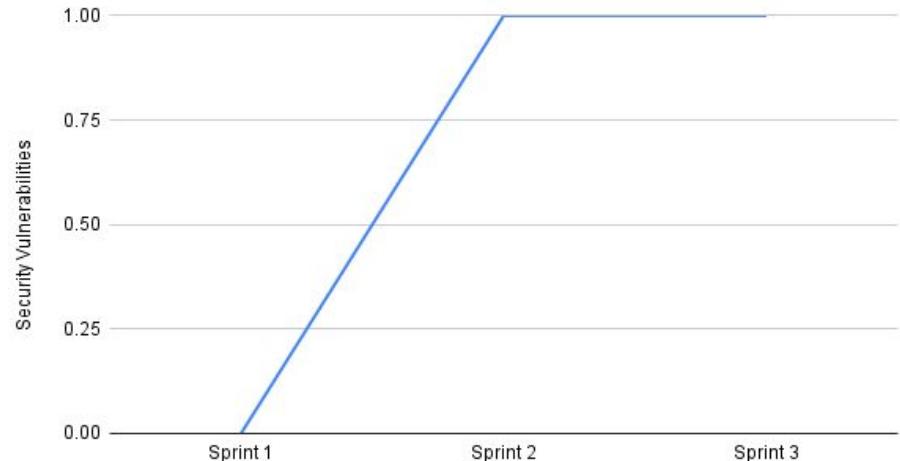
PASS tests/system/CRYP-95_settings_page.e2e.ts (21.59 s)
CRYP-95 Settings page
✓ Should be able to navigate to the settings page and view all the buttons (16763 ms)

02:39:02.172 detox[284609] INFO: CRYP-22 Sign in is assigned to emulator-5554 (Pixel_4_API_30)
02:39:02.172 detox[284609] INFO: CRYP-22 Sign in: should sign in the user to their account without any errors

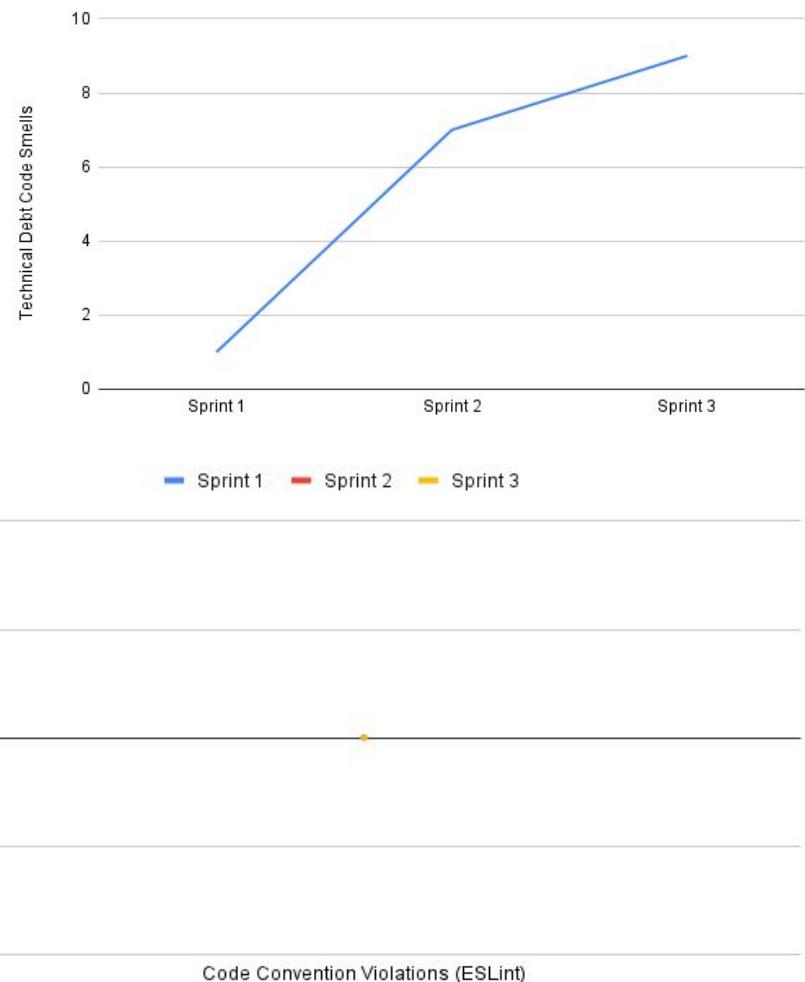
RUNS tests/system/CRYP-22_sign_in.e2e.ts
```

Quality Assurance

Security Vulnerabilities

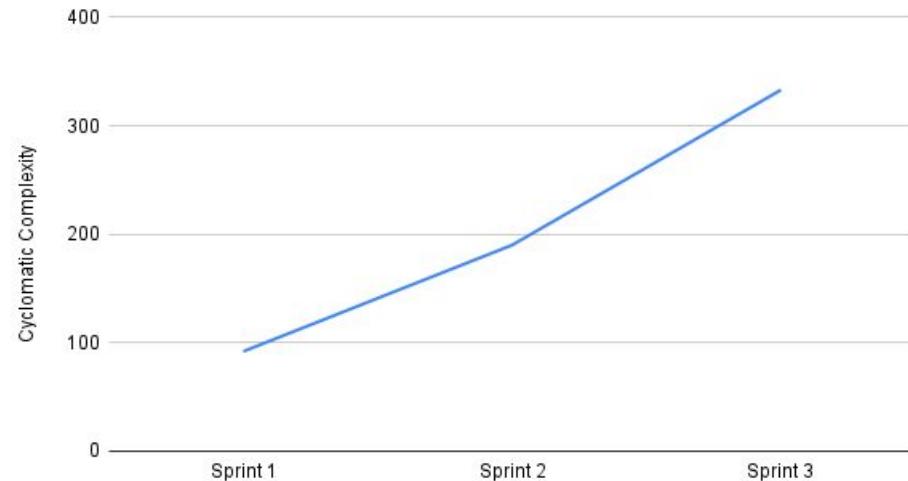


Technical Debt Code Smells

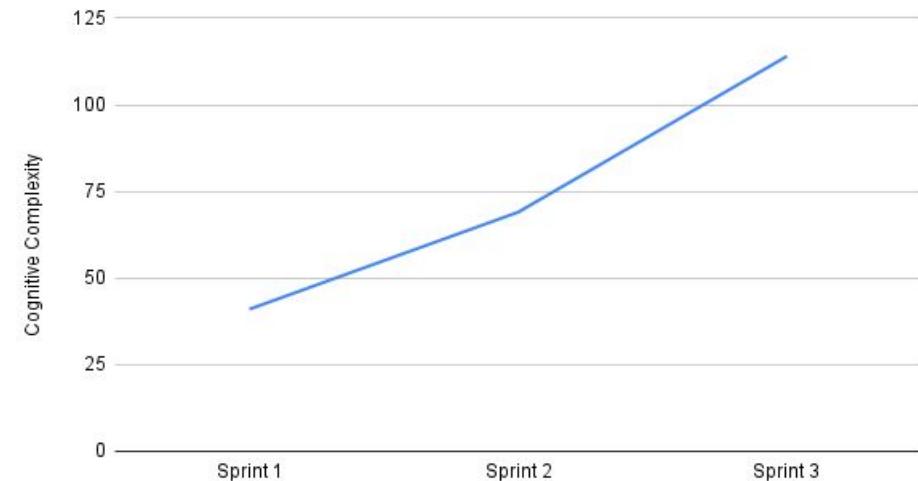


Quality Assurance

Cyclomatic Complexity

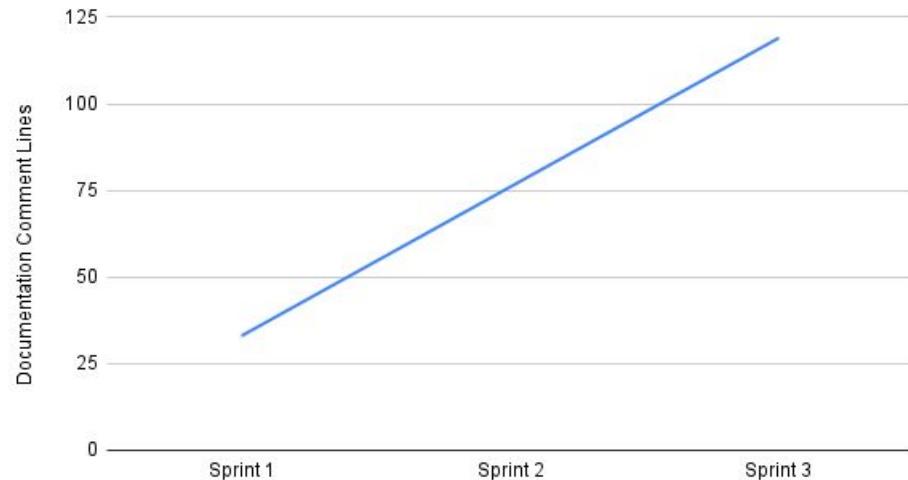


Cognitive Complexity

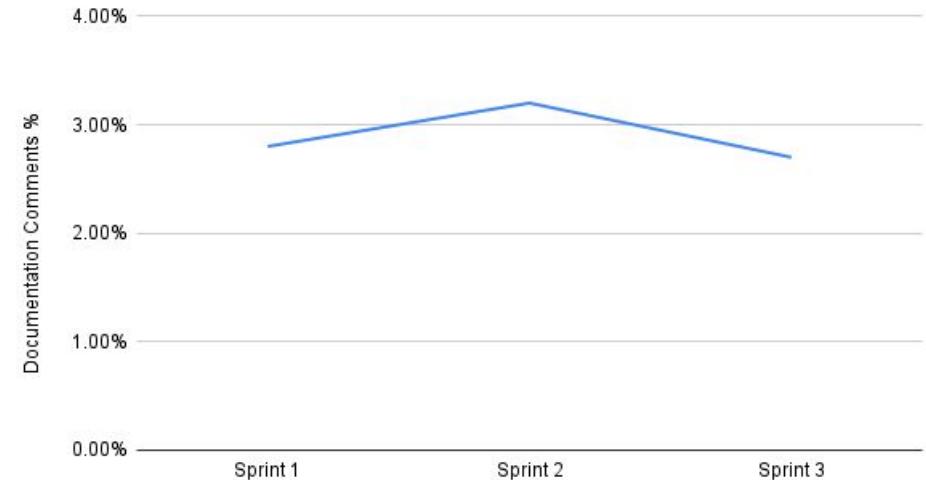


Quality Assurance

Documentation Comment Lines

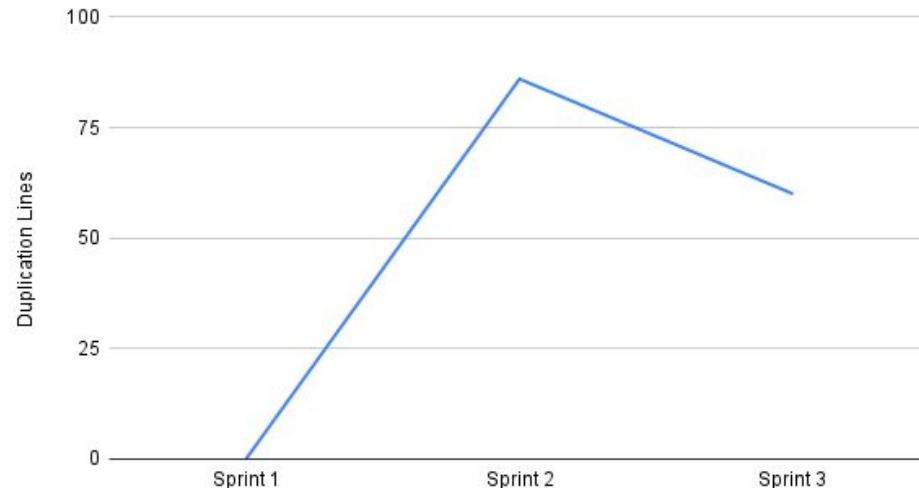


Documentation Comments %

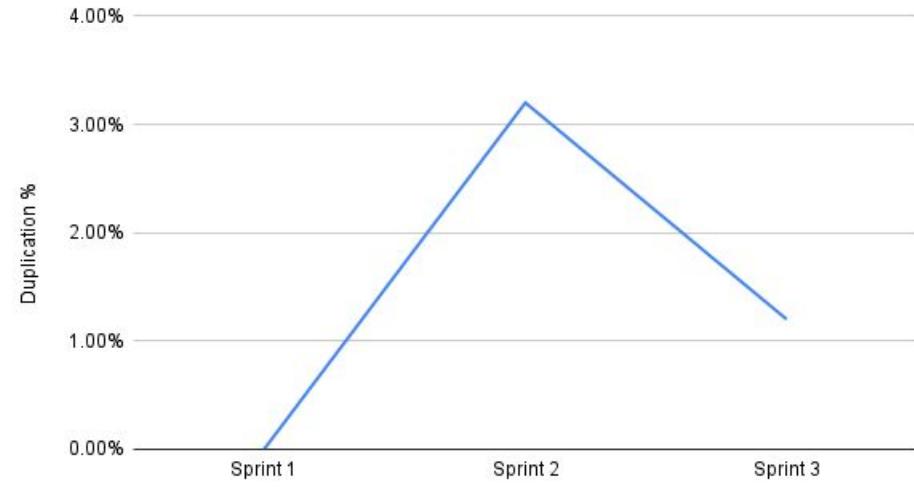


Quality Assurance

Duplication Lines



Duplication %



Quality Assurance

