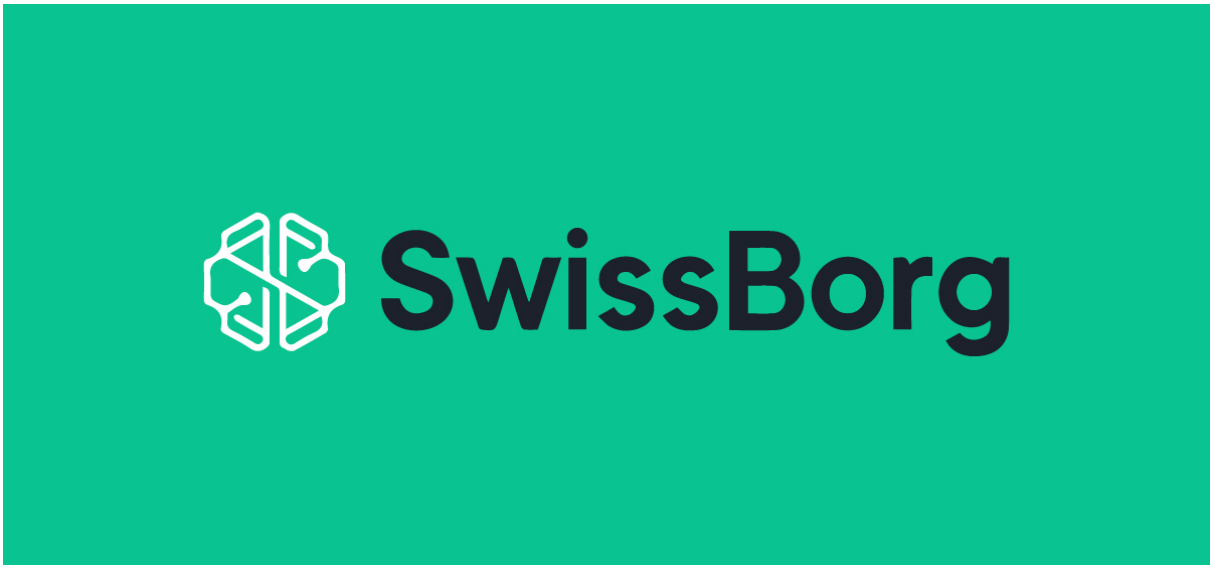


Exercise 2

Acceptance Criteria for Avalanche crypto faucet

Overview

The task at hand requires drafting detailed Acceptance Criteria for a series of user stories related to the operation and use of the Avalanche crypto faucet. These user stories encompass a range of functionalities including Metamask integration, manual address entry for token requests, address validation, and limiting token drop frequency to prevent abuse. The AC derived from these stories will serve as benchmarks for the faucet's design and implementation.

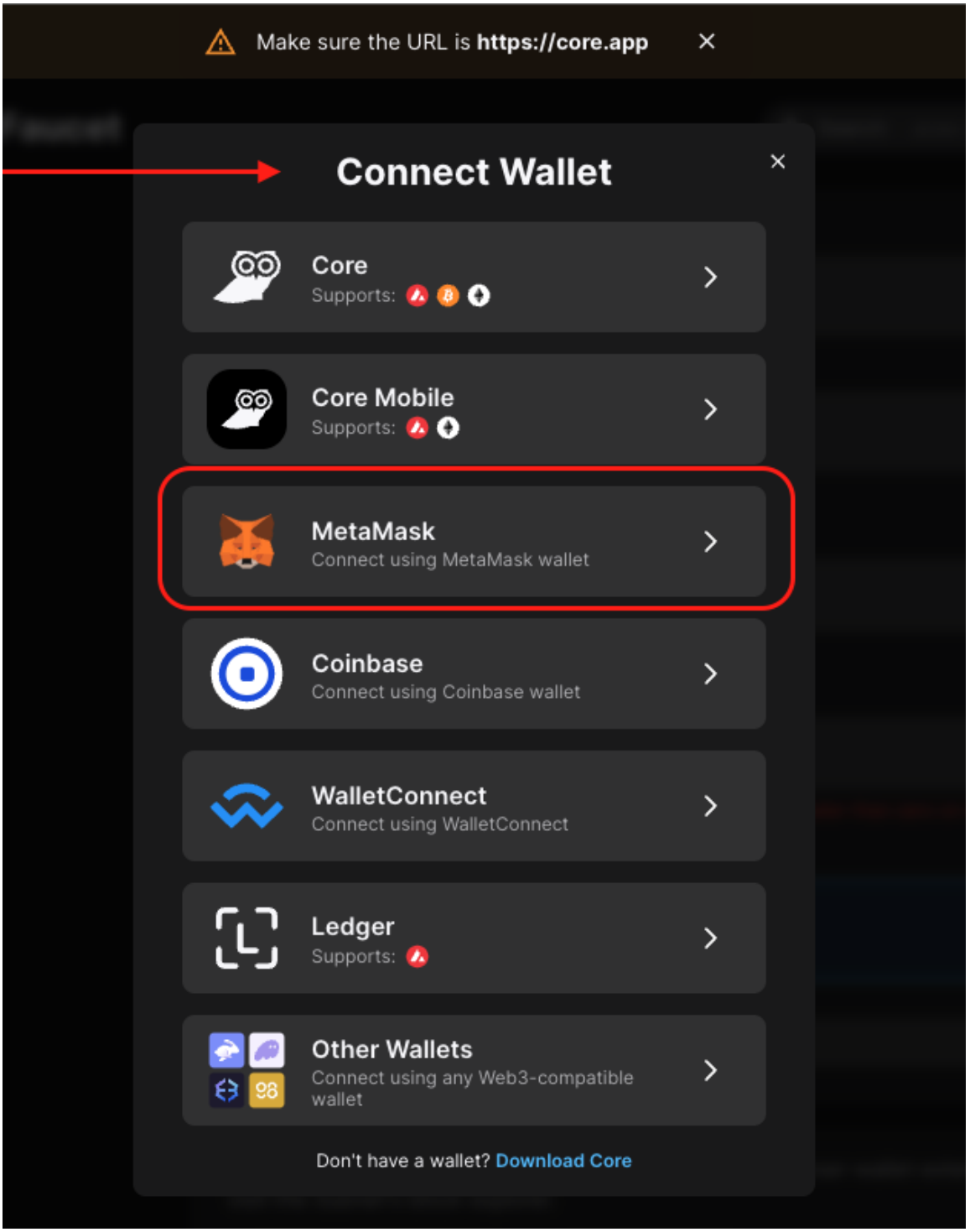
User Stories and Acceptance Criteria 📜✅

1. **Connecting Metamask Account to the Faucet**

   Acceptance Criteria:

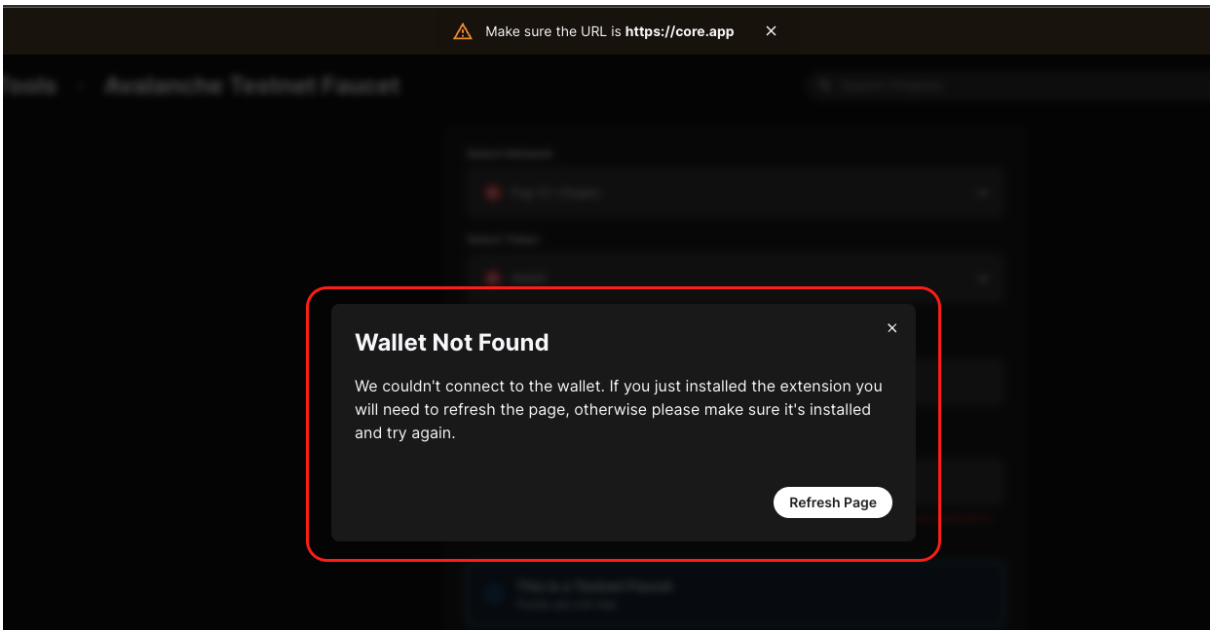
   - 🌐 The faucet's user interface must feature a clearly visible button labeled "Connect Wallet" in order to be able to connect Metamask.

- 🖱️ Clicking the "Connect Wallet" button should prompt the user with a Metamask pop-up requesting authorization for the connection.



- ✔️ After the user authorizes the connection, the faucet should display the user's Metamask account address as a confirmation of the successful link.

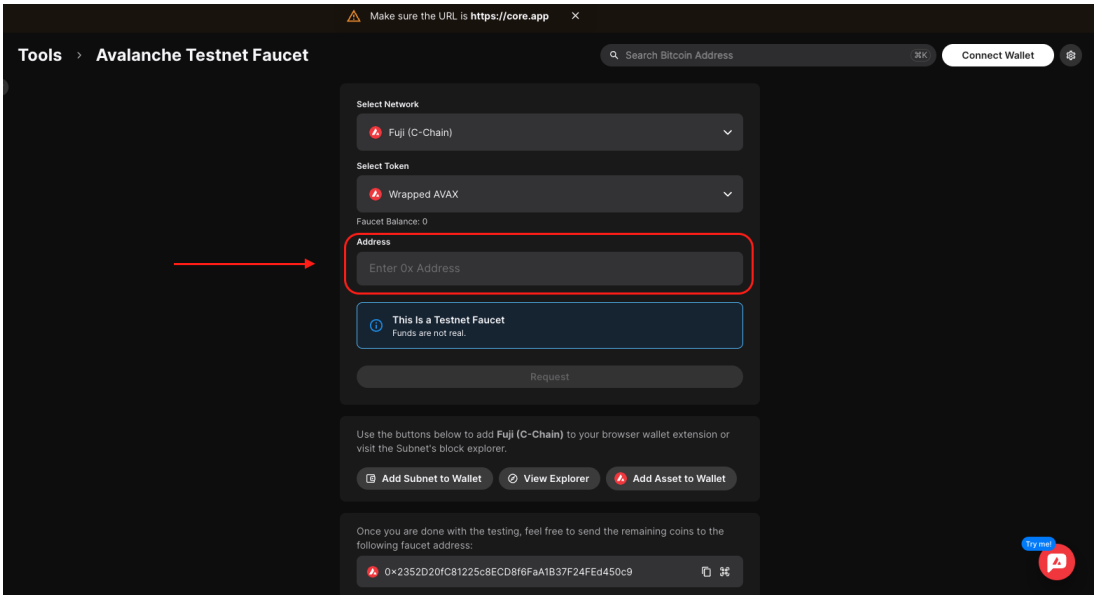
- ❌ Should the connection attempt fail, the faucet must present an error message detailing the reason for the failure, such as Metamask not being installed or the user declining the connection.



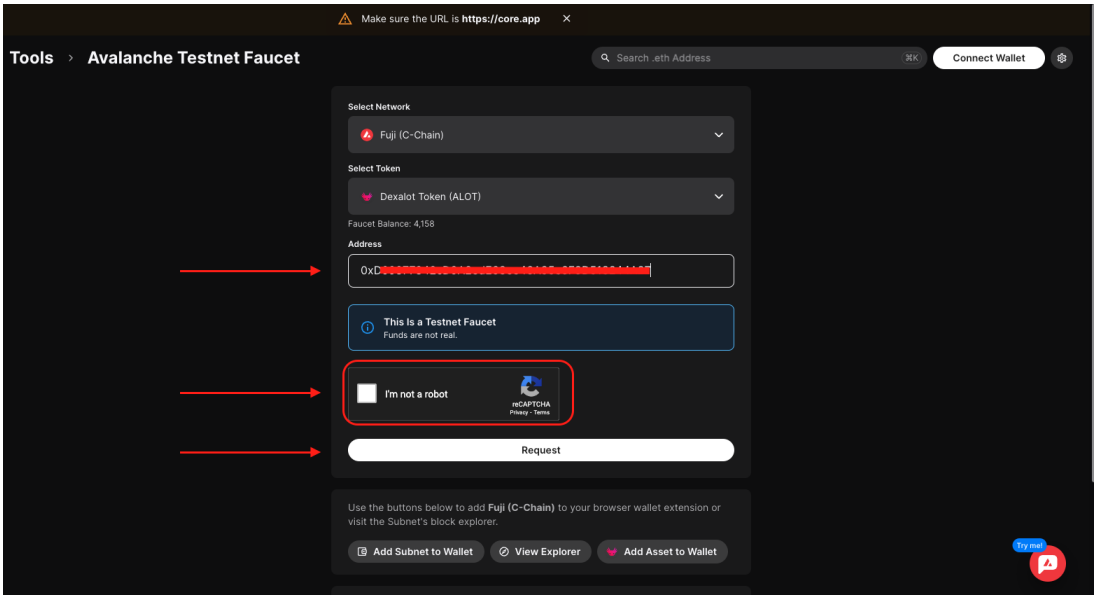
2. **Receiving Test Tokens Without Connecting Metamask Account**

   Acceptance Criteria:

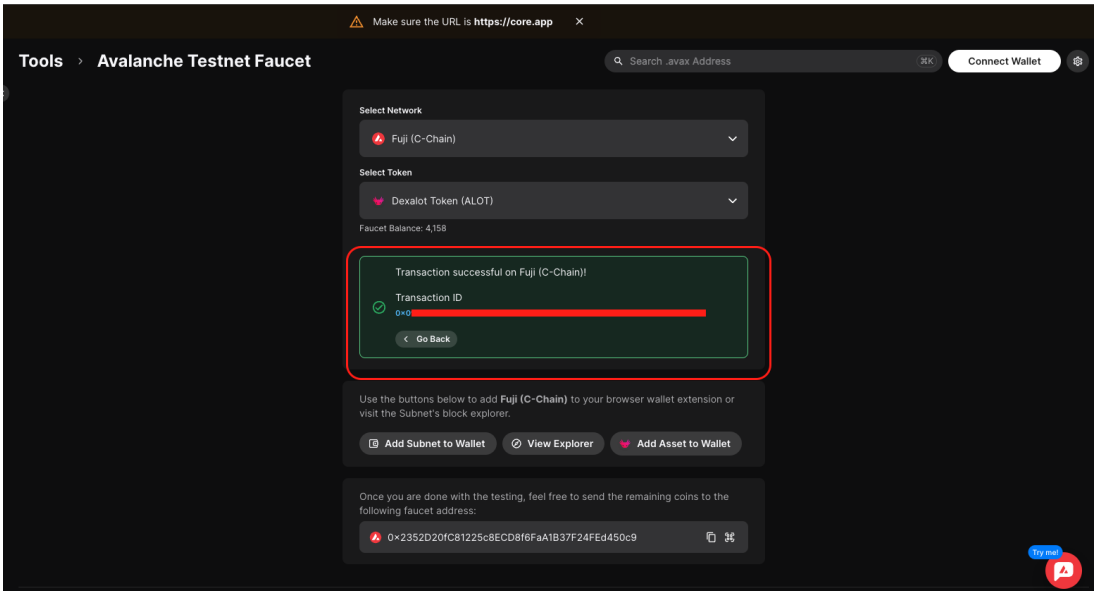
   - 📩 Users must be provided with an input field clearly marked for entering their Avalanche wallet address without needing to connect a Metamask account.



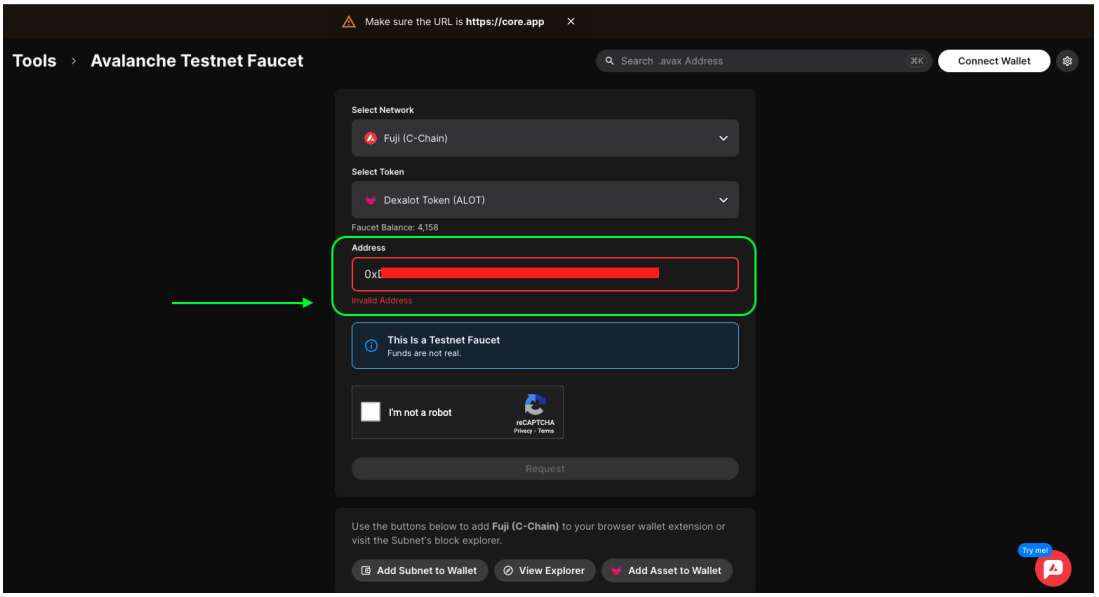
- 🚀 Upon entering a valid Avalanche wallet address and initiating the token request, the faucet must confirm the submission and process the distribution of test tokens to the specified address.



- 🎉 A confirmation message containing the transaction details should be displayed post successful token distribution.



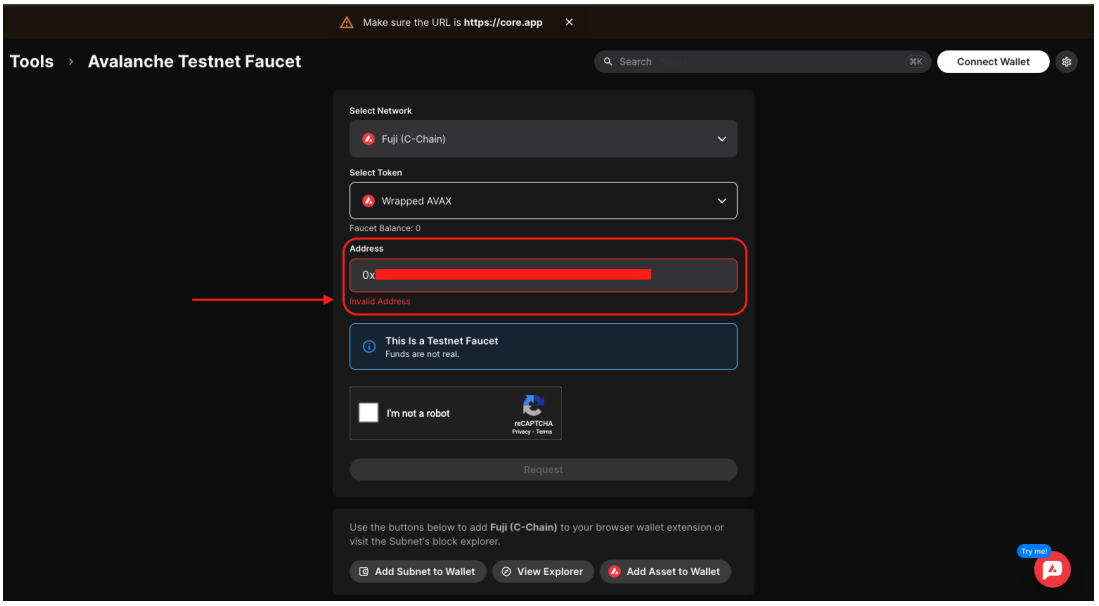
- ❗ In instances of invalid address formats, users should be alerted through a message specifying the correct format requirements.



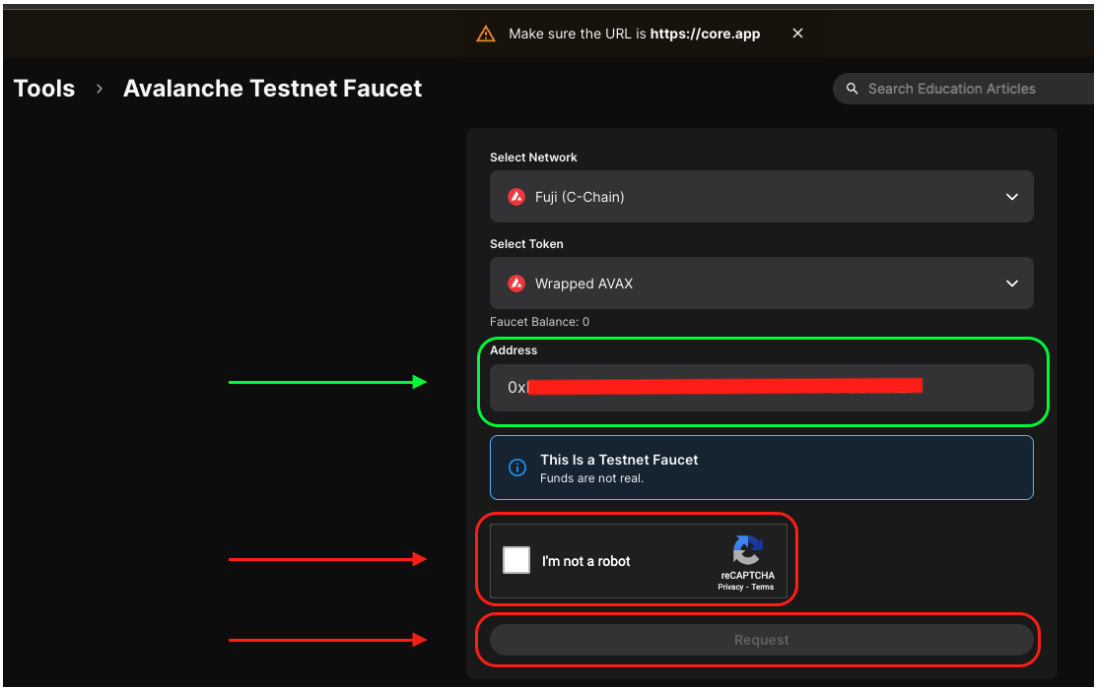
3. **Validating Deposit Address for Correctness**

   Acceptance Criteria:

   - ✔️ The faucet must instantaneously validate the format of entered deposit addresses against the established Avalanche wallet address standards.



- 🔴 Visual indicators, such as a red-highlighted text area for invalid ones, should guide the user during the validation process.
- 🚫 The option to request tokens should remain inactive until a valid wallet address is entered and reCAPTCHA check performed, ensuring no invalid addresses are processed and that the faucet is protected against automated access and abuse by bots.

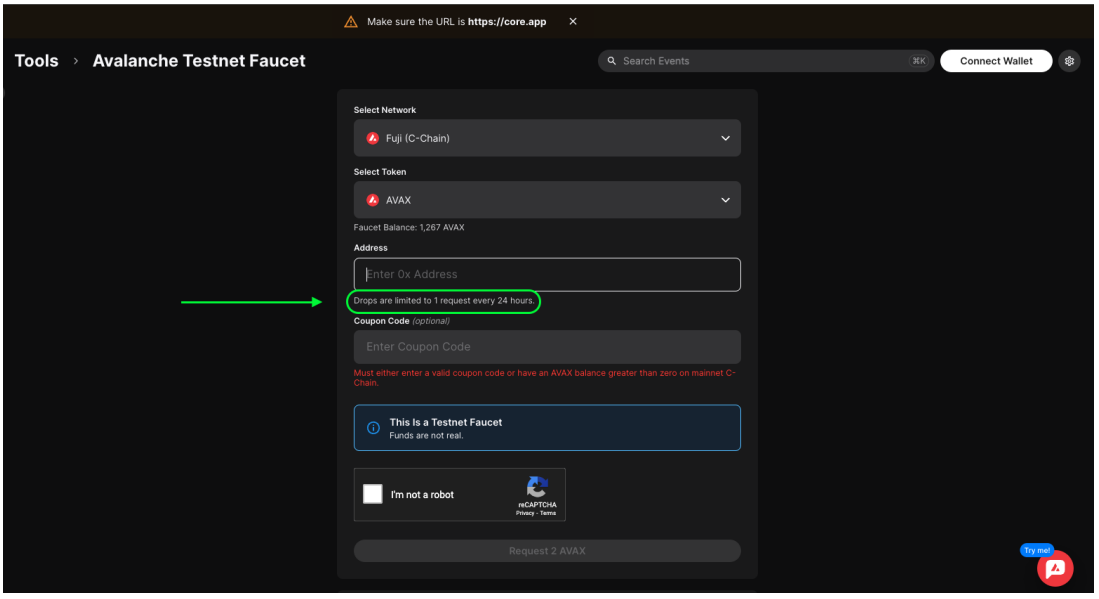


- ✅ Token distribution must not proceed unless the validation confirms the address's correctness, ensuring the integrity of transactions.

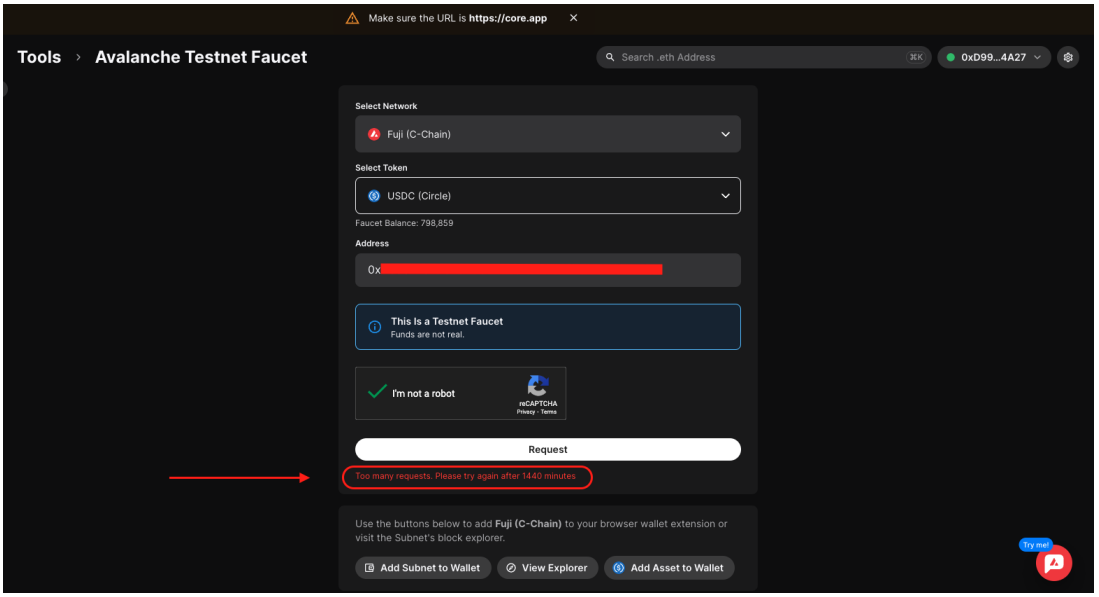
4. **Limiting Token Drops to One in 24 Hours**

   Acceptance Criteria:

   - ⏰ The system is required to log the time of each successful token request for every unique wallet address.



   - 🚫 Requests for additional tokens from the same address within a 24-hour window from the last successful drop must be automatically denied, accompanied by a notification detailing when the next request can be made.
   - 🔒 This limitation applies individually to each wallet address and potentially each IP address to prevent users from exploiting the faucet's resources.
   - 🔄 Users become eligible for another token drop only after 24 hours have passed since their last successful request, maintaining fair access to the faucet.



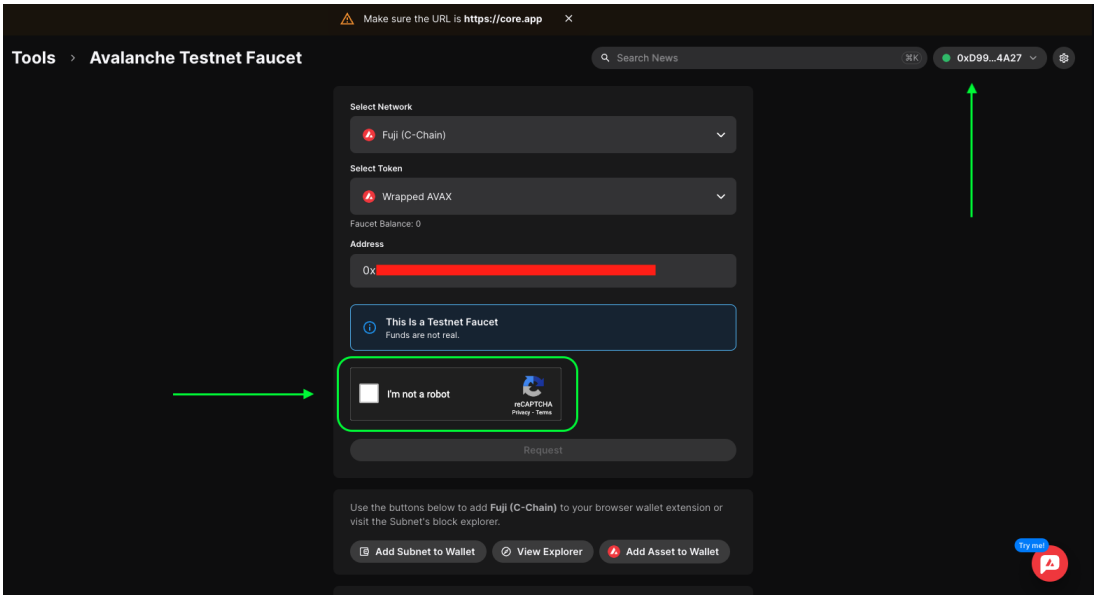
Additional User Stories and Acceptance Criteria 🟫✅

1. **Ensuring Security and Preventing Abuse**

   User Story: As the owner of the faucet, I want to implement robust security measures to deter abuse and maintain equitable access for all users.

   Acceptance Criteria:

   - 🤖 The implementation of CAPTCHA verification is mandatory for all token requests to prevent automated access and abuse by bots.



- ⏳ Rate limiting must be enforced to restrict the number of requests from a single IP address within a given timeframe, safeguarding the faucet against denial-of-service attacks.
- 📝 The system should maintain logs of suspected abusive behavior and alert administrators for potential action.

2. **Token balance and conditions that need to be met to perform request**

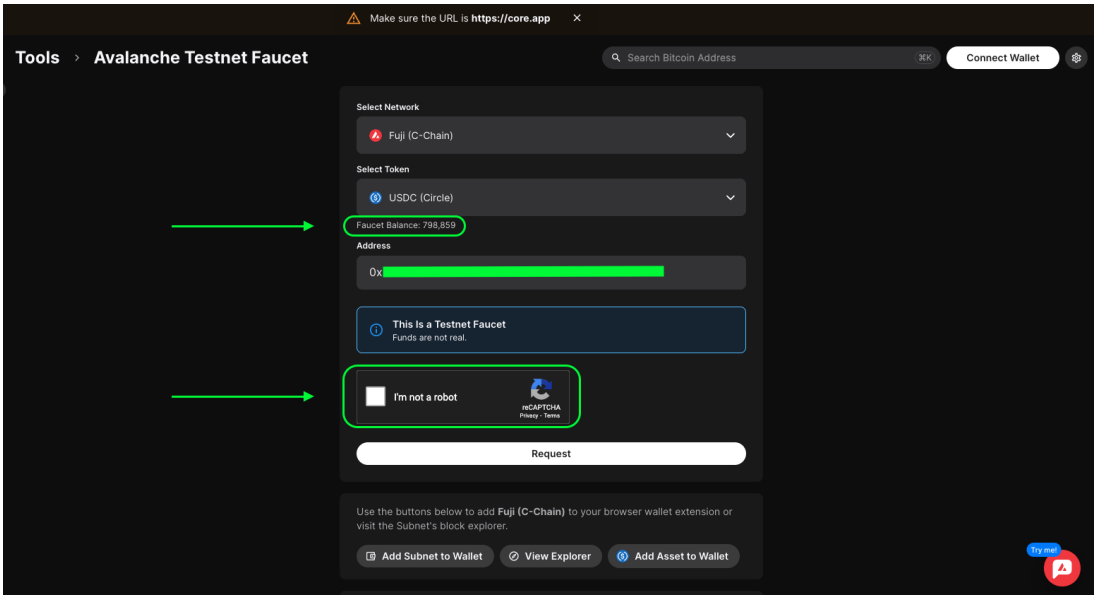
   User Story: As a user, I am able to see the selected token balance, and if the balance is 0, I am unable to request the token.

   Acceptance Criteria:

   - The balance of the selected token is displayed beneath the token dropdown, even if the Metamask wallet is not connected.
   - The Request button is initially disabled.
   - In order to enable the Request button, the following conditions must be met:
     - The user provides their wallet address.
     - The balance of the selected token is greater than 0.
     - The user successfully performs the reCAPTCHA check.
   - If any of the above conditions are not met, the Request button remains disabled.

📊 The balance of the selected token is displayed beneath the token dropdown.
✅ The Request button is initially disabled.
🚫 In order to enable the Request button, the following conditions must be met:

- The user provides their wallet address.
- The balance of the selected token is greater than 0.
- The user successfully performs the reCAPTCHA check.



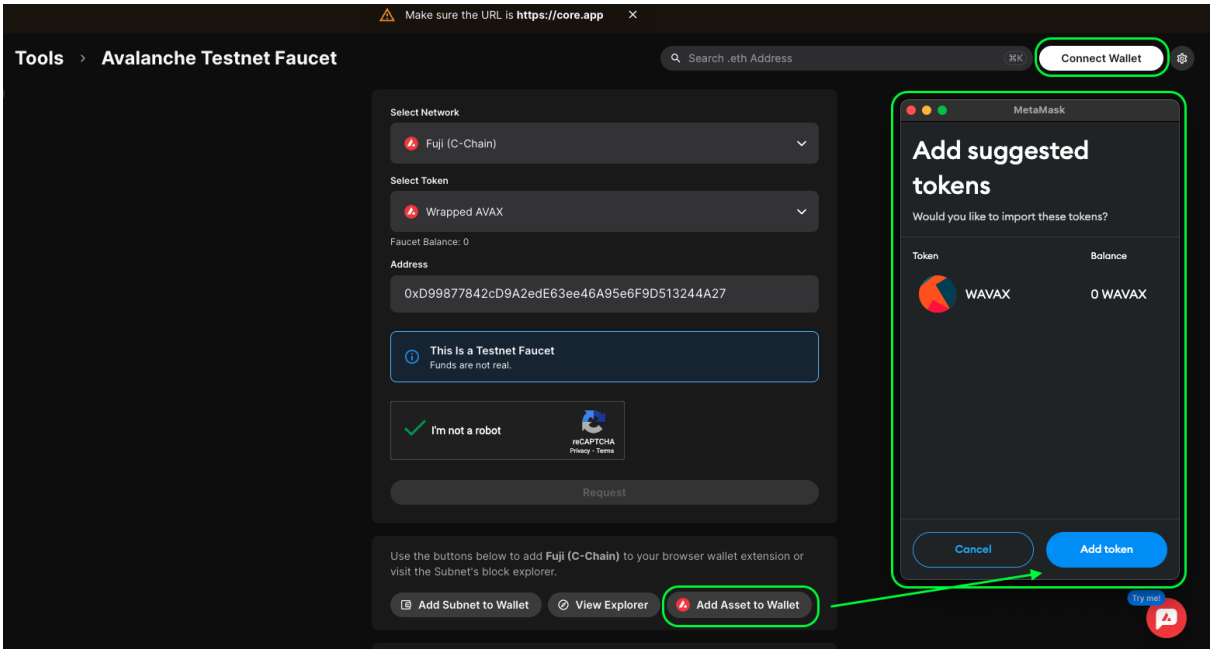
3. **Adding Asset to Wallet**

   User Story: As a user, I want to be able to add a selected token as an asset to my wallet by clicking the "Add Asset to Wallet" button.

   Acceptance Criteria:

   - 🌐 The faucet's user interface must include a prominently displayed button labeled "Add Asset to Wallet".
   - 🖱️ Clicking the "Add Asset to Wallet" button should open a new popup window.
   - 🚪 The popup window should display a message informing the user about the potential risks of adding unsafe tokens to their Metamask wallet.

- 🆗 The popup window should also include buttons labeled "Add token" and "Cancel".
- 💼 If the user clicks on "Add token", the selected token should be added as an asset to their Metamask wallet.
- 🚫 If the user clicks on "Cancel" or closes the popup window, no changes should be made to their wallet.



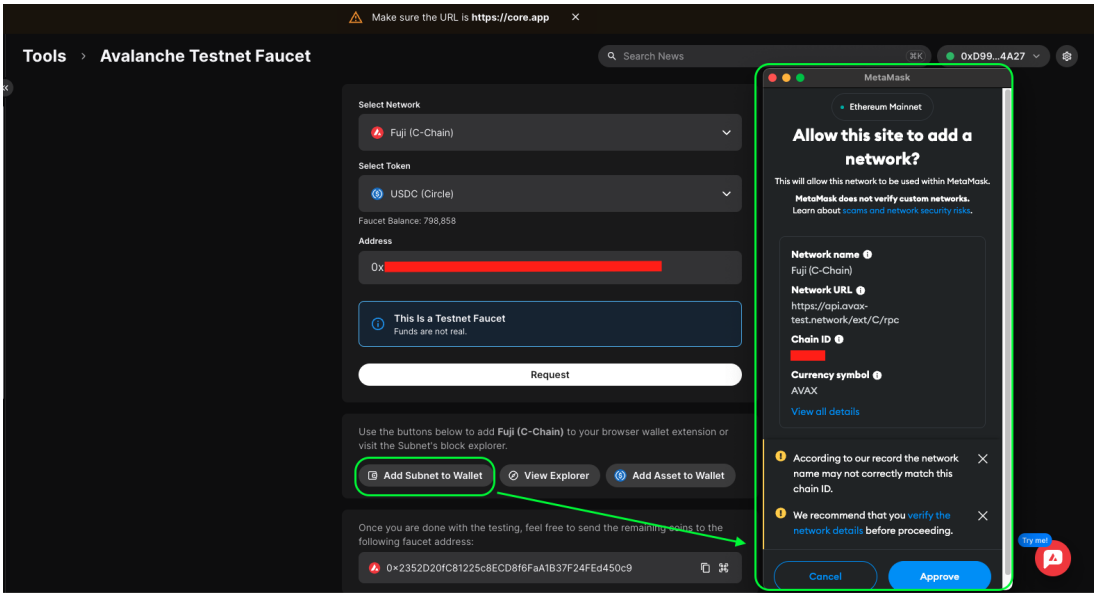
1. **Adding Subnet to Wallet**

   User Story: As a user, I want to be able to add a selected subnet to my wallet by clicking the "Add Subnet to Wallet" button.

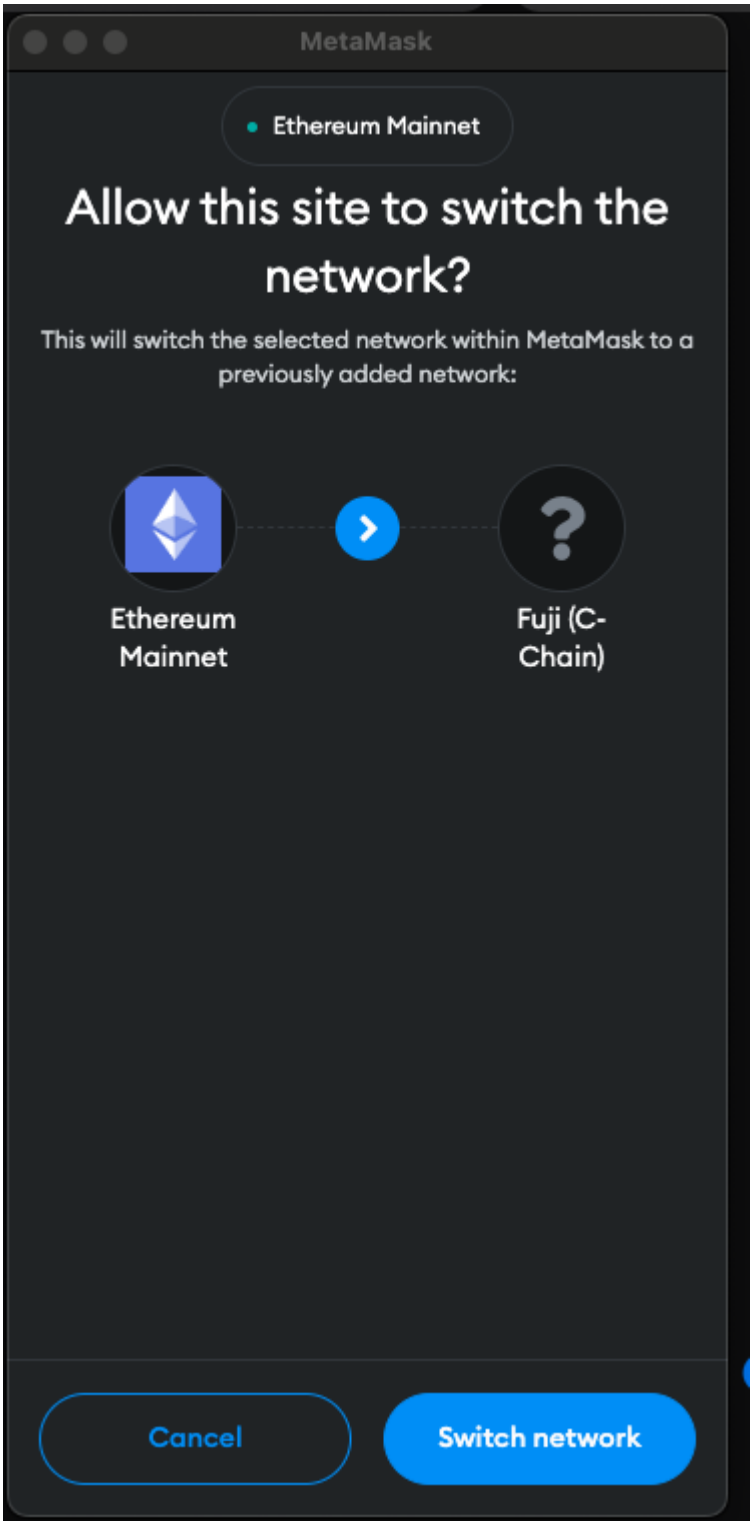
   Acceptance Criteria:

   - 🌐 The faucet's user interface must include a prominently displayed button labeled "Add Subnet to Wallet".
   - 🖱️ Clicking the "Add Subnet to Wallet" button should open a new prompt window.
   - 🪟 The prompt window should display information about the selected network, including the network name, network URL, Chain ID, and currency symbol.

- 🚫 The prompt window should include a cautionary message about the potential risks of adding an unsafe subnet to the wallet.
- 💼 The prompt window should also include buttons labeled "Approve" and "Cancel".



- 🔒 If the user clicks on "Approve", they will be presented with another option to switch networks from their current network (e.g., Ethereum Mainnet) to the selected network in the Faucet tools (e.g., Fuji or C-Chain).



- 🚫 If the user clicks on "Cancel" or closes the prompt window, no changes should be made to their wallet.

This document was created by Dario Ćurjak. 📝✨