

1200167-Open source dynamic assets

CIP68-Product Requirements

1. Introduction:

Problem:

CIP68 offers many more advantages. However, the Community now needs a tool to create and manage CIP68 assets and this proposal will solve that problem.

Solution:

The purpose of the proposal is to provide a tool (a web portal) that allows users to create, update and manage assets safely and conveniently.

2. Version control

Version	Date	Key Changes	By
1.0	11 - Aug - 2024	The initial version	Tien Nguyen Anh
1.1	10 - Oct - 2024	Update Functions and design	Tien Nguyen Anh

3. Project Team

Role	Name
Product Lead	Tien Nguyen Anh
Quality lead	Hieu Nguyen Van
Project Manager	Thanh Khuat Dinh
UI/UX lead	Dung Phung Tien
Front End lead	Dung Phung Tien
Backend lead	Khanh Nguyen Duy
Off-chain/On-Chain lead	Khanh Nguyen Duy

Meeting Schedule: Every monday's evening at 21:00 on zoom link

Reference links:

Doc	Location
Github	https://github.com/cardano2vn/cip68generator
Miro	https://miro.com/app/board/uXjVKhLXUiU=/
Figma	https://www.figma.com/design/F0i6C62BWxT3Mz1sT2Ynd0/shadcn-design?node-id=4-6598&node-type=canvas&t=ofaZtVo9dxTB2VGH-0

4. Basic functions for users

These features are drawn from survey responses from more than 20 users and consensus from the implementation team.

	Functions	FE/BE
Basic functions	Login, identify users through common wallets	FE
	Landing page for login	FE
	There is a token creation page that allows users to create tokens, enter images, and metadata can be defined by themselves	FE/BE
	There is a token management page in the connected wallet, which can display the token number, name, and view metadata information, and has an edit function that leads to the edit page	FE/BE
	The edit page allows full display of token information. Allows editing, deleting, and adding new information in metadata	FE/BE
	The page allows users to select and burn their tokens.	FE/BE
	Users can upload photos to represent tokens or enter their available IPFS addresses (users declare IPFS)	FE/BE
	Allows creation of multiple NFTs from importing csv files	FE/BE
	Allows viewing of NFTs before minting	FE/BE

	Save NFT metadata as template	FE/BE
	Enables display/management of CIP68 compliant NFTs	FE/BE
	Enables pushing NFTs to decentralized exchanges (optional)	FE/BE
	There are 02 options for SC: minter editable and owner editable (optional).	Optional
	Supports image file metadata. Other formats are optional	FE/BE
	Supports querying NFT revision history	FE/BE
	Ability to estimate transaction fees	FE/BE
Support API	Call API (FEE=0)	Optional
User document	Documentation for using product features in text and video	FE
Setup document	Implementation guide	FE
Interface	Page headers contain basic information such as: team introduction, contact us, link to home page.	FE
	Page footers contain basic information including: email, telegram, C2VN website	FE
	Default language for UI/UX is English	FE
IPFS	Using free tier	BE

5. Basic functions for systems:

These features are drawn from survey responses from more than 20 users and consensus from the implementation team.

	Functions	Notes
Basic functions	Interface written in any languages	
	FE can interact with BE to perform basic operations	

	Transaction editing	
	SC is written in AIKEN	
	Environmental variables (Blockfost ID, IPFS ID, network...) of the program need to be saved in the file /secrets/.env	
	Customize fee collection (YES/NO), YES=> set variable FEE=?. Measure the number of uses by counting transactions with SC, save information >30 NFTs toll collection	
	Code is managed by github	
	Product is packaged into containers and be open source.	
	DApp operates on mainnet/prepod	

6. Non functional /user requirements

	Functions	Notes
Non functional requirements	Intuitive, user-friendly interface	
	Creates a smooth and enjoyable user experience	
	Data processing must be accurate	
	Efficient processing performance	
User requirements	Ability to edit NFT metadata after minting	
	Supports a variety of content types for NFTs (PNG, JPEG)	
	Displays a history of metadata modifications	
	Customizable metadata design	
	Lists NFTs minted from the user's wallet	
	The interface should be youthful and user-friendly	
	It should provide both text and video tutorials.	

	The system should be able to guide users when they make incorrect or inappropriate selections.	
	It should be able to estimate transaction fees.	

7. Appendix:

CIP68 Link: <https://cips.cardano.org/cip/CIP-68>

CIP25 Link: <https://cips.cardano.org/cip/CIP-25>

CIP30 Link: <https://cips.cardano.org/cip/CIP-30>