Protocol Requirements
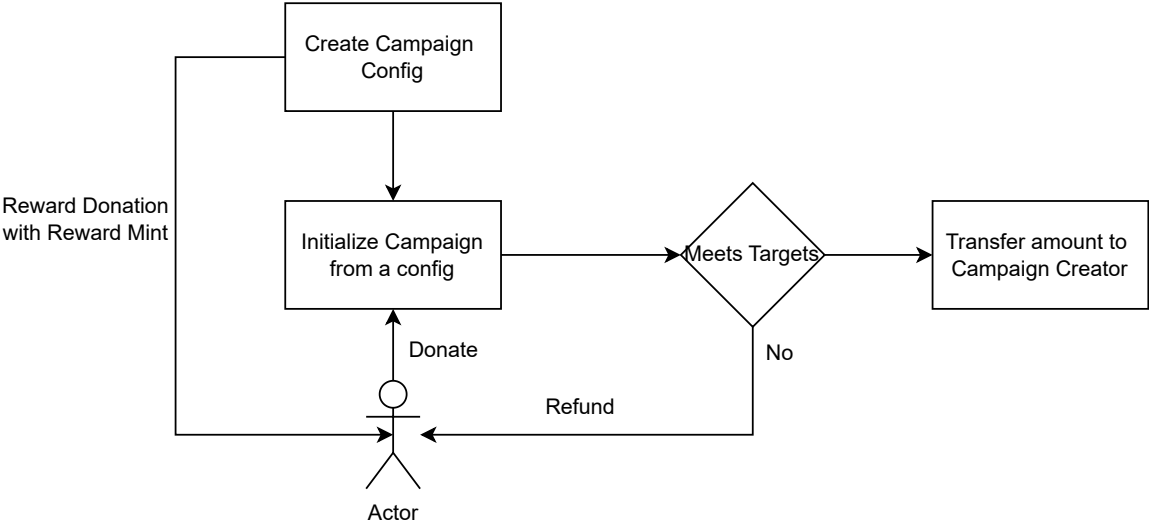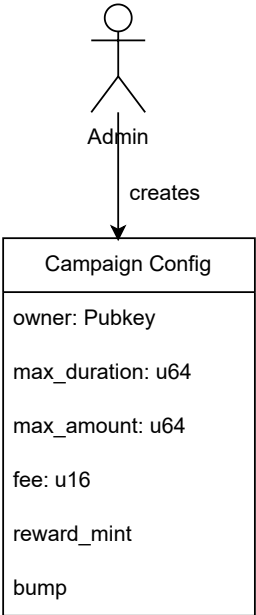The platform shall allow users to create/publish campaigns
The platform shall allow users to donate to campaigns
The platform shall allow Tokens to be minted as donation reward
The platform shall allow for a user to withdraw funds earned from a campaign that has meet its
arget
The platform shall allow for users to Refund donation from a campaign

Program Overview

```
                    ┌──────────────────┐
                    │  Create Campaign │
                    │      Config      │
                    └──────────────────┘
                              │
                              ▼
Reward Donation     ┌──────────────────┐                              ┌──────────────────┐
with Reward Mint    │ Initialize Campaign │────▶  ◇ Meets Targets ◇ ────▶│ Transfer amount to │
                    │   from a config   │                              │ Campaign Creator │
                    └──────────────────┘                              └──────────────────┘
                              ▲
                           Donate                        No
                              │
                              ○
                              │        Refund
                              ▲  ◀──────────────
                             Actor
```

Initialize Campaign Config

Admin

creates

Campaign Config
owner: Pubkey
max_duration: u64
max_amount: u64
fee: u16
reward_mint
bump

User Create Campaign

Actor

Campaign

title

description

target_amount

current_amount

start_timestamp

end_timestamp

bump

Campaign Vault — linked to →

User Donate to Campaign

Actor

initiate donation to Campaign

is Valid Donation

No

yes

Transfer Amount from Actor to CampaignVault

Update Campaign Donation Data

```
┌─────────────────────┐
│   Mint Reward token │
│       to Actor      │
└─────────────────────┘
          │
          ▼
        (  End  )
```
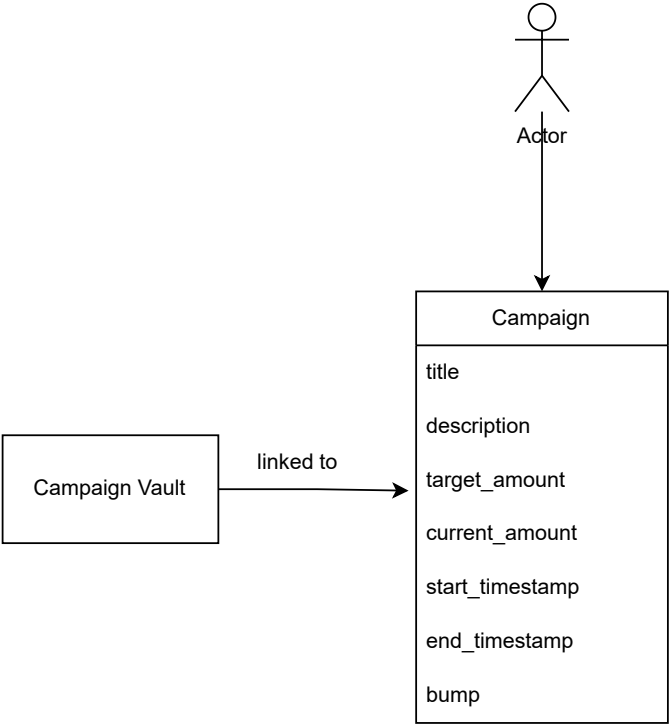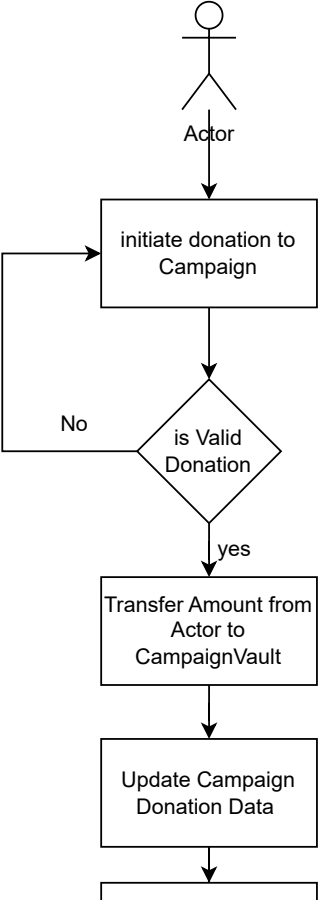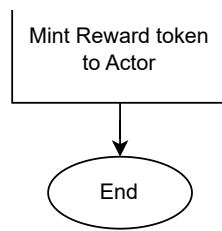
User Request Refund from Campaign

```
          ○
         /|\
          │
        Actor
          │
          ▼
┌─────────────────────┐
│   initiate refund   │◄──────┐
│   donation from     │       │
│     Campaign        │       │
└─────────────────────┘       │
          │                   │
          ▼                   │
         ◇◇◇                  │
   No   is Valid              │
◄────── Donation              │
        refund                │
         ◇◇◇
          │ yes
          ▼
┌─────────────────────┐
│ Transfer Amount from│
│  Vault to Campaign  │
│       Actor         │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│   Update Campaign   │
│   Donation Data     │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  Burn Actor Reward  │
│       token         │
└─────────────────────┘
          │
          ▼
        (  End  )
```

Actor Close Campaign

```
          ○
         /|\
          │
        Actor
          │
          ▼
┌─────────────────────┐
│    intiate close    │
```

campaign

is in Valid campaign close state

No

yes

Transfer Amount from Vault to Campaign Actor

Update Campaign Donation Data

Close Campaign Account

Close Campaign Vault

End