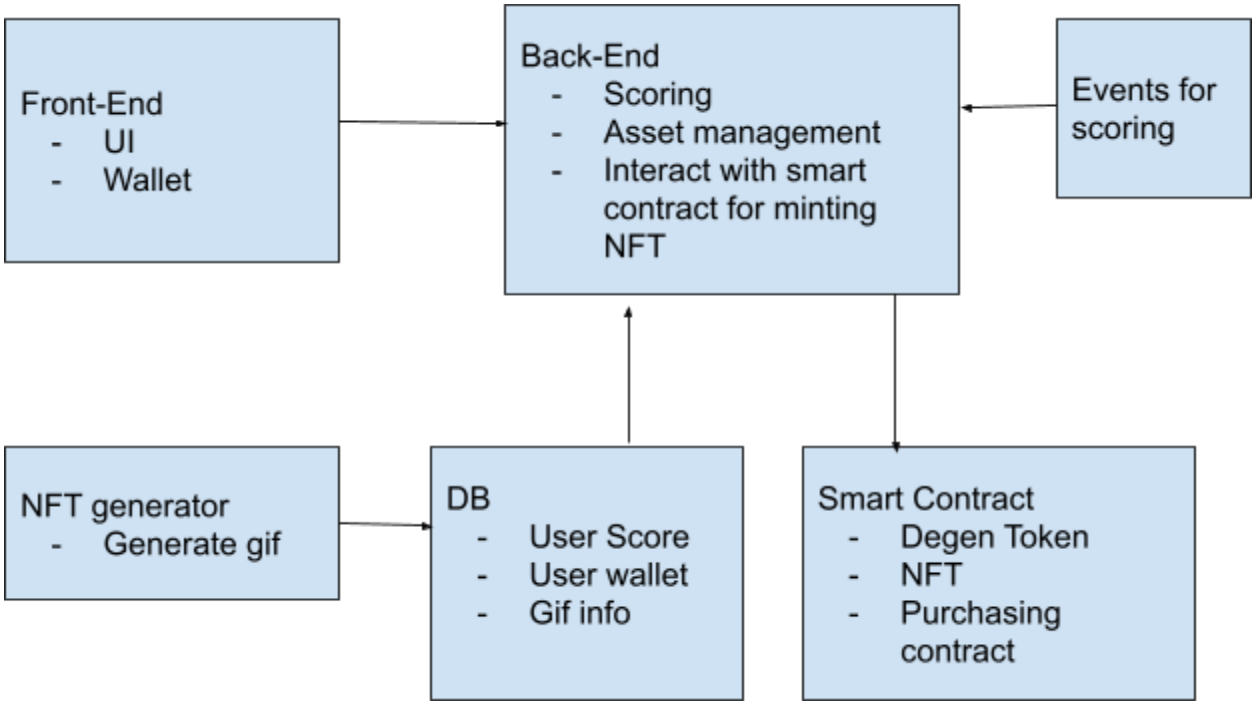
Degen NFT project

NFT generating project on which users can purchase NFT based on their score. The score is calculated by the system automatically with the events that users took place on several platforms. The higher the score is, the better NFT will be unlocked for them. Users can purchase unlocked NFTs by paying Degen Token.

1. Degen NFT system Architecture Overview



- **NFT generator**
  Generate a lot of images for NFTs using assets including BG gifs, body, cigar, shirt, right hand, left hand, cap etc.

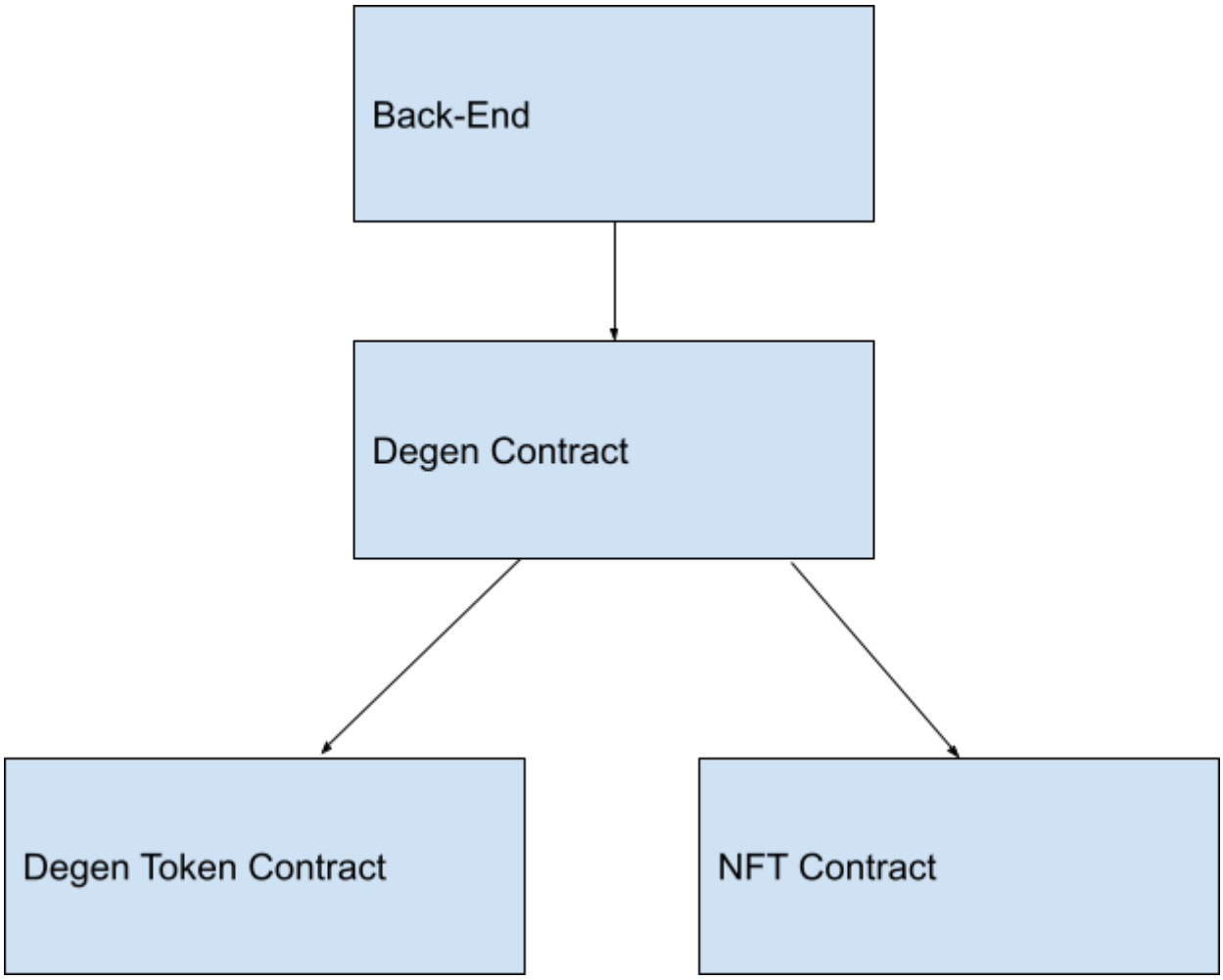
- **Front-end**
  Provides a company wallet for users to manage assets including Degen Token and NFTs they purchased.
  Users see their score, NFTs unlocked and NFTs purchased.

- **Back-end**
  Automatically capture events for each user from several sources and calculate scores.
  Interact with DB for managing user information, wallet management.
  Interact with Smart contract to mint NFTs, purchase NFTs with Degn Token for users

- **Smart Contract**
  Mint and sell NFTs based on the users' scores and receiving Degen Token. Manage NFTs and Degen Tokens.

- **DB**
  Stores user information including email, score, wallet, balance etc.

2. Smart Contract overview



- **Degen Token Contract**
  Utility Token that will be used as a payment on the platform.

- **NFT Contract**
  Zombie token that will be minted for based on their score and given parameter.

- **Degen Contract**

The main contract is in charge of the main logic of mint, purchase of NFTs. Once it gets a function call of minting from the back-end it mints a new NFT token based on the score to the user's address.

3. User Story & workflows

- Users will use Metamask for sign in and purchase NFTs.
- Users can see their score, token balance and unlocked NFTs that are available for them to purchase on the site.
  Once they trigger events on several platforms the backend of the Degen NFT project will capture these and calculate scores automatically.
- Once a user wants to purchase a NFT that is available for him on the site, he can purchase it by paying Degen Token from his Metamask wallet.

  Then the FE will get the score of the user from the backend and call the purchase() function of Degen Contract with the parameter of the score, level, and randomly generated zombie properties. The smart contract will mint a new NFT token with the properties including the link of a zombie gif file and send it to the user’s address. Also it will transfer Degen Token from the user’s wallet to the smart contract address. Front-end sign parameters and send it to smart contract as a parameter for verification

  purchase(address user, uint score, uint level, Zombie property, r,v,s)