

Requirements

Problem Statement:

Fans can only watch, they can not make decisions or influence the organizations that they love and support every week throughout a season. There is almost no system in place for influencing a team's decisions and there is no way to transition from a fan to an active participant. Historically Gaining this voice through direct investment in a specific team is not feasible for the vast majority of fans, with the barrier being immense to the point of being insurmountable. eg. (time, funding, talent acquisition ability).

Goals:

Create a tokenization system built on the Ethereum blockchain, utilizing utility tokens as a valued asset that sports teams will be able to supply to fans. These tokens will allow wider access to the team fan base while allowing fans to engage in some decisions that are made by the sports team through poll voting, as well as a wider range of access to other perks that the team can provide. These decisions could be but are not limited to eg. (appointment of a new manager, trade/purchase of players/team jersey..etc), and also some perks can include VIP access to players' community, access to signed gears which could be prioritized for token holders,

tokens supply will be finite which will allow an increase in value based on demand on supply, tokens have a lifetime existence with no expire date compared to season membership.

Stakeholders:

Sports Team

- Create customized Tokens and supplies.
- Offer incentives for Token holders.

Fans

- Purchase Tokens
- Trade Tokens
- Pool Tokens on voting polls
- Participate in exclusive rewards programs

Restrictions/Rules:

Function Roles	Create Users	Create Token	Create Polls	Buy Token	Vote/Trade
Admin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Teams		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Fans				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Data:

This defines data that is required for the smart contracts, information about the Sports team (Name, Symbol, Decimals, Total supply), hashes of data for fans will be stored on the blockchain but that data will not be stored on the blockchain.

Exceptions:

An audit may need to be done and access may be needed in the case of a government investigation or sports team league operators (E.g. Money Laundering, illegal activities by the sports team).

User Stories:

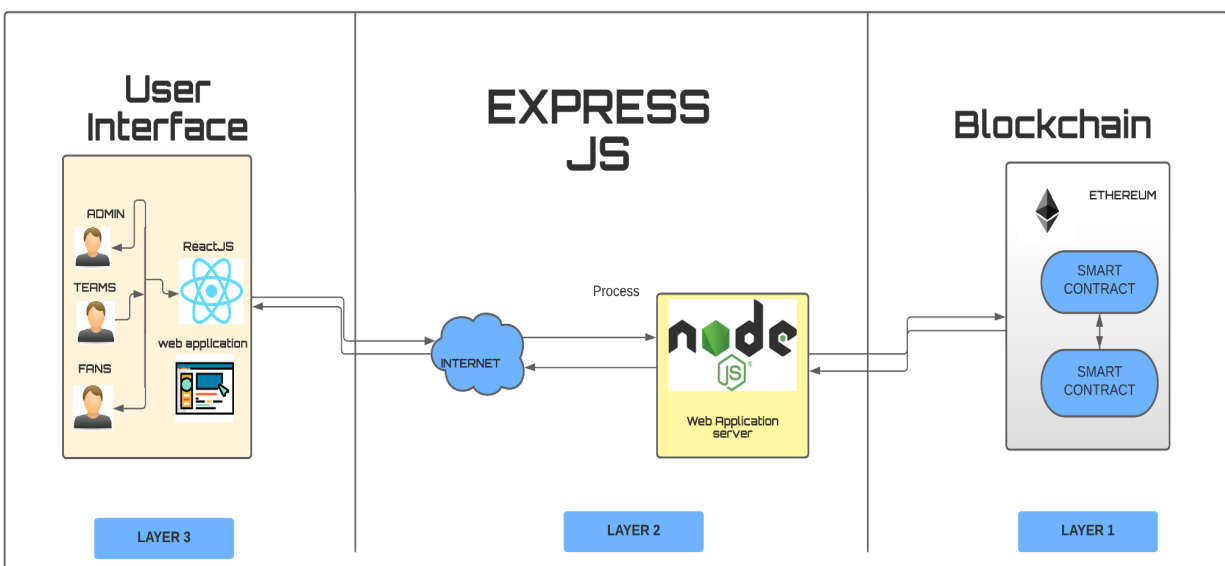
This application demonstrates the use of ERC20 utility tokens built on Ethereum Blockchain which allows sports teams to allocate these tokens to fans that will improve fan engagement and sports team brand exposure. The user interface is built with React which interacts with the blockchain ledger. The application allows sports teams to create customized utility tokens which will be available to be owned by fans, then fans will be allowed to pool tokens in voting polls to make certain decisions and have exclusive access to specified VIP experiences, offering rewards to the wider population of fans on a global scale.

Architecture

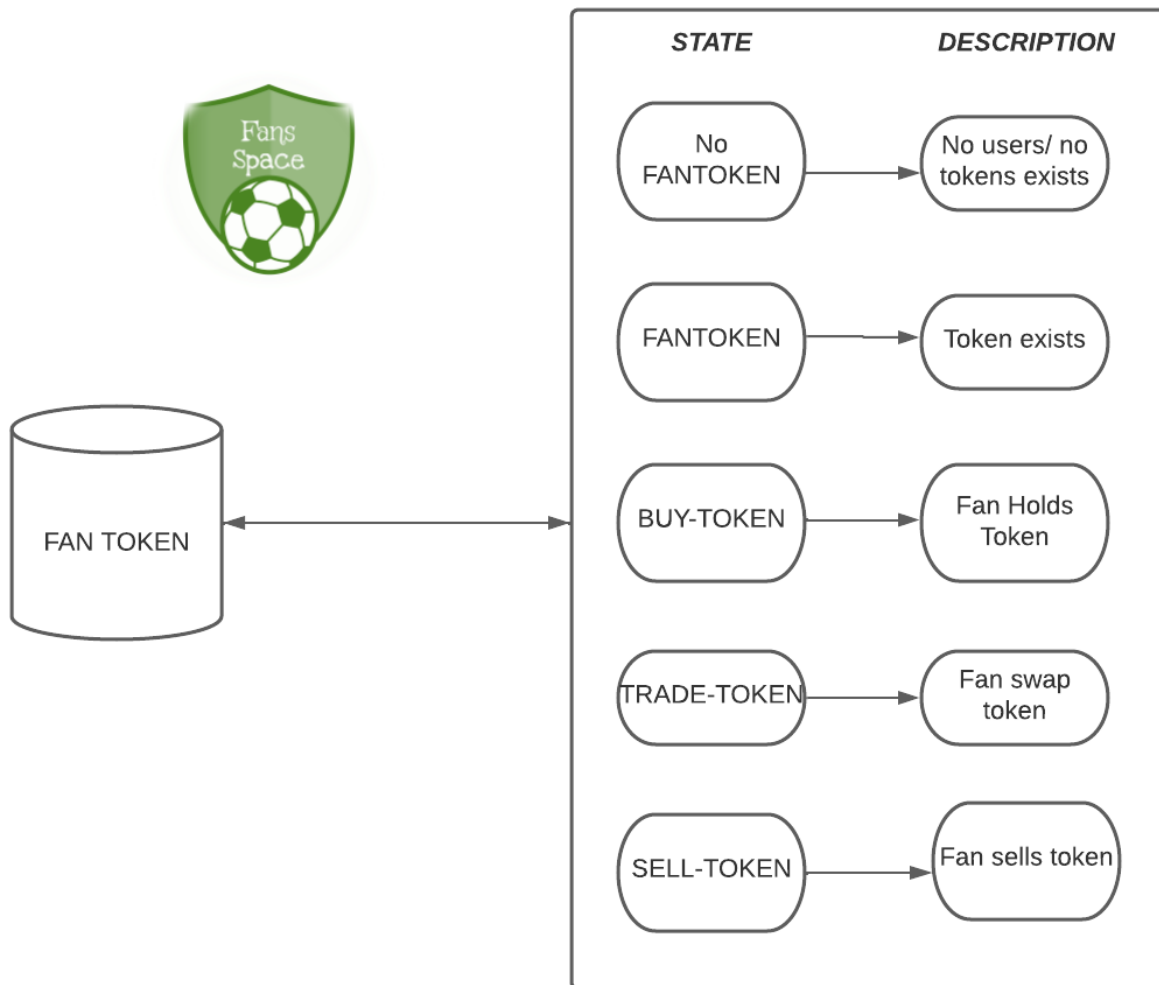
Project Description:

This project is designing a Fan Token dApp (Decentralized Application) using the Ethereum Blockchain framework, other technologies used are Nodejs which acts as a middleware technology in connecting the frontend and backend (blockchain) to communicate together, react is used for developing the Web application. The reason for blockchain is to create a tokenized system on a platform that is trustless, efficient and transparent which allows for sports teams and fans to have a better engagement ecosystem.

Architecture Diagram



State Diagram:



Data:

Token Fields	Token State
Token_Name	Token_Created
Token_Symbol	Token_Purchase
Token_Decimal	Token_Trade
Token_Supply	Token_Sold

Functions - Inputs/Outputs:

Transitions
Create Token
Transfer Token -Purchase
Trade Token
Transfer-Token-Sold