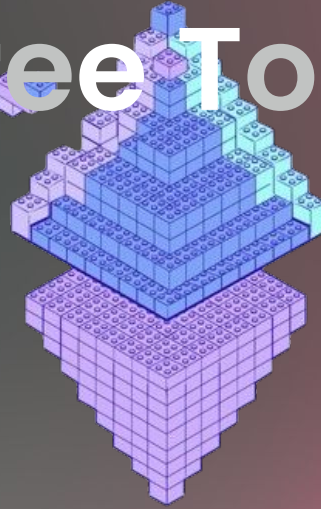


# University Degree Token

Soulbound NFT in education



# About project

- Soulbound tokens (SBTs), or soulbound NFTs, are non-fungible tokens that cannot be transferred to another wallet after they are issued.
- For example, you graduate from a university and receive your degree certificate. Your university, which will issue a digital certificate and a token, will be the Soul in this case.

**Important note:** soulbound tokens, just like NFTs, cannot be issued without a blockchain. They will forever remain there and will be tied to a specific user (wallet) for life.

# Tech Stack



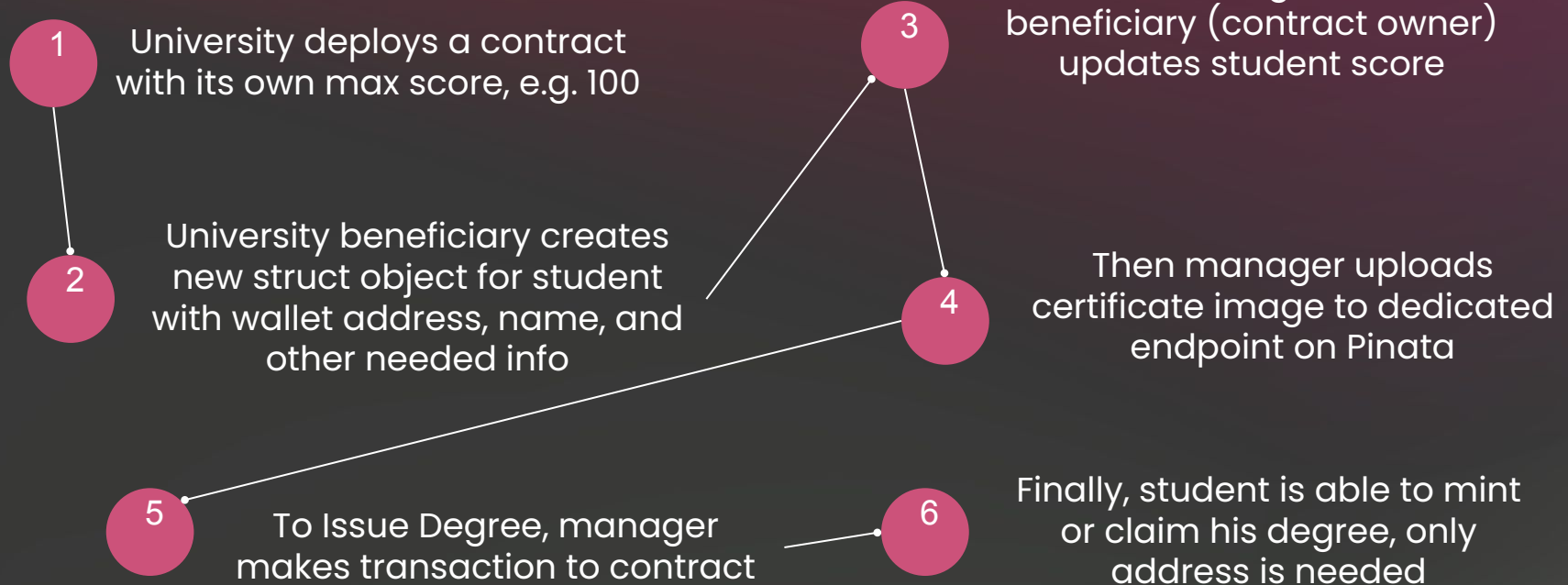
**Contract writing & deploying:**  
Hardhat + Infura

**Frontend:** next.js

**Images store:** Pinata IPFS

**Testnet:** Sepolia

# Project concept



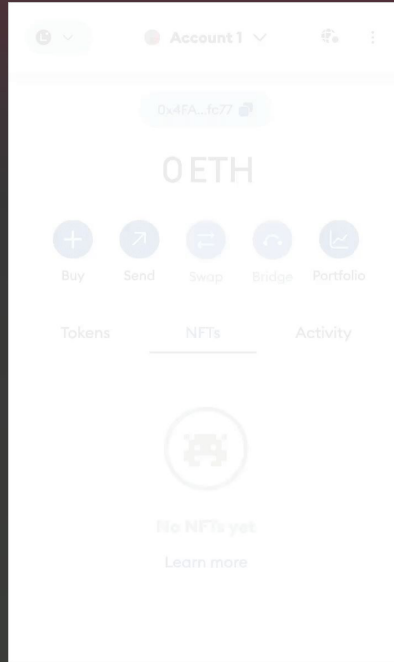
# See your transaction on Etherscan

ERC-721 Tokens Transferred:



ERC-721 Token ID [1]  UniversityDe... (UDSBT...)  
From 0x000000...00000000 To 0x2C9B7E...23BC13A6

# Add NFT to MetaMask wallet



# Final result



[View on OpenSea](#)

# Why this token is non-transferable?

```
function _beforeTokenTransfer(  
    address from,  
    address to,  
    uint256 tokenId,  
    uint256 batchSize  
) internal virtual override (ERC721) {  
    require(from == address(0), "Err: token transfer  
is BLOCKED");  
    super._beforeTokenTransfer(from, to, tokenId,  
batchSize);  
}
```

Every time this code will run, the require statement will check: if the from address parameter in the function is set to zero. If yes, it will allow the action to happen and block all the other transfers to make it a non-transferable token.

**Note:**

When the address **from** == **0**, it means the token is being issued or minted and not transferred.



# Closing thoughts

Soulbound tokens are still only a nascent concept. But they could break into our digital world at any moment. In the same way, we talked about Web3 as the idea of the future, but this future has already come and is developing now.

**!Thank you for your attention**

