

Grad Invite Manager

**Ethereum-based dApp for Grad Dinner Invitation
Trading and Management**

DESIGNED BY BIG BANG@UC BERKLEY FINTECH BOOTCAMP

INSTRUCTOR: FIRAS, JENNIFER, and SHAHRIAR

2023/04/04

Our stute & Intelligent Team



Cary



Demi



Jonny



Julio

BIG BANG THEORY

About

Background:

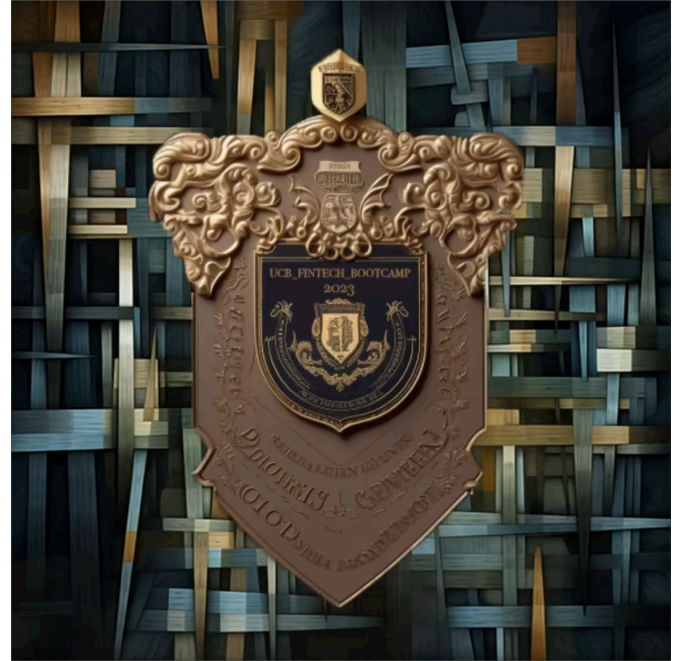
UCB Fintech Bootcamp is pleased to announce the upcoming Graduation Ceremony on May 31, 2023. The event will be held virtually in the Zoom Banquet Hall. We are offering 8 guest seats for the dinner.

Problem:

The traditional process of managing and trading graduation dinner invitations is often tedious, time-consuming, and prone to errors. It typically involves manual tracking, physical paperwork, and reliance on intermediaries to facilitate the exchange of invitations. This process can be inefficient, costly, and lack transparency, leading to frustration and inconvenience for both administrators and customers.

Objective:

The Ethereum-based dApp offers a streamlined solution to address the challenges associated with managing and trading graduation dinner invitations. By leveraging the power of blockchain technology, the dApp provides a secure, transparent, and efficient platform for administrators and customers to interact.



Welcome to

UCB FINTECH BOOTCAMP GRAD
DINNER

Who is our user?

This platform is for:

- Prestigious individuals like Elon Musk who eagerly want to join Firas and TAs for a dinner celebration to congratulate all new grads from this bootcamp.



Congratulations to Everyone!

dApp Technologies

Backend - Smart Contract (Solidity)

- **OpenZeppelin ERC 1155**
- **OpenZeppelin Ownable**
- **OpenZeppelin Counter**



Bridge

- Web3 - frontend to local Ethereum blockchain
- ABI- backend to frontend

Frontend - Streamlit Interface (Python)

- PIL



Why ERC 1155

1. ERC1155 provides greater efficiency as it allows for batch operations, which means you could transfer (gift) multiple NFTs (invitations) in a single transaction, reducing the gas cost associated with individual transfers as it would be the case with ERC721.
2. The ERC1155 standard supports both fungible and non-fungible tokens within the same contract, providing more flexibility in representing various types of assets - both individual unique tickets (non-fungible) and batches of identical tickets (fungible).

Welcome to

UCB FINTECH BOOTCAMP GRAD DINNER

Select User Type

- ☐ Administrator
- ☒ Customer

Choose an operation

Purchase Invitation

Customer Operations

Purchase Invitation

How to purchase

- Each ticket costs **10 ETH**.
- Once an invitation has been purchased, that Invitation Number cannot be minted again.
- The lower the Invitation Number, the closer the seat is to Firas and the TAs.
- **If you want to gift the invitation to someone else, please generate a receipt before gifting. You are unable to generate the receipt as you are no longer the owner of the invitation.**

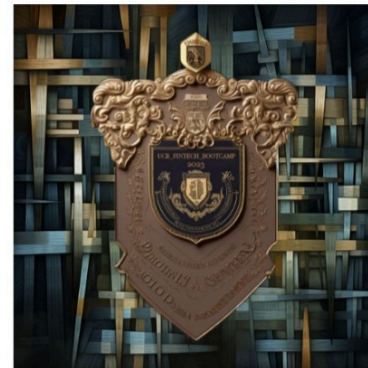
Your Wallet Address

Purchase Invitation 1



Your Wallet Address

Purchase Invitation 4



Your Wallet Address

Purchase Invitation 5





Administrator
Check Balance
Behind the scenes

- contractBalance

Administrator
Withdraw Balance
Behind the scenes

- withdrawBalance

User
Purchase Invitation
Behind the scenes

- mintInvitation
- getAvailableInvitationIds

User
Generate Receipt
Behind the scenes

- theOriginalMinter
- generateReceipt

User
Gift Invitation
Behind the scenes

- giftInvitation



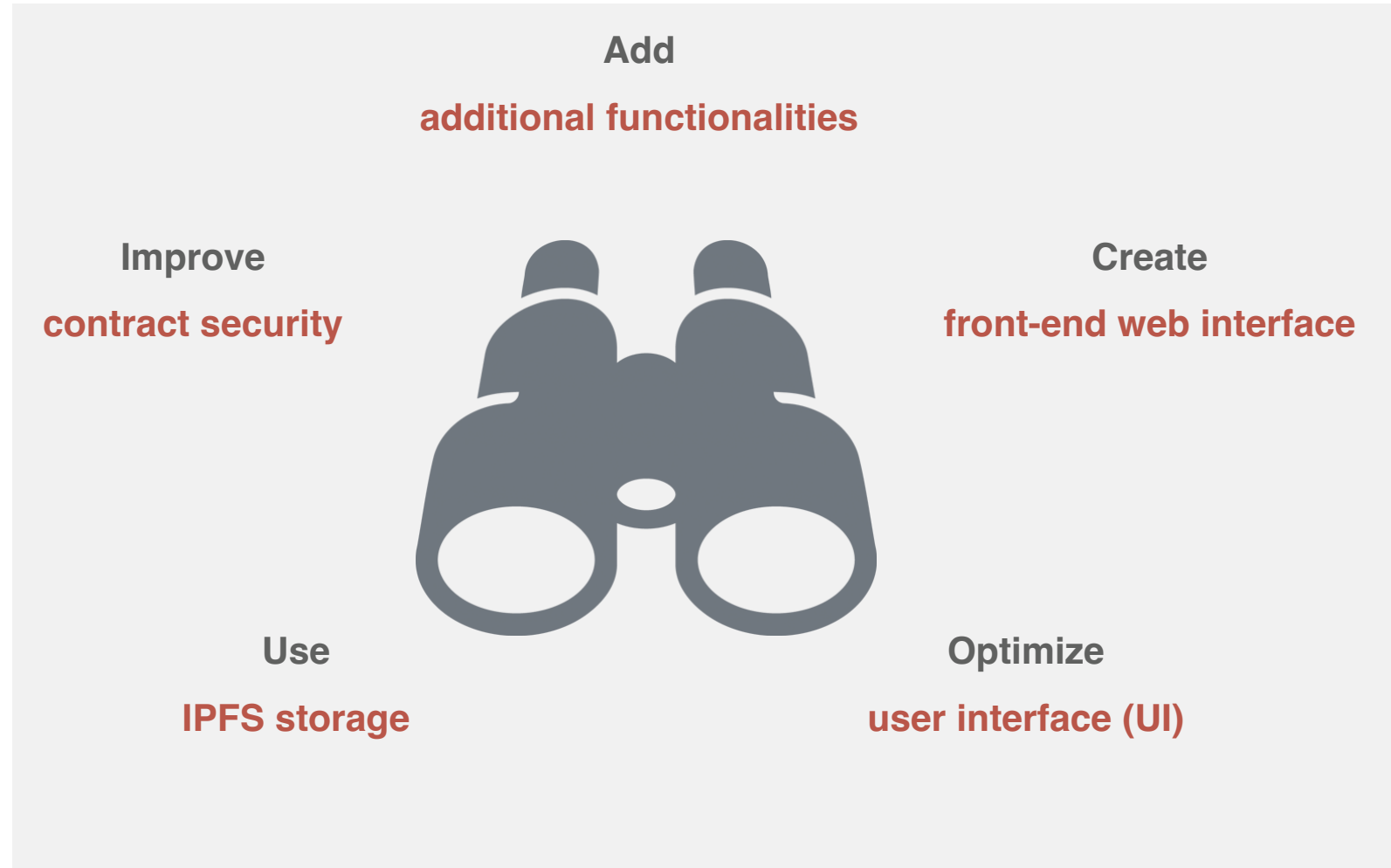
Impact to the Fintech Industry

Tokenizing tickets and their derivative forms solve age-old challenges from traditional ticketing systems, such as scalping and fraud. Furthermore, they unlock new possibilities for the industry.

- Cost Reduction
- Enhanced Security
- Quick Production
- Perpetual Revenue
- New Revenue Opportunities

Next Steps

Develop
a white-labeling business model
that can be applied
to a variety of
businesses/industries



Ready to Celebrate?

LET'S CHEERS

