

# CS300 - Group 5 - PA0

## Team members

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## 1. Introduction

### A short introduction about NFT:

- An NFT can represent anything, but let's explore some of the ways NFTs are being used today and potential implementations for the future.
- NFTs may be art, profile pictures, collectibles, domain names, ticketing and membership, gaming, virtual works, and future applications.

### The reasons why it is worth doing:

- The diverse range of NFTs from the world's brilliant artists and influencers.
- Create a place where you can buy and sell like traditional markets.  
Verify identity in a unique way.
- Creating a bridge allows users to connect to popular blockchain networks.
- Explore your virtual worlds.

## 2. Target users and environments

### Target users

Our NFT marketplace is a vibrant, user-friendly platform that caters to both creators and collectors, offering a wide range of features to empower and connect users in the ever-expanding world of non-fungible tokens.

Whether you're an artist, a crypto enthusiast, or a collector, we provide the tools and community to make your NFT journey an exciting and rewarding one. **Anyone**, especially those with an interest in crypto and NFTs.

## Environments

Web apps are easy to use on computers, laptops, and mobile phones which can use search engines like Google, CocCoc, or Safari.

## Technologies

### Frontend

- Next.js using TypeScript
- Connect crypto wallet via Metamask Web3 API

### Backend

- Using Firebase for storage of image
- Real-time database using MongoDB
- NodeJS and ExpressJs for server

### Smart contract (Blockchain)

- Solidity
- Metamask API
- Endpoints:
  - BSC Testnet
  - ETH Testnet (RinkyNetwork) (Optional)

## 3. Key features

- **Login with Metamask, Facebook, and Gmail.**

Seamlessly access our platform with your preferred authentication method.

- **Create and keep track of your NFTs.**

Our intuitive interface makes it easy to manage your creations, whether they're unique artworks, collectibles, domain names, tickets, or virtual gaming items.

- **Sell your own NFTs (arts, profile pictures, collectibles, domain names, ticketing and membership, gaming, virtual works, and future applications,...).**

Monetize your digital talent or assets. List your NFTs for sale on our marketplace, reaching a global audience

- **Buy and keep NFTs in your collections NFTs.**

Discover a vast world of unique digital assets. Browse, bid, and purchase NFTs from a variety of categories, adding them to your ever-growing collection.

- **Connect to multiple networks (ETH, BSC, Polygon,...).**

We support multiple blockchain networks, enabling you to transact with NFTs on Ethereum, Binance Smart Chain, Polygon, and more.

- **View trending, the most searched, the most valuable NFTs.**

Our platform allows you to explore trending NFTs, discover what's being searched for, and evaluate the most valuable NFTs, keeping you informed and inspired.

- **Stat the ranking and activities.**

Get insights into your NFT ranking and activities, empowering you to make informed decisions about your NFT portfolio and creations.

- **Ownership franchise to Partners.**

The ownership franchise feature lets you collaborate with others on NFT projects.

- **Join our social networks.**

Collaborate with others on NFT projects, creating new possibilities for joint ventures and co-ownership.

## Tools setup

- **Trello:** <https://trello.com/b/JbAaRdzN/intro2se-21tt1-group05>
- **Github:** [https://github.com/hoangrank1/AuraSky\\_NFT-Market](https://github.com/hoangrank1/AuraSky_NFT-Market)

This GitHub `repository/src` includes 3 main folders:

AuraSky - Frontend

AuraSky - Backend

AuraSky - Blockchain

- **Google Drive:**  
[https://drive.google.com/drive/u/1/folders/1oBKex-WhGQxUWKy9zfq4bjAE7yiA3gg?fbclid=IwAR2IUwRQNaVR\\_U-RxDS2rQEJiA0JJdLHADJzx3zNwRN6yrzkGpNfJVsGBfk](https://drive.google.com/drive/u/1/folders/1oBKex-WhGQxUWKy9zfq4bjAE7yiA3gg?fbclid=IwAR2IUwRQNaVR_U-RxDS2rQEJiA0JJdLHADJzx3zNwRN6yrzkGpNfJVsGBfk)
- **Facebook Group:**  
<https://www.facebook.com/groups/886216796170155>
- **Slack:** <https://app.slack.com/client/T05U2F1N4CW/C060ZQ56TCZ>