

Nftcollective.io (NFT Marketplace)

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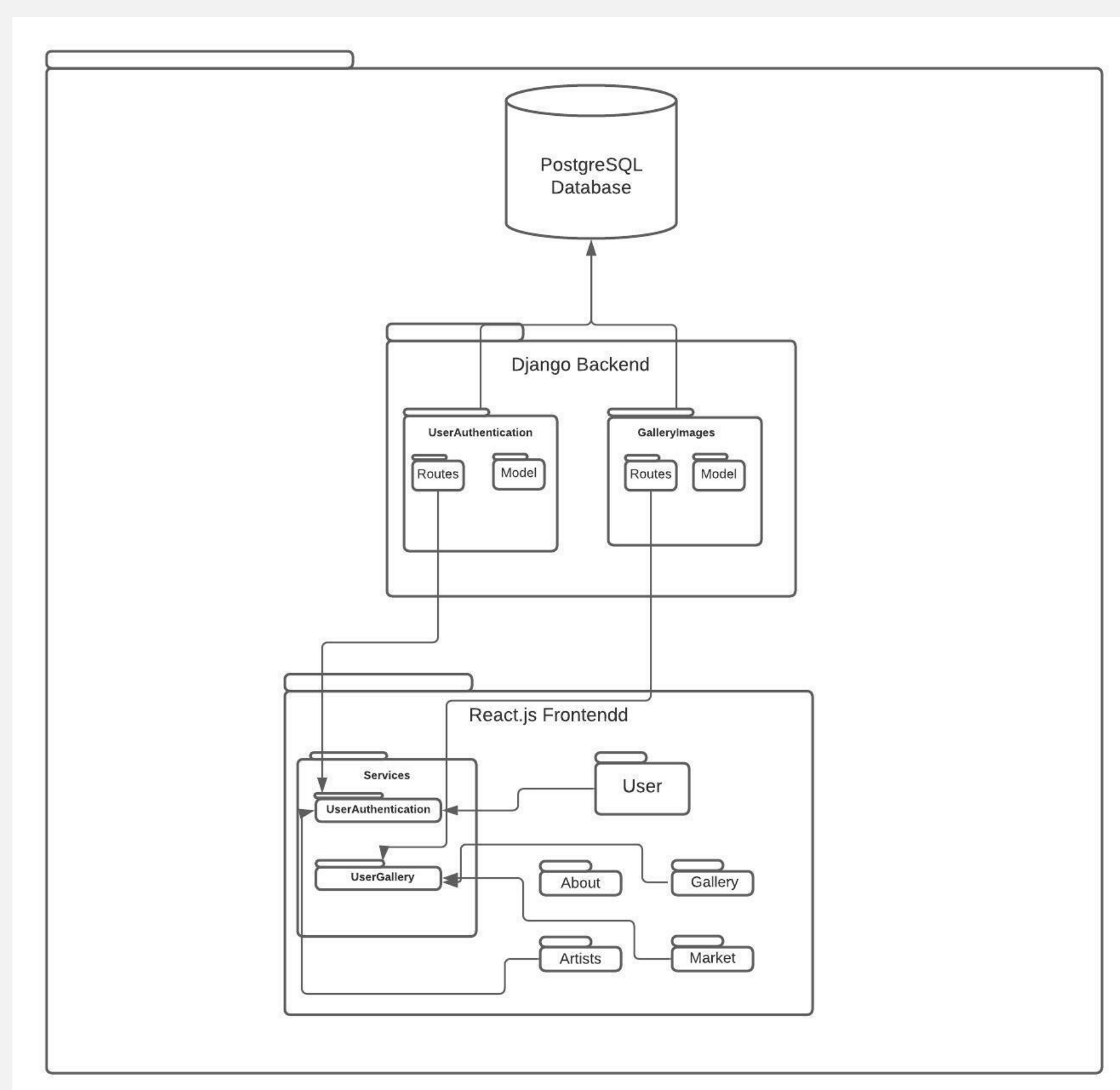
Product Owner: Eddie Garcia, Product Owner

Instructor: Dr. Masoud Sadjadi, Florida International University

PROBLEM

The digital world has become bigger and more important over the past years. With crypto as a digital currency, decentralized payments can be done worldwide with different types of economic systems displayed digitally. An NFT (Non Fungible Token) is a digital asset that people can purchase and they own the rights of said asset. It is a unit of data stored in the blockchain, which certifies the uniqueness of the asset therefore it cannot be changed. Most of the NFTs created are made in the Ethereum blockchain. One interesting and important aspect of an NFT is that an artist can create one out of their art (digital) and sell it without giving a big percentage to a gallery. NFT Marketplaces have been very popular since NFTs are on the rise and becoming a "boom". Since it is a new technology and the approach is not as easy to use, there is usually a high price for an artists' artwork. Our main goal is to create an NFT Marketplace which is easy to use in order to help people deliver their digital art to the world.

SYSTEM DESIGN



VERIFICATION

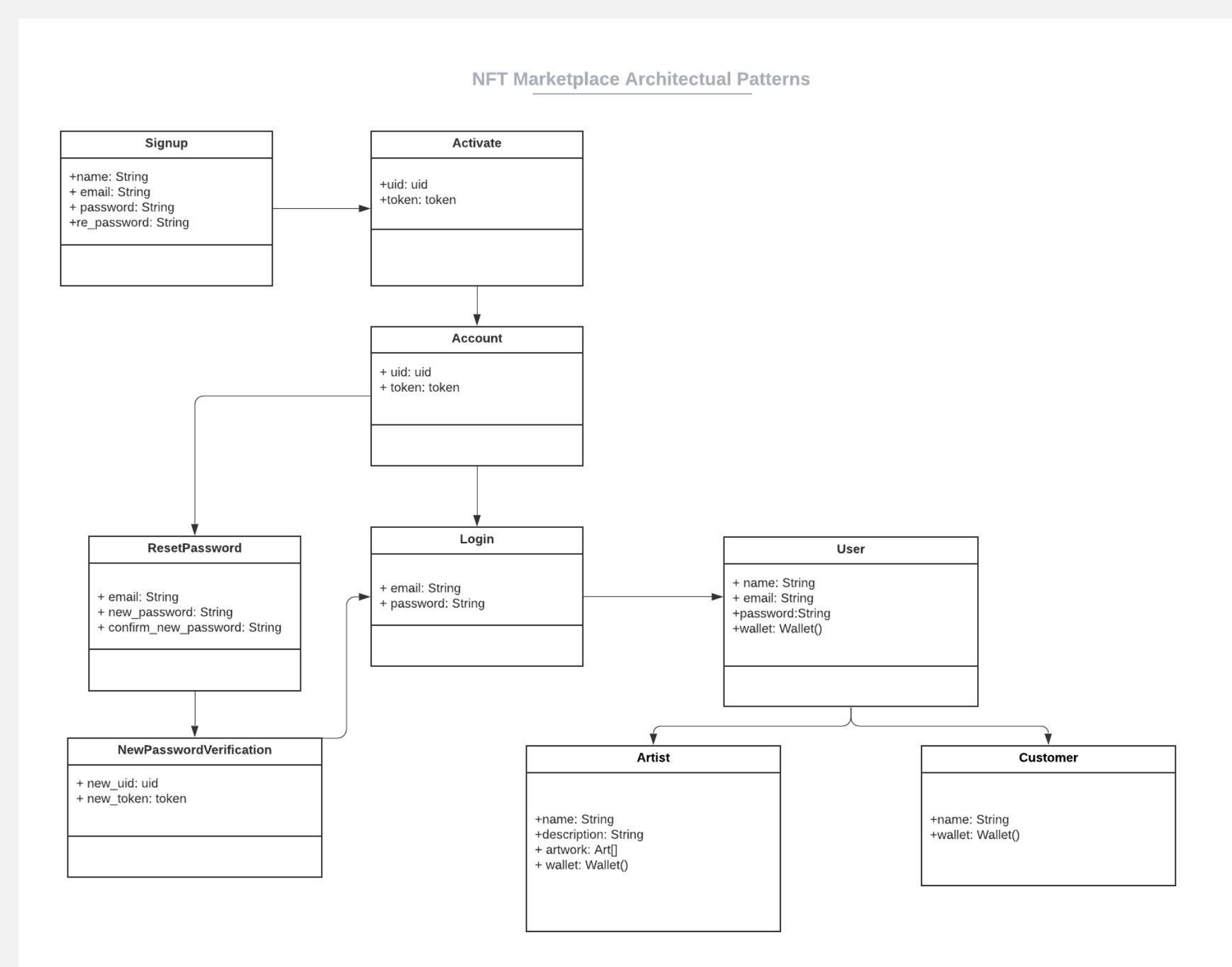
Testing was a consistent process in this project. We continued to fix some bugs. We used Visual studio Code and web console to debug and do testing. Verification from different request for the backend using frontend's information was required and tested thoroughly.

CURRENT SYSTEM

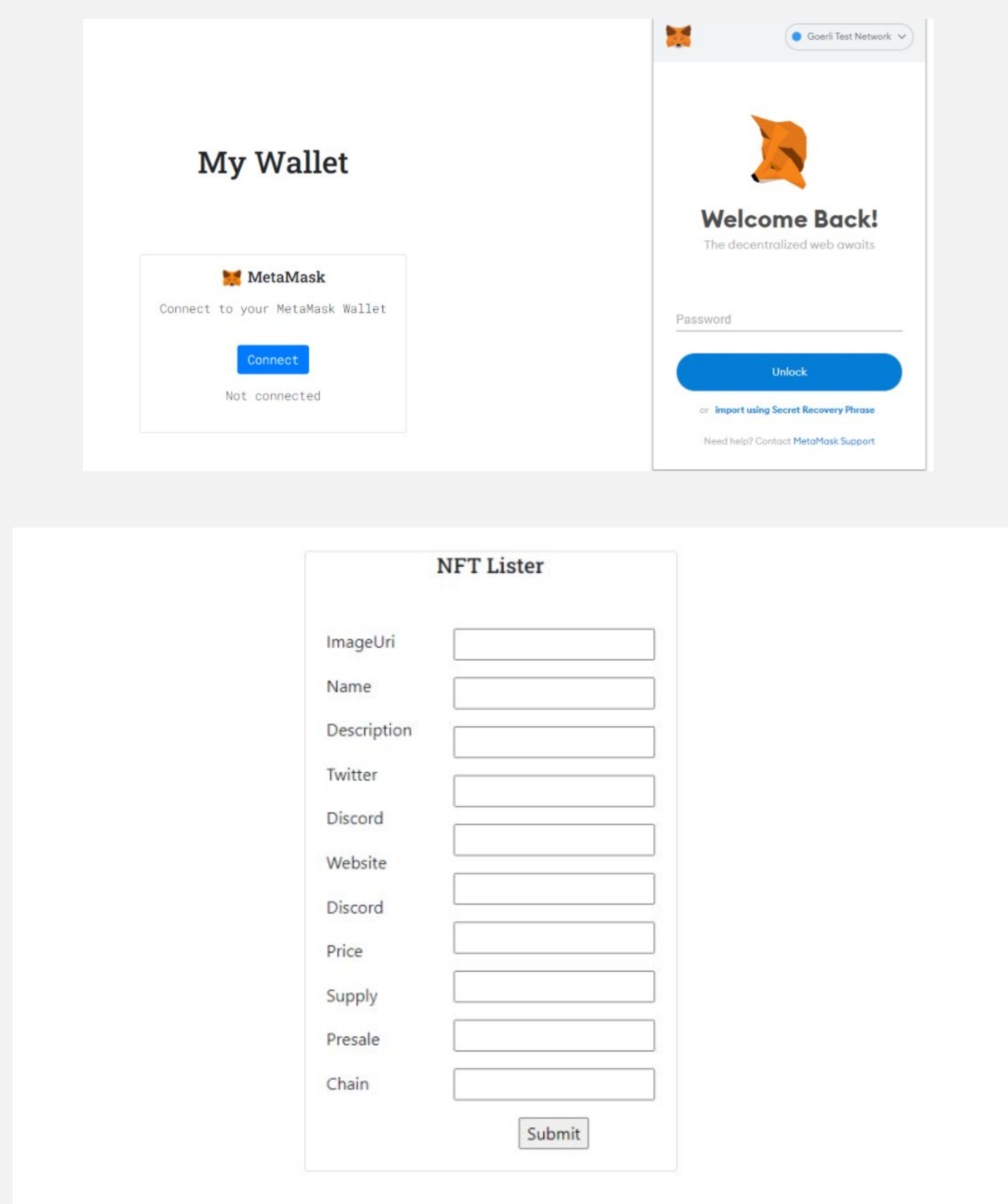
A web application with user authentication, password reset and account verification.

Our team was divided in three areas: crypto, frontend and backend development. There are two types of smart contracts included into our development which are ERC 721 and ERC 1155, which have the highest accessibility and allow transactions that involve cheaper gas costs. The frontend involves React.js and Bootstrap which allowed us to create each web page. The backend was done using Django and Python which allowed us to connect the frontend logic with the backend's

OBJECT DESIGN



SCREENSHOTS



REQUIREMENTS

- What was worked on:
 - o As part of the Backend team, I worked using Python and Django in order to connect the logic from the Frontend to the Backend side of the project.
 - o Developed the sign up page in order to let users create their account.

IMPLEMENTATION

- Backend was implemented using Python and Django framework.
- Database was implemented using PostgreSQL.
- Frontend was implemented using React.js, Bootstrap, HTML and CSS.
- Crypto was implemented using Solidity.

SUMMARY

The NFT web app was designed as a user friendly website that allows artists to create digital artwork so people can own their unique digital assets in the easiest and least expensive way possible. A lot of progress was made, including the creation of two smart contracts which were built to mint NFTs. By leaving everything ordered and available for the next team, more progress will be able to made in order to get a fully deployed website which will allow artists to show their digital art to the world and make profits by doing so.

ACKNOWLEDGEMENT

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