**User Story:**

**Yilin:**

**As a** digital image artist,

**I want** to be able to price my NFT art collections accurately

**so that** I can make enough money to buy the best equipment for my art studio and keep on making the kind of digital art that I love.

**Acceptance Criteria:**

* Build a model/models that can predict the price of NFT art accurately
* Find differences in visual patterns between successful and unsuccessful NFT projects
* Group artist with similar aesthetic sense together
* A UI that is easy to navigate and convey the essential information (Price of upcoming NFTs, general market trend, top earning visual features, a score that compares NFT projects with each other)
* Price should be given in fiat (can find trend in ETH and then convert to fiat) because artist would be more comfortable thinking in fiat

**Mission:** Applying ML models to a corpus of NFT data to predict pricing with a high degree of certainty

**Vision:** Providing a reliable marketplace for artists to price their digital art on a trusted network and monetize their work; Improve the general digital finance ecosystem by bringing liquidity; allowing financial derivatives to work on top of NFTs by bringing stability

**Tasks:**

* **Finalize the dataset**/datasets
* Work on **Web Scraping** and extracting data through **APIs**
* **Cleaning and Labeling Data**
* **Feature Selection**: use 3,4 for main features to build a simple model and then improve the model through iterations
* **Finalize models:** A basic Linear Regression model should give a good R^2 (similar results obtained before by other projects). But that can be improved by better models like CART, Random Forest, Gradient Boosting, KNN.
* **Testing and implementing** models; comparing accuracy of different models
* Tech team (with help from all members) needs to do some due diligence on how to go about **differentiating the visual features and rank ordering them**. One way can be to use the scoring on rarity and take data from there. Can also use CNN (convolutional neural nets) to analyze the visual imagery. (This should be done after working on the initial model for pricing since that's our priority) https://anyfty.medium.com/anyftys-first-results-in-nft-pricing-prediction-68c131501524
* Work on a **UI and UX Design** that caters to the persona’s needs: being able to price the NFT; finding other artists with similar artistic sense
* **Front-end design**
* **Refine user story and persona needs:** talk to some NFT artists about your idea and if they feel the user needs could be further refined; do some market and user research and collab with design tema to make sure the final design provides a complete user experience