

# Milestone 4 Report

## Current State of the project

We have finished up on our website ([artpredict.herokuapp.com](https://artpredict.herokuapp.com)) and loaded two of our models onto it. One of the models predicts the price of a painting based only on an input image, while the other one takes in additional information being the artist name and dimensions of the painting. Users also have the option of drawing directly on a canvas on the website and get a price prediction from it. The final feature of our website is a competition leaderboard, which ranks users' submissions based on the estimated price that they get. Users are able to upload multiple paintings and the submission with the highest estimated price will be recorded and ranked on the leaderboard. Our website is deployed on Heroku.

## Feature Changes

There were no feature changes.

## Current Challenges

Our model accuracy is still not very high. As mentioned previously, the price of a painting can depend on many factors, and to achieve the best accuracy possible, we would need to gather far more information about a painting than we currently have. However, the purpose of our project is to predict the price of a painting based mostly on its aesthetic aspects, thus we have to compensate our model loss/accuracy a little bit in order to keep with our original purpose.

## Tasks Done and Underway by Each Member

Dylan:

- Trained various models
- Wrote script, recorded and edited project video
- Helped with the final report

Eva:

- Created and wrote `leaderboard.py` and other files to implement the competition leaderboard on the website
- Created and wrote `option3.py` to make a more accurate prediction through a model that also takes artists and dimensions as inputs
- Improved, added more features, and debugged the files in the web component (such as fixing the issue of uploading grayscale or RGBA images, reading and writing .csv file, and etc.)
- Successfully host the web app on Heroku.com (<https://artpredict.herokuapp.com/>)
- Worked on the final report
- Helped with the script of our video

Jane:

- Worked on the web app
- Worked on the final report
- Helped with the script of our video

Jared:

- Trained different models
- Worked on the final report
- Helped with the script of our video