Auction Hunter

Finding the Perfect Car at the Perfect Price - For You!

Figure 1: Salvage Car

Motivation

- Thousands of wrecked cars go on auction websites such as IAAI or Copart every month.
- Quantifying the potential value of a wrecked car is tedious, and finding the best deal is even more difficult.
- Since most auctions are bid on, at what point does the asking price surpass the potential value of the car?
- If a script calculated the value of each car and compared it to the asking price, the best deal could be found much faster than manual searching and calculation.
- It is difficult to bid for cars on the east coast due to time zones. Consumers need a tool to help them automatically bid on the vehicle from around the country.

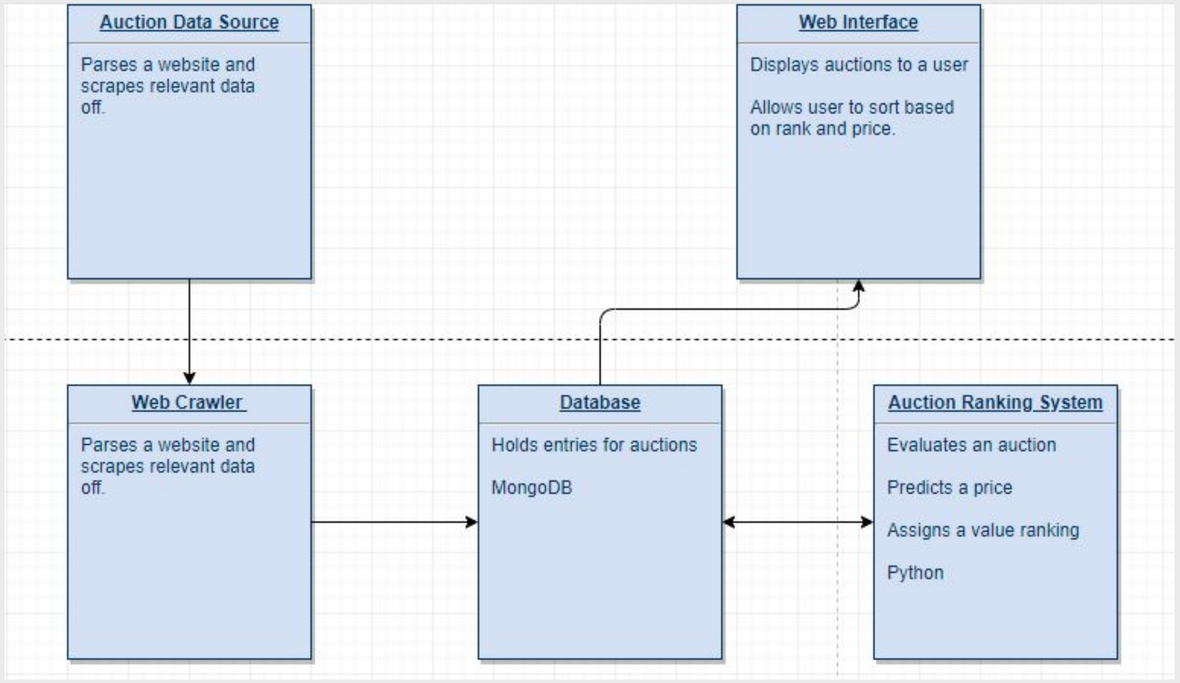

Figure 2: Flow Chart

Save Money

Whether a user is bidding on a salvaged car in hopes of reselling parts, restoring damages, or rebuilding a car to drive they want to avoid wasting money. Auction hunter will be able to display a list of auctions and give an estimate of the value associated with the car. When compared the the current asking price, a user can judge if a bid is worth making. Once the asking price approaches or surpasses the predicted value, it may not be a worthwhile bid!

Expedite the Search

- Each auction has a current bid price, which a user has to manually evaluate compared to the perceived value. Even an experienced bidder would have to sift through each auction.
- Even a rudimentary value analysis algorithm could eliminate the bottom 50% of possible auctions, cutting a user's manual work in half.
- Individual websites allow for refining a search, but doesn't allow for searching through multiple websites at once.

Implementation

- Our auction data is sourced from various vehicle auction websites.
- A web crawler will capture relevant information from each auction entry.
- Web crawler sends auction entities to backend MongoDB database.
- Auction ranking system pulls entities from the database end performs value calculations, and predicts the most worthwhile auctions.
- Auction ranking system sends evaluation data back into database to be stored.
- Web interface pulls information from the database and displays it to a user.
- Web interface allows for sort based on the rank assigned to the auction or select attributes.

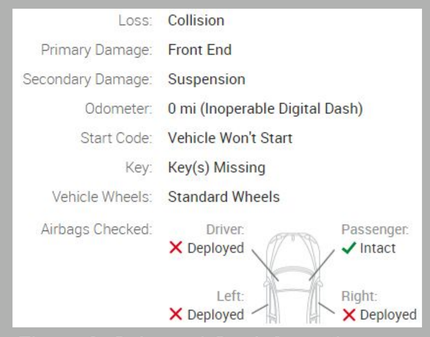

Figure 3: Salvaged Car Information

Team Members

CS Capstone Members
Alexander Jacobson - jacoalex@oregonstate.edu
Yufei Zeng - zengyu@oregonstate.edu
Alexander Hull - hullale@oregonstate.edu
Client
Ryan Kalb - ryanmaxkalb@gmail.com

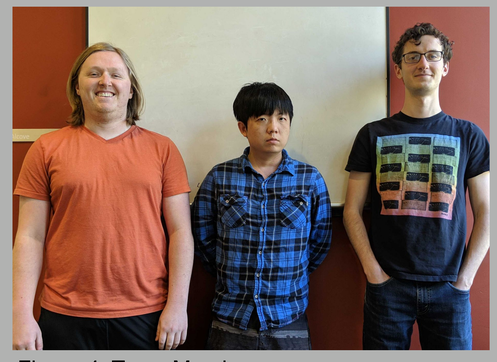
Figure 4: Team Members

Oregon State University