

# Final project

The WoW Auction House in Alloy

# Introduction



# Auction workflow



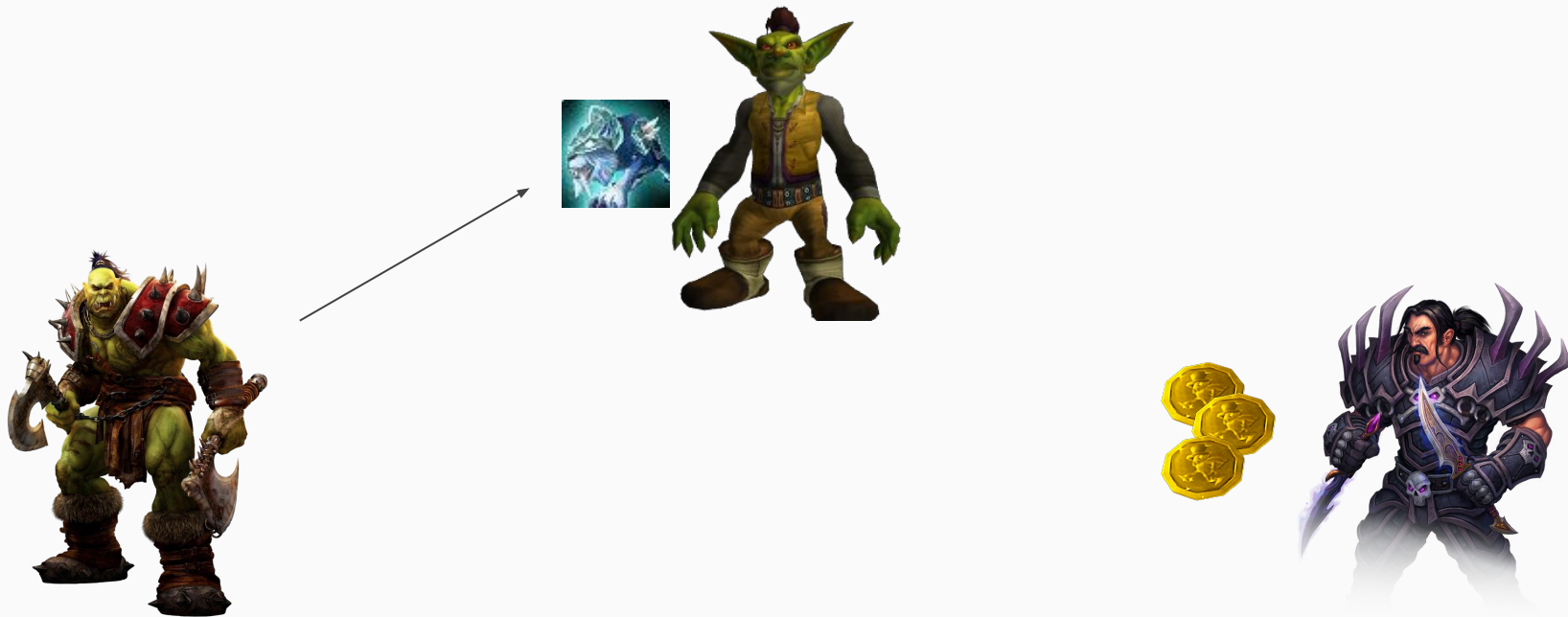
# Auction workflow



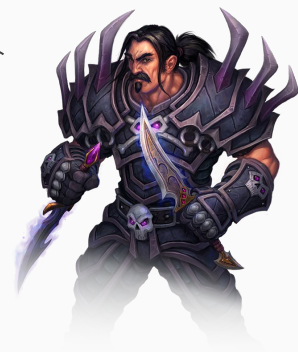
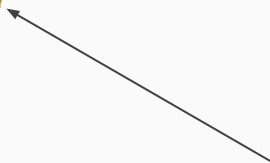
# Auction workflow



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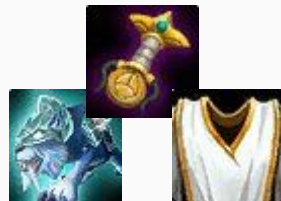
# Alloy model

Players



Auction House

Items



# Alloy model

- Player: has Items; bids on Auctions.
- Item: belongs to a Player; has a status.
  - If listed for sale, is related to an Auction and has a highest bidder.
- Auction: has a seller Player; has an Item to be sold; might have a highest bidding Player or buyout Player.

# Alloy model

- The Player must own the Item they intend to sell.
- A Player must not bid in their own auction.
- An Auction ends at most after 3 steps.
  - The highest bidder Player becomes the Item owner.
  - If no bids were put, the Item returns to the original owner.
  - If a Player buys out the Auction, it ends immediately.
- The seller must pay a convenience tax to the Auction House over their earnings.