**Model objects**:

* AuctionBean
* OfferBean
* ProductBean
* UserBean

**Data Access objects:**

AuctionDAO

createAuction (price,rise, expiry, userID)

getUserAuctions (userID, active, loginTime)

getWinner (auctionID)

isAuctionOwner (userID, auctionID)

isAuctionActive( auctionID)

getWonAuctions (userID)

getAuctionByKeyword (article, userID, loginTime)

close (auctionID, userID)

OfferDAO

getOffers (auctionID)

addOffer (offer, userID, auctionID, date)

getMaxOffer (auctionID)

ProductDAO

addProduct (name, description, price, userID)

getUserProducts (userID)

update (productid, auctionID)

getPrice (productID)

checkProduct (productid, userID)

getProductFromAuction (auctionID)

UserDAO

authenticate (username, password)

addUser (username, email, city, address, province, password)

getUser (userID)

getUserByUsername (username)

getUserByEmail (email)

**Controllers:**

DoAddProduct

DoClose

DoCreateAuction

DoGetImage

DoLogin

DoLogout

SoSignup

GetAuctionDetails

GetMatchingAuctions

GetSearchedAuctions

GetSell

GetWonAuctions

LoadDefaultPage

**Filters:**

* AuthFilter
* UnAuthFilter