Auction Service specification

Infrastructure

.Net Web API

Postgres DB

Entity Framework ORM

Service Bus - RabbitMQ

Nuget Packages

AutoMapper.Extensions.Microsoft.DependancyInjection

Microsoft.AspNetCore.Authentication.JwtBearer

Microsoft.EntityFrameworkCore.Design

Npgsql.EntityFrameworkCore.PostgreSQL

MassTransit.RabbitMQ

External (User)

CreateAuction - Creates an Item.   Emits **AuctionCreated**

UpdateAuction - Updates an Auction. Emits **AuctionUpdated**

DeleteAuction - Deletes an Auction if state allows (no bids on auction, reserve not met). Emits **AuctionDeleted**

Queries handled

GetAuctionById - Gets an auction by an ID.   Returns **AuctionDto**

GetAuctions - Gets all auctions.   Returns list of **AuctionDto**

GetAuctionsFromDate - Gets all auctions updated from a Date

Events emitted

AuctionCreated - When the auction is created, in response to CreateAuction - Emits **AuctionDto**

AuctionUpdated - When the auction is updated, in response to UpdateAuction - Emits **AuctionDto**

AuctionDeleted - When the auction is deleted, in response to DeleteAuction - Emits **AuctionId**

Events consumed

BidService.BidPlaced - When a bid has been placed in the BidService

BidService.BiddingFinished - When an auction has reached the AuctionEnd date.

API Endpoints

POST	api/auctions	Create Item	Auth
PUT	api/auctions/:id	Update auction	Auth
DELETE	api/auctions/:id	Delete auction	Auth
GET	api/auctions	Get auctions	Anon
GET	api/auctions/:id	Get auction by id	Anon

Models

Aucton.cs

Property Name	Property Type	Default Value
Id	Guid	
ReservePrice	int	0
Seller	string (username from claim)	
Winner?	string (username of winner)	
SoldAmount?	int	
CurrentHighBid?	int	
CreatedAt	DateTime	DateTime.UtcNow
UpdatedAt	DateTime	DateTime.UtcNow
AuctionEnd	DateTime	
Status	Status	Status.Live
Item	Item	

Item.cs

Property Name	Property Type	Default Value
Id	Guid	
Make	string	
Model	string	
Year	int	
Color	string	
Mileage	int	
ImageUrl	string	
Auction	Auction (related to **Auction**)	
AuctionId	Guid	

Status.cs (enum)

Live
Finished
ReserveNotMet

DTOs

AuctionDto.cs

Property Name	Property Type	Default Value
Id	Guid	
CreatedAt	DateTime	
UpdatedAt	DateTime	
AuctionEnd	DateTime	
Seller	string	
Winner	string	
Make	string	
Model	string)	
Year	int	
Color	string	
Mileage	int	
ImageUrl	string	
Status	string	

Property Name	Property Type	Default Value
ReservePrice	int	
SoldAmount?	int	
CurrentHighBid?	int	

CreateAuctionDto.cs

Property Name	Property Type	Default Value
Make	string	
Model	string)	
Color	string	
Mileage	int	
Year	int	
ReservePrice	int	
ImageUrl	string	
AuctionEnd	DateTime	

UpdateAuctionDto.cs

Property Name	Property Type	Default Value
Make?	string	
Model?	string)	
Color?	string	
Mileage?	int	
Year?	int	

Event Emitted Types

AuctionCreated

Property Name	Property Type	Default Value
Id	Guid	
CreatedAt	DateTime	
UpdatedAt	DateTime	
AuctionEnd	DateTime	
Seller	string	

Property Name	Property Type	Default Value
Winner	string	
Make	string	
Model	string)	
Year	int	
Color	string	
Mileage	int	
ImageUrl	string	
Status	string	
ReservePrice	int	
SoldAmount?	int	
CurrentHighBid?	int	

AuctionUpdated

Property Name	Property Type	Default Value
Id	string	
Make	string	
Model	string	
Color	string	
Mileage	int	
Year	int	

AuctionDeleted

Property Name	Property Type	Default Value
Id	string	

Event Consumed Types

BidService.BidPlaced

Property Name	Property Type	Default Value
Id	string	
Make	string	
Model	string	

Property Name	Property Type	Default Value
Color	string	
Mileage	int	
Year	int	