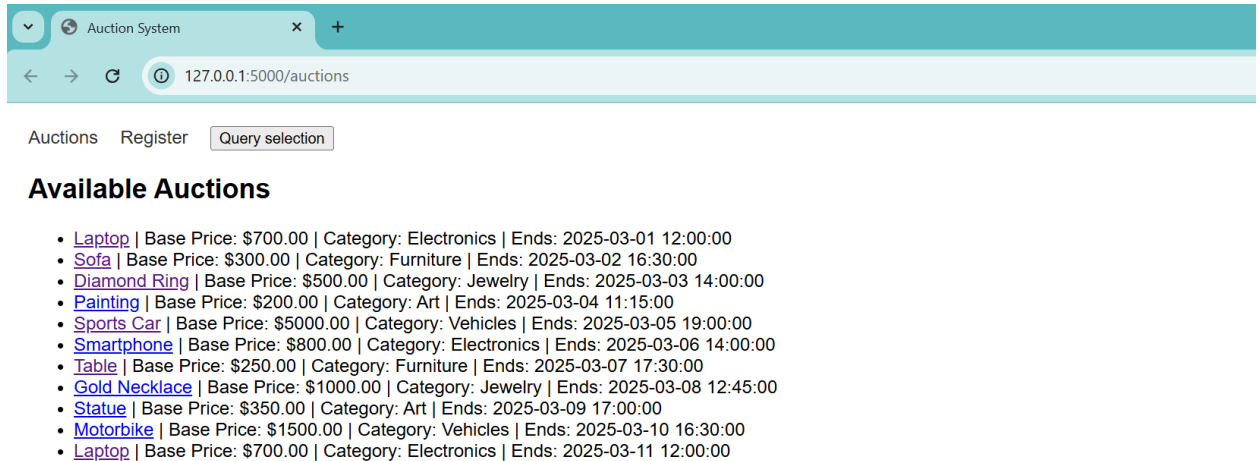Group 28 members-
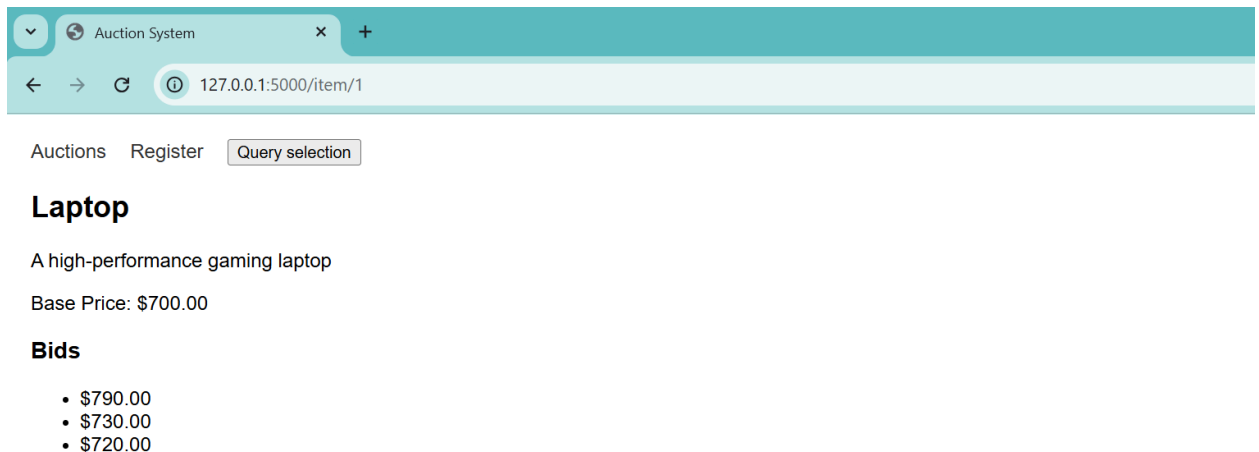   2023515-Shubh Sharma
        2023428-Revant Gupta
        2023450-Ruhani Bhatia

- Auction tab:
Shows all items in available auctions:
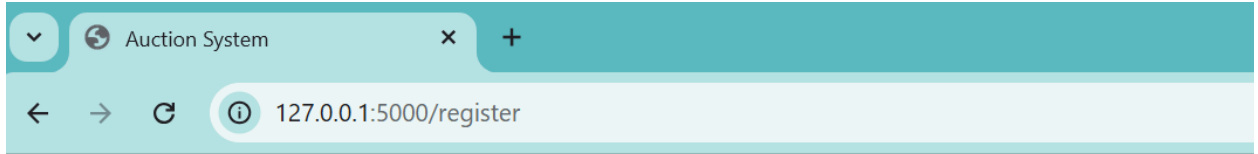
Auction System   127.0.0.1:5000/auctions

Auctions   Register   [Query selection]

Available Auctions

- Laptop | Base Price: $700.00 | Category: Electronics | Ends: 2025-03-01 12:00:00
- Sofa | Base Price: $300.00 | Category: Furniture | Ends: 2025-03-02 16:30:00
- Diamond Ring | Base Price: $500.00 | Category: Jewelry | Ends: 2025-03-03 14:00:00
- Painting | Base Price: $200.00 | Category: Art | Ends: 2025-03-04 11:15:00
- Sports Car | Base Price: $5000.00 | Category: Vehicles | Ends: 2025-03-05 19:00:00
- Smartphone | Base Price: $800.00 | Category: Electronics | Ends: 2025-03-06 14:00:00
- Table | Base Price: $250.00 | Category: Furniture | Ends: 2025-03-07 17:30:00
- Gold Necklace | Base Price: $1000.00 | Category: Jewelry | Ends: 2025-03-08 12:45:00
- Statue | Base Price: $350.00 | Category: Art | Ends: 2025-03-09 17:00:00
- Motorbike | Base Price: $1500.00 | Category: Vehicles | Ends: 2025-03-10 16:30:00
- Laptop | Base Price: $700.00 | Category: Electronics | Ends: 2025-03-11 12:00:00

Clicking any item allows user to view its details:

Auction System   127.0.0.1:5000/item/1

Auctions   Register   [Query selection]

Laptop

A high-performance gaming laptop

Base Price: $700.00

Bids

- $790.00
- $730.00
- $720.00

- Register tab:
Prompts user to enter following to register:

127.0.0.1:5000/register

Auctions   Register   [Query selection]

Register

Username: heloo
Password: |
Balance:
[Register]   ⚠ Please fill out this field.

On clicking register:

Auctions   Register   [Query selection]

Registration successful!

Available Auctions

- Laptop | Base Price: $700.00 | Category: Electronics | Ends: 2025-03-01 12:00:00
- Sofa | Base Price: $300.00 | Category: Furniture | Ends: 2025-03-02 16:30:00
- Diamond Ring | Base Price: $500.00 | Category: Jewelry | Ends: 2025-03-03 14:00:00
- Painting | Base Price: $200.00 | Category: Art | Ends: 2025-03-04 11:15:00
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- Table | Base Price: $250.00 | Category: Furniture | Ends: 2025-03-07 17:30:00
- Gold Necklace | Base Price: $1000.00 | Category: Jewelry | Ends: 2025-03-08 12:45:00
- Statue | Base Price: $350.00 | Category: Art | Ends: 2025-03-09 17:00:00
- Motorbike | Base Price: $1500.00 | Category: Vehicles | Ends: 2025-03-10 16:30:00
- Laptop | Base Price: $700.00 | Category: Electronics | Ends: 2025-03-11 12:00:00

Update visible in User table in db:

- Query tab: Query 1 to 13 are for task 1 and query 14 to 16 are for task 2(llm interaction fixed queries) of 3rd deadline

Screenshots for running all queries:

Result for Query 1

Retrieve all items with their respective category titles.

ItemID	Name	Description	CategoryTitle
1	Laptop	A high-performance gaming laptop	Electronics
2	Sofa	A comfortable leather sofa	Furniture
3	Diamond Ring	A beautiful diamond ring	Jewelry
4	Painting	An exquisite art piece	Art
5	Sports Car	A luxurious sports car	Vehicles
6	Smartphone	Latest model smartphone	Electronics
7	Table	Wooden dining table	Furniture
8	Gold Necklace	Pure gold necklace	Jewelry
9	Statue	Greek-style marble statue	Art
10	Motorbike	Fast and stylish motorbike	Vehicles

Result for Query 2

Get the highest bid for each auction.

AuctionID	ItemName	HighestBid
1	Laptop	790.00
2	Sofa	350.00
3	Diamond Ring	550.00
4	Painting	250.00
5	Sports Car	5700.00
6	Smartphone	850.00
7	Table	320.00
8	Gold Necklace	1150.00
9	Statue	450.00
10	Motorbike	1700.00

Result for Query 3

Retrieve the total sales amount for each seller.

UserID	Username	TotalSales
1	Alice	0.00
2	Bob	0.00
3	Charlie	0.00
4	David	0.00
5	Eve	0.00
6	Frank	0.00
7	Grace	0.00
8	Hank	0.00
9	Ivy	0.00
10	Jack	0.00

Result for Query 4

Get all auctions that have ended but have no winner assigned.

AuctionID	ItemName	EndTime
1	Laptop	2025-03-01 12:00:00
2	Sofa	2025-03-02 16:30:00
3	Diamond Ring	2025-03-03 14:00:00
4	Painting	2025-03-04 11:15:00
5	Sports Car	2025-03-05 19:00:00
6	Smartphone	2025-03-06 14:00:00
7	Table	2025-03-07 17:30:00
8	Gold Necklace	2025-03-08 12:45:00
9	Statue	2025-03-09 17:00:00
10	Motorbike	2025-03-10 16:30:00

Result for Query 5

Retrieve details of any auction including seller, item, and highest bid.

AuctionID	ItemName	Seller	HighestBid
1	Laptop	Alice	790.00
11	Laptop	Alice	None
2	Sofa	Bob	350.00
3	Diamond Ring	Charlie	550.00
4	Painting	David	250.00
5	Sports Car	Eve	5700.00
6	Smartphone	Alice	850.00
6	Smartphone	Frank	850.00
7	Table	Grace	320.00
8	Gold Necklace	Bob	1150.00
8	Gold Necklace	Hank	1150.00

Auctions   Register   Query selection

Result for Query 6

Count the number of items in each category

CategoryTitle	ItemCount
Art	2
Electronics	2
Furniture	2
Jewelry	2
Vehicles	2

Back to Queries

127.0.0.1:5000/run_query/7

Auctions   Register   Query selection

Result for Query 7

Find items that were auctioned more than once.

ItemID	Name
1	Laptop

Back to Queries

127.0.0.1:5000/run_query/8

Result for Query 8

Find the Latest auction for each time.

AuctionID	ItemID	StartTime	EndTime
2	2	2025-03-02 14:00:00	2025-03-02 16:30:00
3	3	2025-03-03 11:00:00	2025-03-03 14:00:00
4	4	2025-03-04 09:00:00	2025-03-04 11:15:00
5	5	2025-03-05 15:00:00	2025-03-05 19:00:00
6	6	2025-03-06 12:00:00	2025-03-06 14:00:00
7	7	2025-03-07 16:00:00	2025-03-07 17:30:00
8	8	2025-03-08 10:00:00	2025-03-08 12:45:00
9	9	2025-03-09 14:30:00	2025-03-09 17:00:00
10	10	2025-03-10 13:00:00	2025-03-10 16:30:00
11	1	2025-03-11 10:00:00	2025-03-11 12:00:00

Auctions   Register   Query selection

Result for Query 9

Find Users Who Have Placed the Most Bids in any Auction.

UserID	Username
3	Charlie

Back to Queries

Result for Query 10

Find users who have participated as both sellers and bidders

UserID	Username
3	Charlie
5	Eve
4	David
6	Frank
7	Grace
8	Hank
9	Ivy
10	Jack

Back to Queries

127.0.0.1:5000/run_query/11

Auctions   Register   Query selection

Result for Query 11

Get the top 3 bidders who have placed the highest total bid amount

BidderID	Username	TotalBidAmount
6	Frank	5950.00
7	Grace	5200.00
4	David	2050.00

Back to Queries

127.0.0.1:5000/run_query/12

Auctions   Register   Query selection

Result for Query 12

Find Auctions That Lasted Longer Than the Average Duration

AuctionID	ItemID	Duration
3	3	3:00:00
5	5	4:00:00
8	8	2:45:00
10	10	3:30:00

Back to Queries

Result for Query 13

Find Users Who Have Placed the Most Bids in every Auction

UserID	Username	AuctionID	TotalBids
3	Charlie	1	2
3	Charlie	9	1
4	David	2	1
4	David	10	1
5	Eve	3	1
6	Frank	4	1
6	Frank	5	1
7	Grace	5	1
8	Hank	6	1
9	Ivy	7	1

Query 14 takes user input via a new form:

Retrieve all bids for a specific auction along with bidder details

Enter Auction ID: [1 ⬍] [Run Query]

on pressing run query:

Auctions   Register   [Query selection]

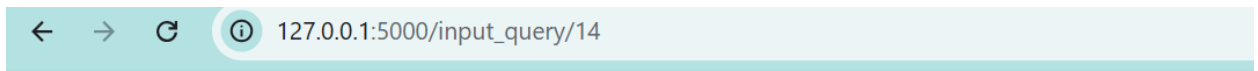Auction ID is required for this query.

Result for Query 14

Retrieve all bids for a specific auction along with bidder details

BidderID	Username	Balance	BidAmount	AuctionID	ItemName
3	Charlie	750.00	720.00	1	Laptop
3	Charlie	750.00	790.00	1	Laptop
5	Eve	300.00	730.00	1	Laptop

[Back to Queries]

Another input for showcasing different outputs dependent upon user input:

127.0.0.1:5000/input_query/14

Retrieve all bids for a specific auction along with bidder details

Enter Auction ID: 5   Run Query

On pressing run query:

127.0.0.1:5000/run_query/14.auction_id=5

Auctions   Register   Query selection

Auction ID is required for this query.

Result for Query 14

Retrieve all bids for a specific auction along with bidder details

BidderID	Username	Balance	BidAmount	AuctionID	ItemName
6	Frank	900.00	5700.00	5	Sports Car
7	Grace	450.00	5200.00	5	Sports Car

Back to Queries

127.0.0.1:5000/run_query/15

Auctions   Register   Query selection

Result for Query 15

Get all bidders who have exceeded their bid limit

UserID	Username	BidLimit	BidAmount
3	Charlie	750.00	790.00

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127.0.0.1:5000/run_query/16

Result for Query 16

Get a list of users and the number of auctions they have participated in (either as a bidder or as a seller)

Username	NumAuctions
Charlie	2
Eve	2
David	2
Frank	2
Grace	1
Hank	1
Ivy	1
Jack	1
Alice	3
Bob	2
Charlie	1