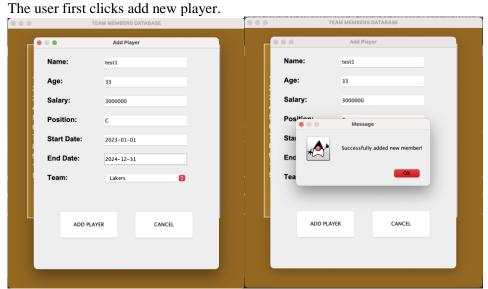
### **Insert Operation:**

Before:





During:

The user enters corresponding values of the new player and clicks add player, then the successful prompt shows the player is added to the database.

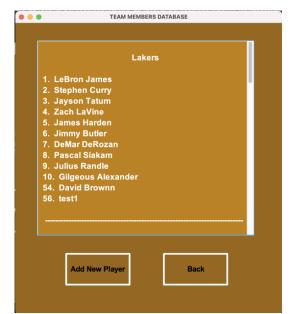


After:

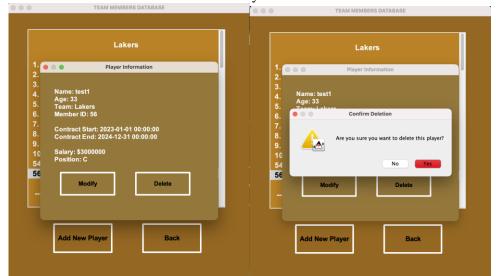
We can see that test1 has been added to the Lakers roster.

### **Delete Operation:**

Before:



The user first clicks the team member they want to delete.



Then the user clicks the delete button and is prompted with confirmation. If they click "Yes" the selected team member will be deleted from the database.



After:

During:

We can see that test1 has been deleted from the Lakers roster.

# **Update Operation:**

Before:



The user first clicks the team member they want to update.



During:

Then the user clicks the modify button and can modify attribute of that player, here we changed Lebron James's age to 37 and his team to the Warriors



After:

We can see that Lebron James's team and age have been updated to the given values.

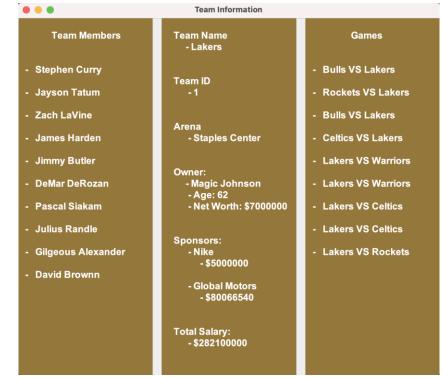
### **Selection Operation:**



The user first clicks team information.



Then the user clicks which team's information they would like to see.



Here the user selects the Lakers and the team's information is displayed.

Before:

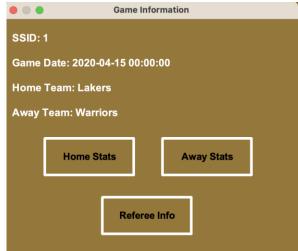
During:

After:

### **Projection Operation:**



The user first navigates to game information and selects the team's game stats they would like to view.



During:

Before:

Then the user clicks the Home Stats or Away Stats to get those attributes from the StatSheet relation in the database.



After:

Here the user clicked the Home Stats button and only home stats are returned.

## **Join Operation:**



The user first clicks the team information.



Then the user clicks the teams information they would like to see.



Here we join the sponsors and team table to display the a given team's sponsors name and contributions.

Before:

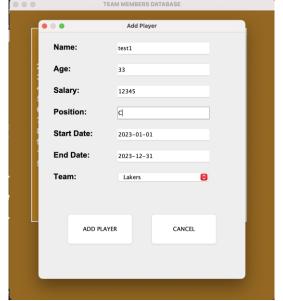
During:

After:

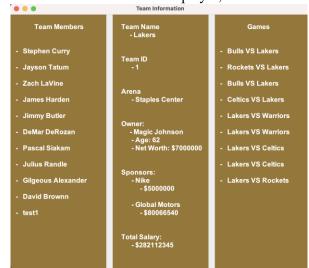
## **Aggregation with GROUPBY Operation:**



The user first navigates to the Team information tab, here we note the total salary which is salaries for all players summed up.



Then the user can add a new player, here we add a player "test1" with salary \$12345.



Here we can see the salary of the player we just added is added to the total salary.

After:

During:

Before: