# Project Report: DBMS Assignment 4

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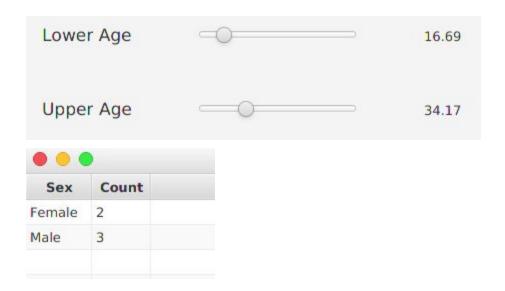
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## List of Queries:

### Complex

1. Get Count of Members grouped by sex with given age limits

"SELECT Sex, count(Sex) AS Count FROM gym.Members WHERE Age BETWEEN " + lower + " AND " + upper + " GROUP BY Sex"



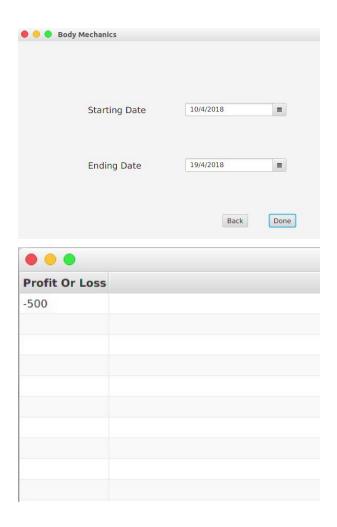
#### 2. Get Trainer with most students

"SELECT T.Name, count(`Trainer ID`) as Count FROM gym.Trainers as T INNER JOIN gym.Members AS M ON T.ID = M.`Trainer ID` GROUP BY T.Name ORDER BY Count DESC LIMIT 1"



#### 3. Get profit/loss made in a particular month

"SELECT" + " (SELECT COALESCE(sum(J.Cost), 0) FROM gym.Members AS M INNER JOIN gym.Plans AS J ON M.Plan = J.Name WHERE (M.`Plan Started` >= "" + sql\_lower + "' AND M.`Plan Started` <= "" + sql\_upper + "")) -" + " (SELECT COALESCE(sum(Salary), 0) FROM gym.Trainers AS T WHERE (T.`Last Paid` >= "" + sql\_lower + "' AND T.`Last Paid` <= "" + sql\_upper + "")) -" + " (SELECT COALESCE(sum(E.Cost), 0) FROM gym.Equipment AS E WHERE (E.`Purchased On` >= "" + sql\_lower + "' AND E.`Purchased On` <= "" + sql\_upper + "")) AS `Profit Or Loss`"



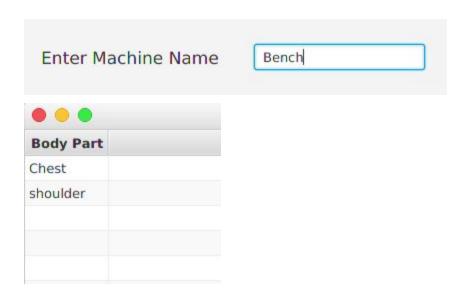
#### 4. Get members with plans expired in ascending order

"SELECT gym.Members.Name, DATE\_ADD(`Plan Started`, INTERVAL `Duration (Days)` DAY) AS Expired FROM gym.Members INNER JOIN gym.Plans ON gym.Members.Plan = gym.Plans.Name HAVING Expired < CURDATE() ORDER BY Expired ASC"

Name	Expired
ABC	2017-05-06

#### 5. Get which body parts a machine is used for

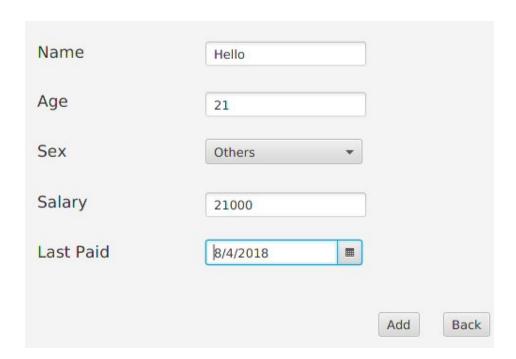
"SELECT E.`Body Part` FROM gym.Equipment AS M INNER JOIN gym.Exercise AS E ON M.Name = E.Equipment WHERE M.Name = "" + machine +"""



# Simple

#### 1. Add entry

"INSERT INTO gym.Exercise (Name, `Body Part`, Equipment) VALUES ('" + name +"","" + body\_part + "","" + equipment +"")"



## 2. **Delete Entry**

"DELETE FROM gym." + relation + " WHERE Name=""+ name + "' " + <input>

Name	Hello	
ld	1	

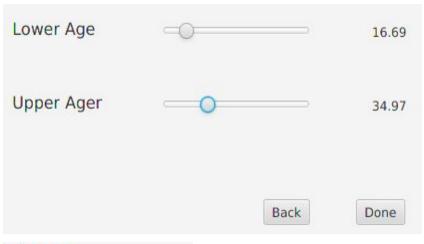
#### 3. **Display**

"SELECT \* FROM gym." + relation

ID	Name	Age	Sex	Phone	Plan	Trainer ID	Plan Started
11	Aakash	20	Male	12345	Basic	None	2018-04-01
12	Suraj	21	Male	23456	Basic	4	2018-04-09
13	Dew	20	Female	52342	Basic	4	2018-04-09
14	ABC	25	Female	65432	Basic	1	2017-04-06
15	BCD	30	Male	12342	Premium	1	2018-04-19
16	xyz	10	Mal	654	Premium	1	2018-04-19
17	lmn	20	m	123	Basic	1	2018-04-18
21	fds	12	Male	6543	Basic	4	2018-04-11
22	fds	12	Male	6543	Basic	4	2018-04-11

#### 4. Get names of members in a certain age group

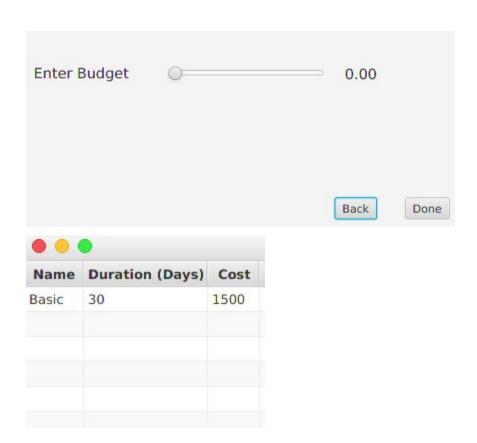
"SELECT ID, Name, Age FROM gym." + relation + " WHERE Age BETWEEN " + lower + " AND " + upper



ID	Name	Age	
11	Aakash	20	
12	Suraj	21	
13	Dew	20	
14	ABC	25	
15	BCD	30	

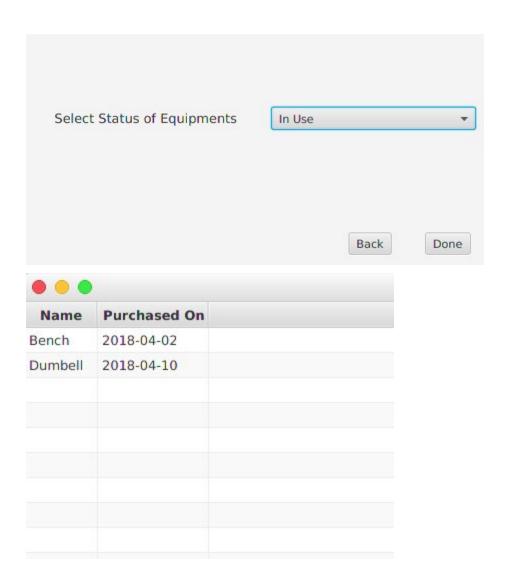
#### 5. Get plans in a budget

"SELECT Name, `Duration (Days)`, Cost FROM gym.Plans WHERE Cost <= "+budget



#### 6. Get equipment using status : in use/in maintenance

"SELECT Name, `Purchased On` FROM gym.Equipment WHERE Status = ""+ status + """



#### 7. Get total salary needed to be given

"SELECT sum(Salary) AS Salary FROM gym.Trainers"

