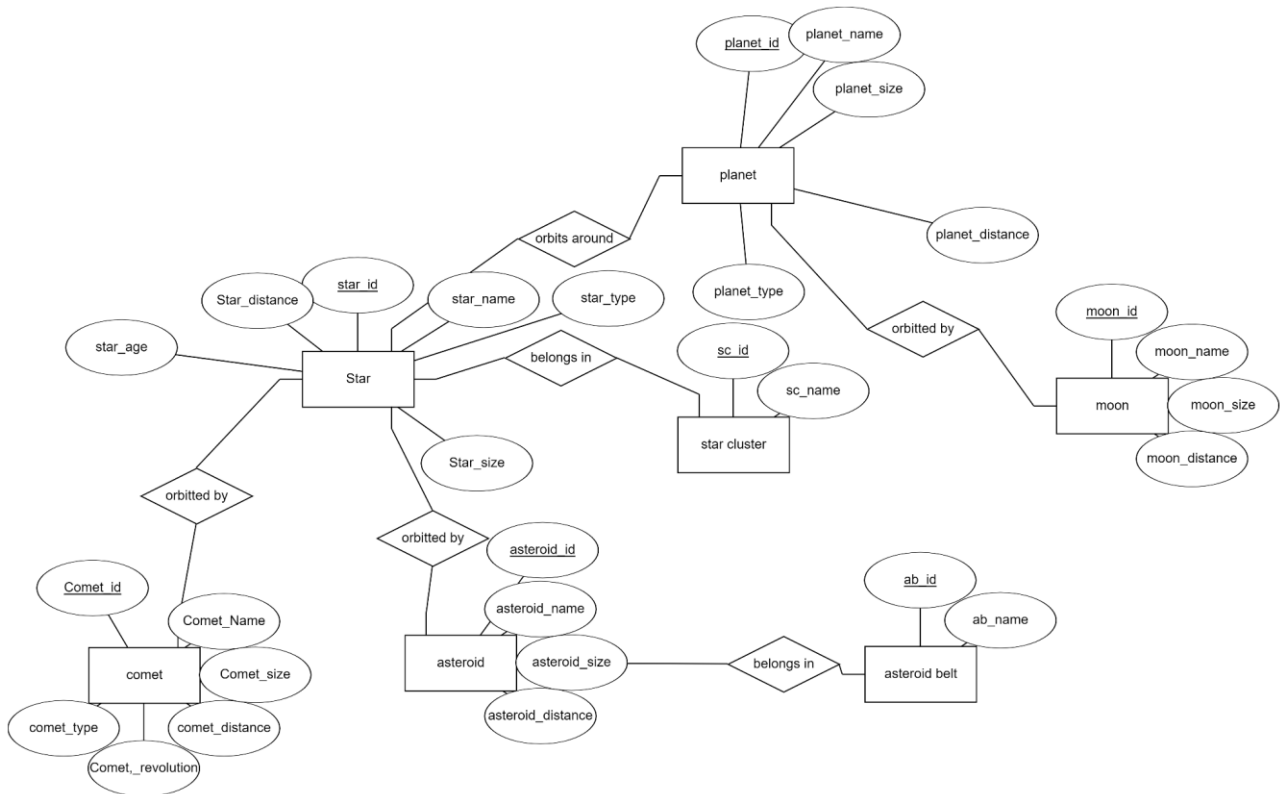


## MINI PROJECT REPORT

### Astronomical Database Management System

|      |                |                 |
|------|----------------|-----------------|
| NAME | Shreya Sridhar | Siddharth Hegde |
| SRN  | PES1UG21CS578  | PES2UG21CS522   |

#### ER DIAGRAM :



#### RELATIONAL SCHEMA :

| Star           |
|----------------|
| <u>star_id</u> |
| star_name      |
| Star_size      |
| Star_distance  |
| star_age       |
| star_type      |

| planet           |
|------------------|
| <u>planet_id</u> |
| planet_name      |
| planet_size      |
| planet_distance  |
| planet_type      |

| moon           |
|----------------|
| <u>moon_id</u> |
| moon_name      |
| moon_size      |
| moon_distance  |

| asteroid           |
|--------------------|
| <u>asteroid_id</u> |
| asteroid_name      |
| asteroid_size      |
| asteroid_distance  |

| comet            |
|------------------|
| <u>Comet_id</u>  |
| Comet_Name       |
| Comet_size       |
| comet_distance   |
| Comet_revolution |
| comet_type       |

| asteroid belt |
|---------------|
| <u>ab_id</u>  |
| ab_name       |

| star cluster |
|--------------|
| <u>sc_id</u> |
| sc_name      |

## MilkyWay - Register

Username:

Password:

Select Privileges:

Register

## MilkyWay - Login

Username:

Password:

Login

Query Executions:

1)REGISTER USER:

Adding user abc

## MilkyWay - Register

Username:

abc

Password:

...

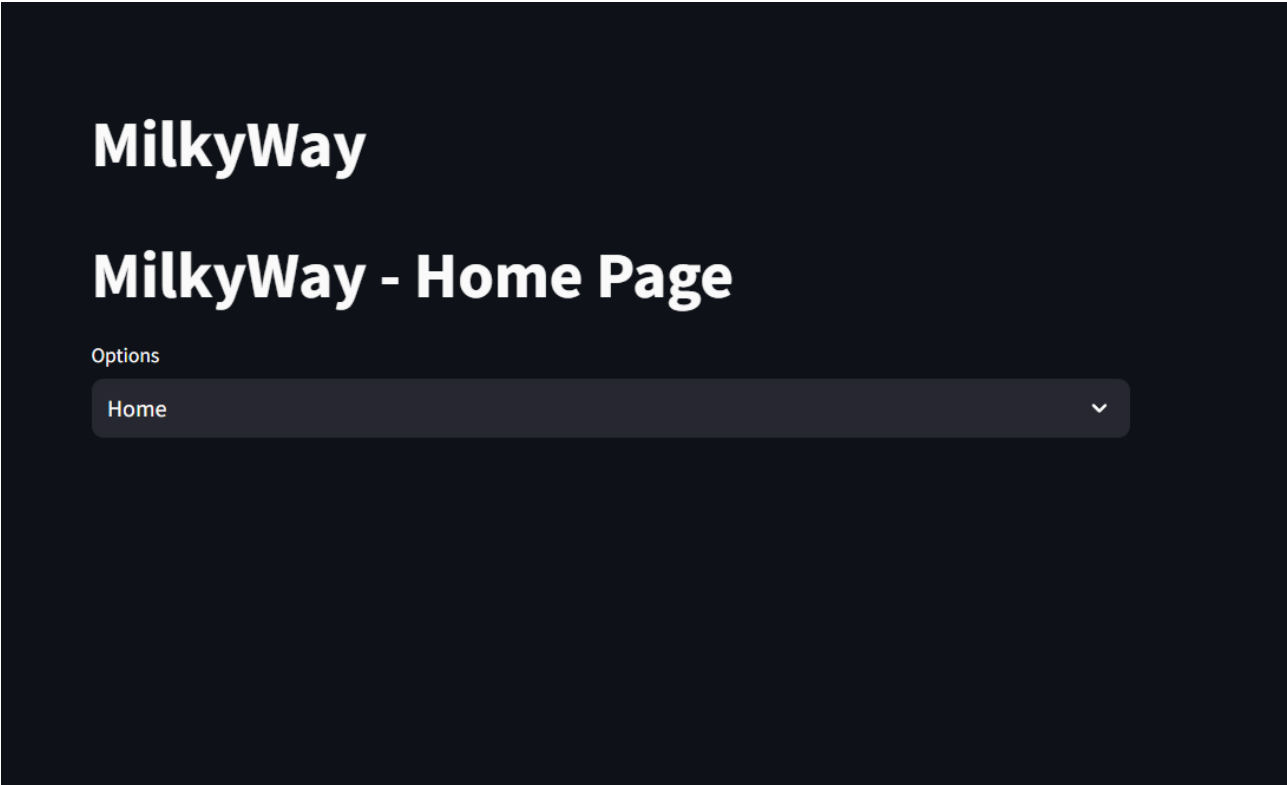
Select Privileges:

standard

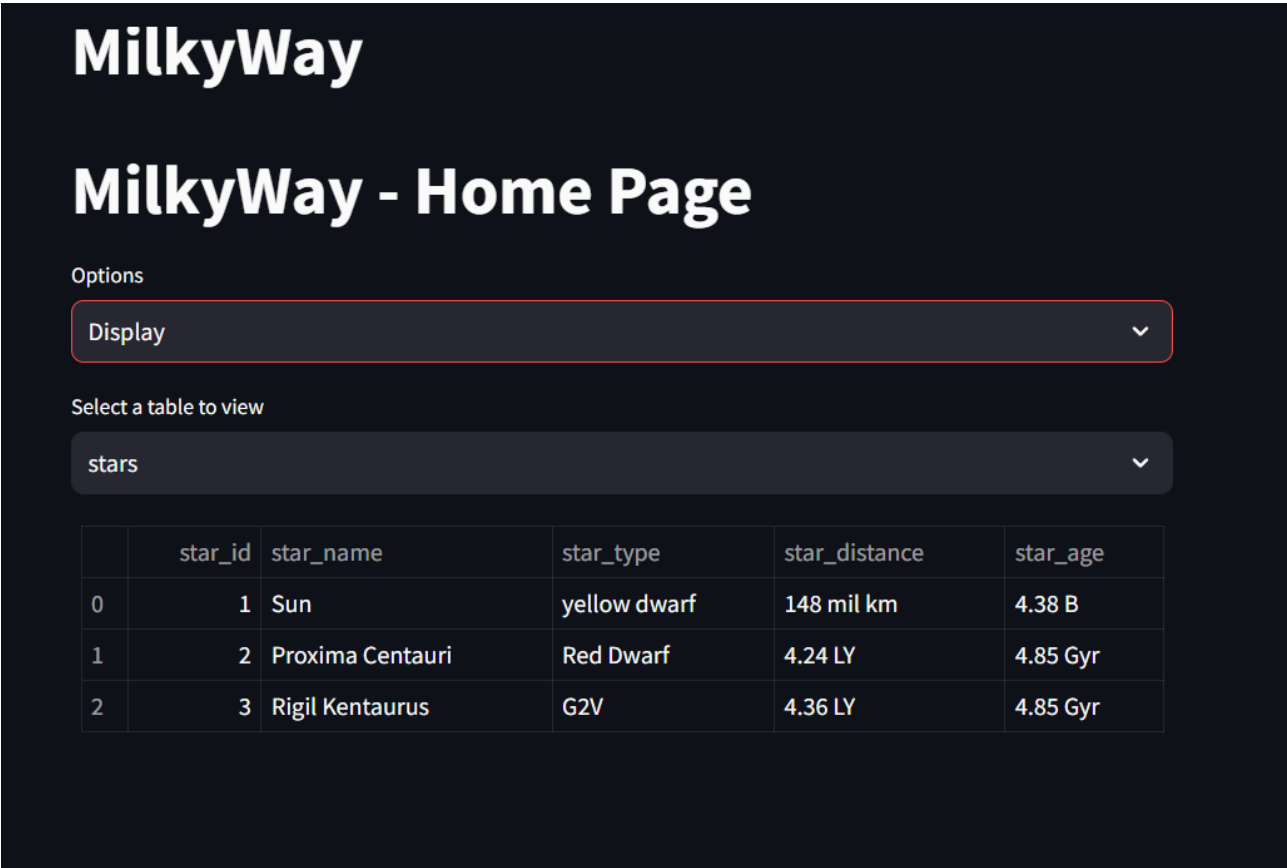
Register

User registered successfully.

2)LOGIN:  
Logging in with admin



3)Display Entity:  
Displaying stars



4)Insert new Entity:  
Inserting Example\_Star into stars

### Add a stars Entry

star\_id

4.00

-

+

star\_name

Example\_Star

star\_type

Example\_Star

star\_distance

Example\_Star

star\_age

Example\_Star

Add stars

stars added successfully!

## MilkyWay

### MilkyWay - Home Page

Options

Display

Select a table to view

stars

|   | star_id | star_name        | star_type    | star_distance | star_age     |
|---|---------|------------------|--------------|---------------|--------------|
| 0 | 1       | Sun              | yellow dwarf | 148 mil km    | 4.38 B       |
| 1 | 2       | Proxima Centauri | Red Dwarf    | 4.24 LY       | 4.85 Gyr     |
| 2 | 3       | Rigil Kentaurus  | G2V          | 4.36 LY       | 4.85 Gyr     |
| 3 | 4       | Example_Star     | Example_Star | Example_Star  | Example_Star |

5)Update Entity:

## Update a stars Entry

star\_id to update

4

star\_id

4

-

+

star\_name

Example\_Star\_Update

star\_type

Example\_Star

star\_distance

Example\_Star

star\_age

Example\_Star

Update stars

stars updated successfully!

## MilkyWay - Home Page

Options

Display

Select a table to view

stars

|   | star_id | star_name           | star_type    | star_distance | star_age     |
|---|---------|---------------------|--------------|---------------|--------------|
| 0 | 1       | Sun                 | yellow dwarf | 148 mil km    | 4.38 B       |
| 1 | 2       | Proxima Centauri    | Red Dwarf    | 4.24 LY       | 4.85 Gyr     |
| 2 | 3       | Rigil Kentaurus     | G2V          | 4.36 LY       | 4.85 Gyr     |
| 3 | 4       | Example_Star_Update | Example_Star | Example_Star  | Example_Star |

6)Delete Entity:

# MilkyWay - Home Page

Options

Delete

Select an entity to delete

stars

## Delete a stars Entry

star\_id to delete

4

Delete stars

stars deleted successfully!

# MilkyWay - Home Page

Options

Display

Select a table to view

stars

|   | star_id | star_name        | star_type    | star_distance | star_age |
|---|---------|------------------|--------------|---------------|----------|
| 0 | 1       | Sun              | yellow dwarf | 148 mil km    | 4.38 B   |
| 1 | 2       | Proxima Centauri | Red Dwarf    | 4.24 LY       | 4.85 Gyr |
| 2 | 3       | Rigil Kentaurus  | G2V          | 4.36 LY       | 4.85 Gyr |

7)Join Tables:  
Joining tables stars and planets with common attribute star\_id

Options

Join

Select first entity to join

stars

Select second entity to join

planets

Enter the common attribute for the join:

star\_id

Join Tables

Perform Join

|   | star_id | star_name | star_type    | star_distance | star_age | planet_id | planet_name | planet_type | p  |
|---|---------|-----------|--------------|---------------|----------|-----------|-------------|-------------|----|
| 0 | 1       | Sun       | yellow dwarf | 148 mil km    | 4.38 B   | 1         | Mercury     | Terrestrial | 7. |
| 1 | 1       | Sun       | yellow dwarf | 148 mil km    | 4.38 B   | 2         | Earth       | Rocky       | 5. |
| 2 | 1       | Sun       | yellow dwarf | 148 mil km    | 4.38 B   | 3         | Mars        | Terrestrial | 1. |