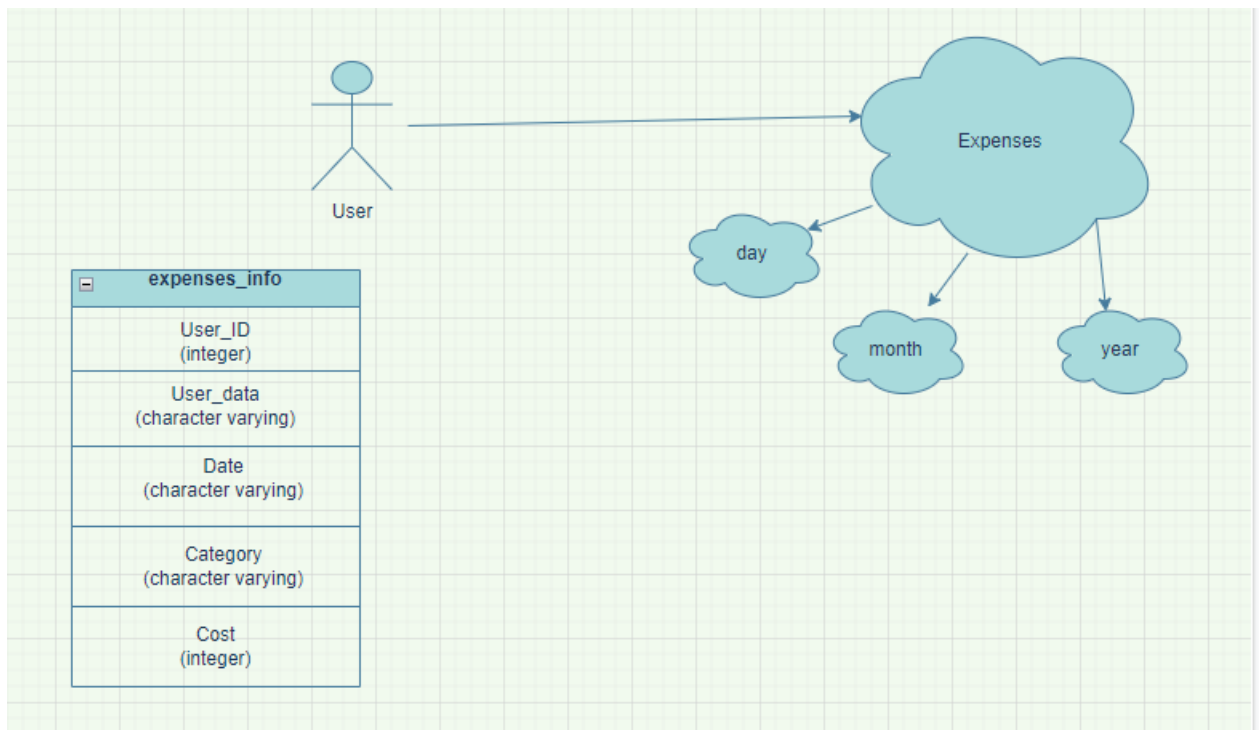


## Graphical representation



## Insert

Before:

The screenshot shows a database management interface. On the left, a tree view displays the database structure, including 'Tables (1)' and 'expenses\_info'. The 'expenses\_info' table is expanded, showing its columns: 'User\_ID' (integer), 'User\_data' (character varying), 'Date' (character varying), 'Category' (character varying), and 'Cost' (integer). On the right, the 'Data Output' tab is active, displaying the table's structure with column names and data types, along with lock icons for each column.

User_ID	User_data	Date	Category	Cost
integer	character varying	character varying	character varying	integer

After:

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> go build main.go storage.go
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main

|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|

INPUT REQUEST NUMBER ---> 1
Input user_id[type int],user_data[type string],date[type string],category[type string],cost[type int]
1 Vasilenko 20.11.2021 Food 250

|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|

INPUT REQUEST NUMBER ---> 4
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> |
```

Tables (1)

- expenses\_info
  - Columns
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
  - Trigger Functions
  - Types

Data Output						Explain	Messages	Notifications
	User_ID integer	User_data character varying	Date character varying	Category character varying	Cost integer			
1	1	Vasilenko	20.11.2021	Food	250			

## Select

Tables (1)

- expenses\_info
  - Columns
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
  - Trigger Functions
  - Types
  - Views

Data Output						Explain	Messages	Notifications
	User_ID integer	User_data character varying	Date character varying	Category character varying	Cost integer			
1	1	Vasilenko	20.11.2021	Food	250			
2	2	Vazerenko	23.12.2021	Movie	100			
3	3	Vasilenko	20.11.2021	Books	300			
4	4	Vazerenko	21.12.2021	Travel	150			

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main
```

```
|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 3
```

```
|all_data(1)|per_day(2)|per_month(3)|per_year(4)|category(5)|
```

```
INPUT REQUEST NUMBER ---> 1
```

```
1 Vasilenko 20.11.2021 Food 250
2 Vazerenko 23.12.2021 Movie 100
3 Vasilenko 20.11.2021 Books 300
4 Vazerenko 21.12.2021 Travel 150
```

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> go build main.go storage.go
```

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main
```

```
|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 3
```

```
|all_data(1)|per_day(2)|per_month(3)|per_year(4)|category(5)|
```

```
INPUT REQUEST NUMBER ---> 2
```

```
Input user surname >>>
```

```
Exsisting surnames: [Vasilenko] [Vazerenko] ;
```

```
>Vasilenko
```

```
Exsisting dates : [20.11.2021 20.11.2021]
```

```
Input day [format day.month.year] >
```

```
20.11.2021
```

```
Expenses per day : 550
```

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main
```

```
|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 3
```

```
|all_data(1)|per_day(2)|per_month(3)|per_year(4)|category(5)|
```

```
INPUT REQUEST NUMBER ---> 3
```

```
Input user surname >>>
```

```
Exsisting surnames: [Vasilenko] [Vazerenko] ;
```

```
>Vasilenko
```

```
Exsisting dates : [20.11.2021 20.11.2021]
```

```
Input the date with the desired month [format day.month.year] >
```

```
20.11.2021
```

```
Expenses per month : 550
```

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main
```

```
|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 3
```

```
|all_data(1)|per_day(2)|per_month(3)|per_year(4)|category(5)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 4
```

```
Input user surname >>>
```

```
Existing surnames: [Vasilenko] [Vazerenko] ;
```

```
>Vazerenko
```

```
Existing dates : [23.12.2021 21.12.2021]
```

```
100
```

```
150
```

```
Expenses per year : 250
```

```
|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|
```

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main
```

```
|-----|
|insert(1)|delete(2)|select(3)|exit(4)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 3
```

```
|all_data(1)|per_day(2)|per_month(3)|per_year(4)|category(5)|
|-----|
```

```
INPUT REQUEST NUMBER ---> 5
```

```
Input user surname >>>
```

```
Existing surnames: [Vasilenko] [Vazerenko] ;
```

```
>Vazerenko
```

```
Input category >>>
```

```
Existing categories: [Movie] [Travel] ;
```

```
>Travel
```

```
Expenses per category : 150
```

## Delete

Before:

expenses_info		Data Output Explain Messages Notifications				
>	Columns					
>	Constraints					
>	Indexes					
>	RLS Policies					
>	Rules					
>	Triggers					
>	Trigger Functions					
>	Types					
>	Views					
		User_ID	User_data	Date	Category	Cost
		integer	character varying	character varying	character varying	integer
		1	Vasilenko	20.11.2021	Food	250
		2	Vazerenko	23.12.2021	Movie	100
		3	Vasilenko	20.11.2021	Books	300
		4	Vazerenko	21.12.2021	Travel	150

After:

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main

-----
|insert(1)|delete(2)|select(3)|exit(4)|
|         |         |         |         |
-----

INPUT REQUEST NUMBER ---> 2
Press number 1 if you wanna delete row,number 2 if all data
1
Input id[type int]
2
```

Tables (1)

- expenses\_info
  - Columns
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
- Trigger Functions
- Types

Data Output

Explain

Messages

Notifications

	User_ID	User_data	Date	Category	Cost
	integer	character varying	character varying	character varying	integer
1	1	Vasilenko	20.11.2021	Food	250
2	3	Vasilenko	20.11.2021	Books	300
3	4	Vazerenko	21.12.2021	Travel	150

```
PS C:\Users\3463465\Desktop\Study\Study_Work\test_task> ./main

-----
|insert(1)|delete(2)|select(3)|exit(4)|
|         |         |         |         |
-----

INPUT REQUEST NUMBER ---> 2
Press number 1 if you wanna delete row,number 2 if all data
2
```

Tables (1)

- expenses\_info
  - Columns
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers

Data Output

Explain

Messages

Notifications

User_ID	User_data	Date	Category	Cost
integer	character varying	character varying	character varying	integer