
sqlbits
2025
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Dynamic Power Query

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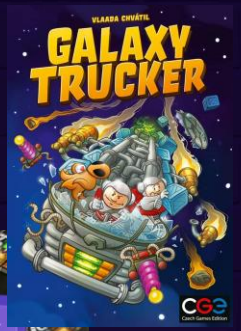
Laura GB (she/her)

- Laura Graham-Brown
- HatFullOfData.blog
- HatFullOfData
- Data Platform



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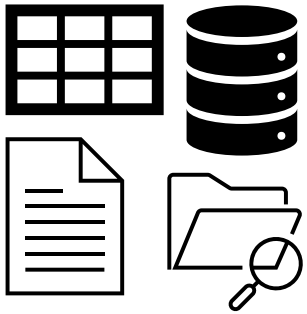
Power Query does Magic

Multiple Data Sources



	Date	Description
1	01/06/2025	Invoice 2345 Payment
2	02/06/2025	Room Hire
3	03/06/2025	Projector
4	04/06/2025	Invoice 2346 Payment

Table

	List
1	Invoice 2345 Payment
2	Room Hire
3	Projector
4	Invoice 2346 Payment

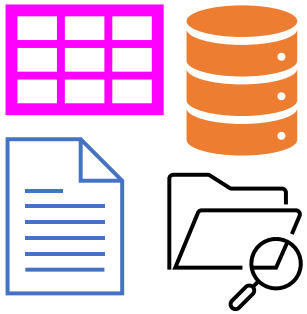
List

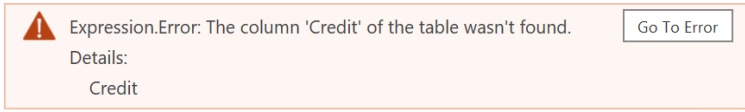
02/06/2025

Value

… then breaks

Multiple Data Sources





Error

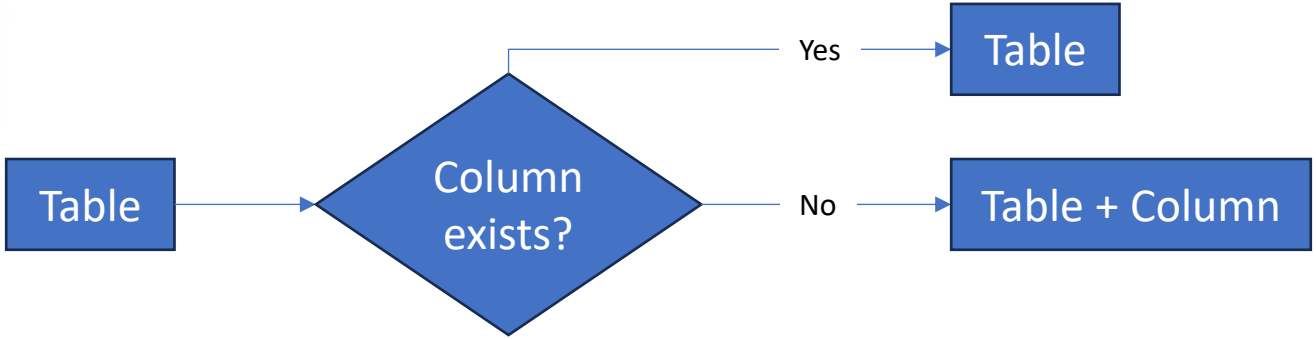
Common Reasons

- Missing Columns
- Hidden Column differences
- Missing Data

Demo 1 & 2

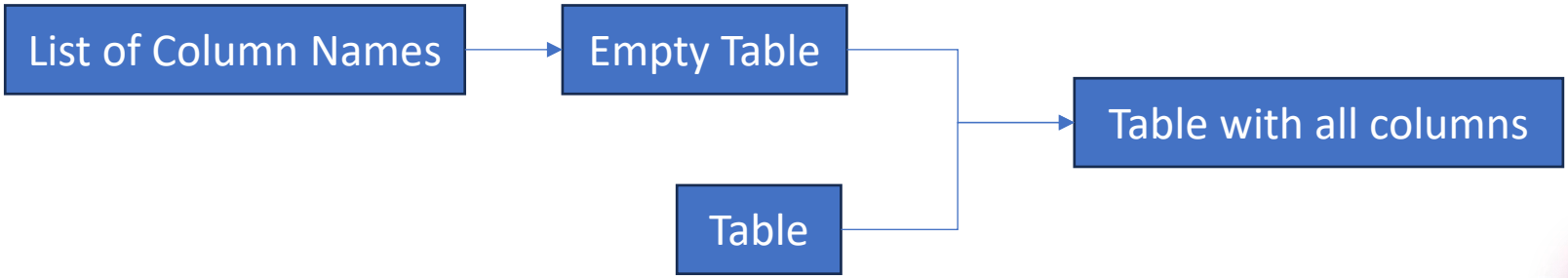
Case of the missing columns

Demo 1 Solution



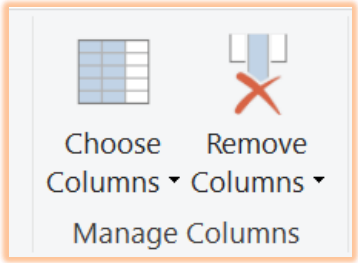

```
#"Added Custom" = If Table.HasColumns(#"Promoted Headers","Credit")
        then #"Promoted Headers"
        else Table.AddColumn(#"Promoted Headers", "Credit", each null),
```

Demo 2 Solution




```
= Table.Combine({#"Pivoted Column", Demo2_EmptyTable})
```

Demo 2 Alternative Solution

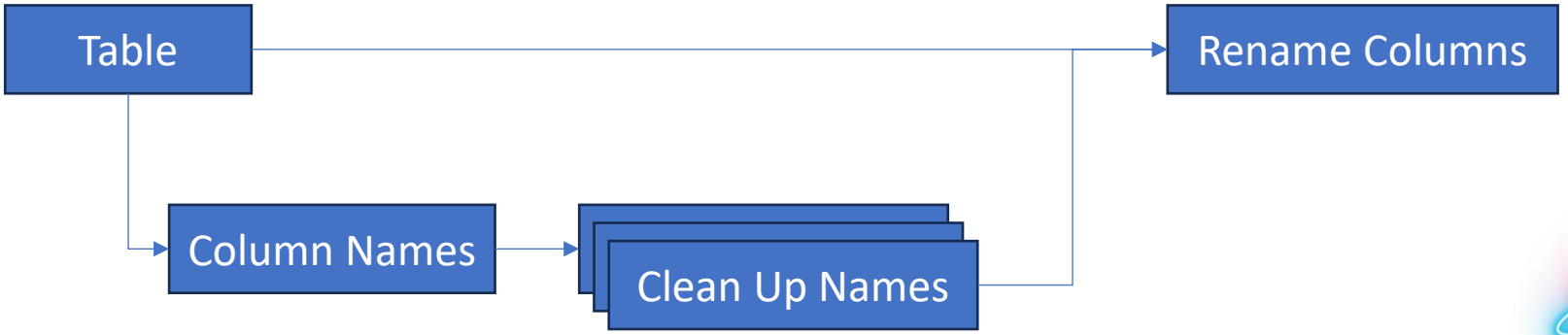



```
= Table.SelectColumns(
        MyTable,
        ListColumnNames,
        MissingField.UseNull
)
```

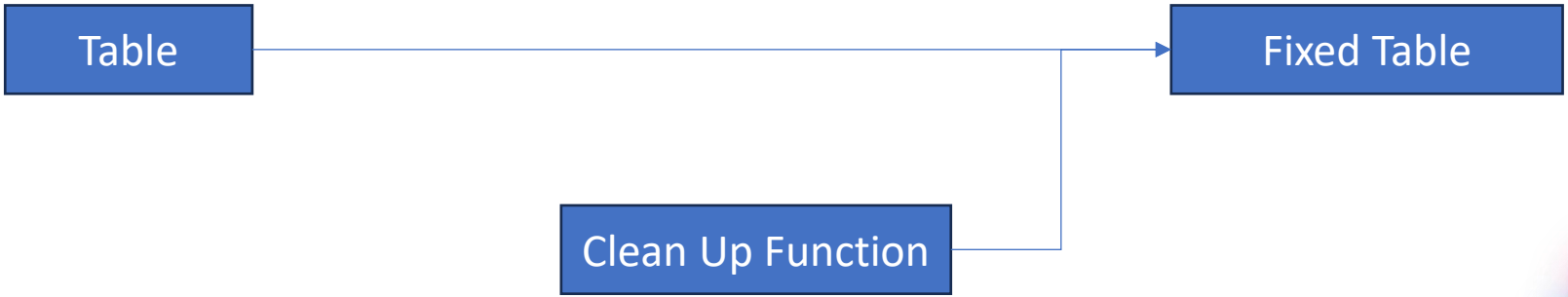
Demo 3

Case of bad column names

Demo 3 Solution



Demo 3 Function Solution



Demo 4

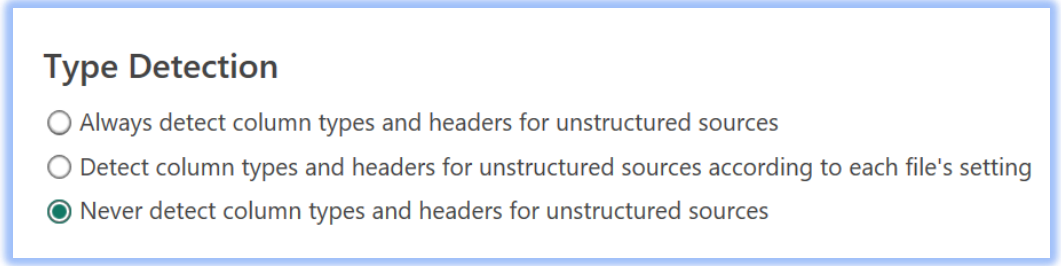
Avoiding the problems

Demo 4 Issues

Demo4

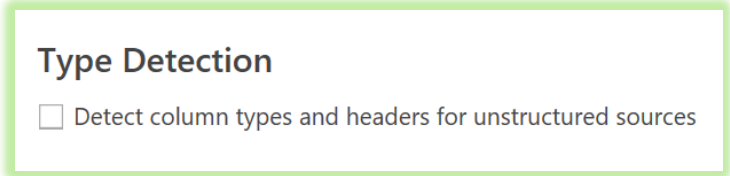
```
let
    Source = Excel.Workbook(Web.Contents(URL & Demo4_File1), null, true),
    Sheet1_Sheet = Source{[Item="Sheet1",Kind="Sheet"]}[Data],
    #"Changed Type" = Table.TransformColumnTypes(Sheet1_Sheet,{{"Column1", type text}, {"Column2", type text}, {
    #"Promoted Headers" = Table.PromoteHeaders(#"Changed Type", [PromoteAllScalars=true]),
    #"Changed Type1" = Table.TransformColumnTypes(#"Promoted Headers",{{"Region", type text}, {"Team Member", ty
    #"Replaced Value" = Table.ReplaceValue(#"Changed Type1",null,0,Replacer.ReplaceValue,{"01/01/2025", "01/02/2
    #"Unpivoted Only Selected Columns" = Table.Unpivot(#"Replaced Value", {"01/01/2025", "01/02/2025", "01/03/20
in
    #"Unpivoted Only Selected Columns"
```

Turn Off Detect Column Types



Global

Current File



Replace Hardcoded Lists

```
= Table.ColumnNames(MyTable)
```

List

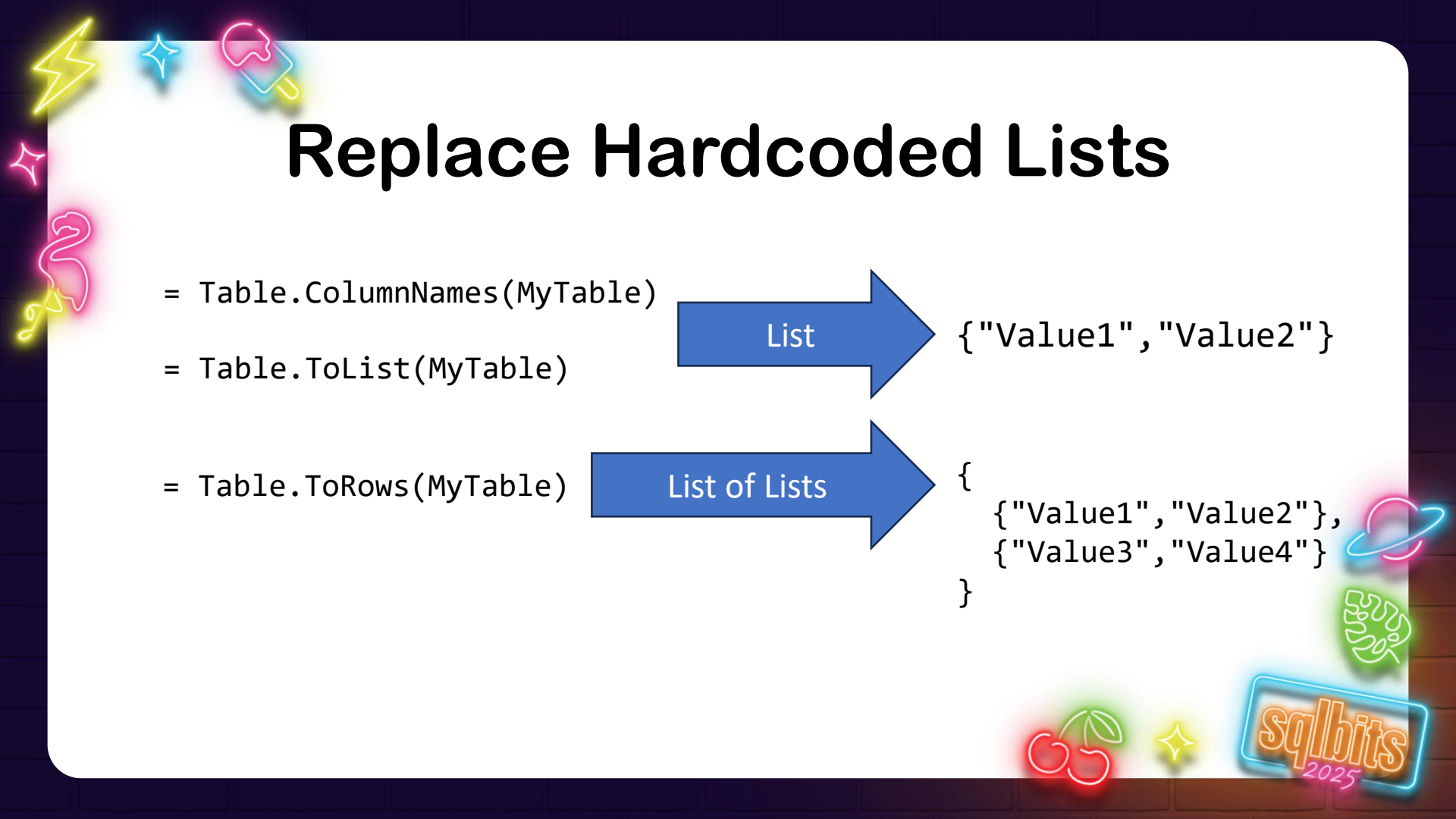
```
{"Value1","Value2"}
```

```
= Table.ToList(MyTable)
```

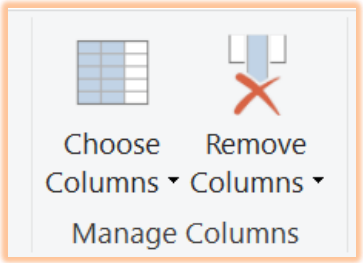
```
= Table.ToRows(MyTable)
```

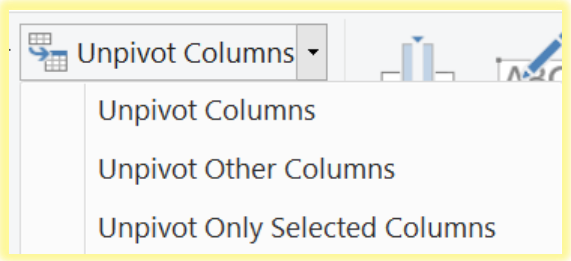
List of Lists

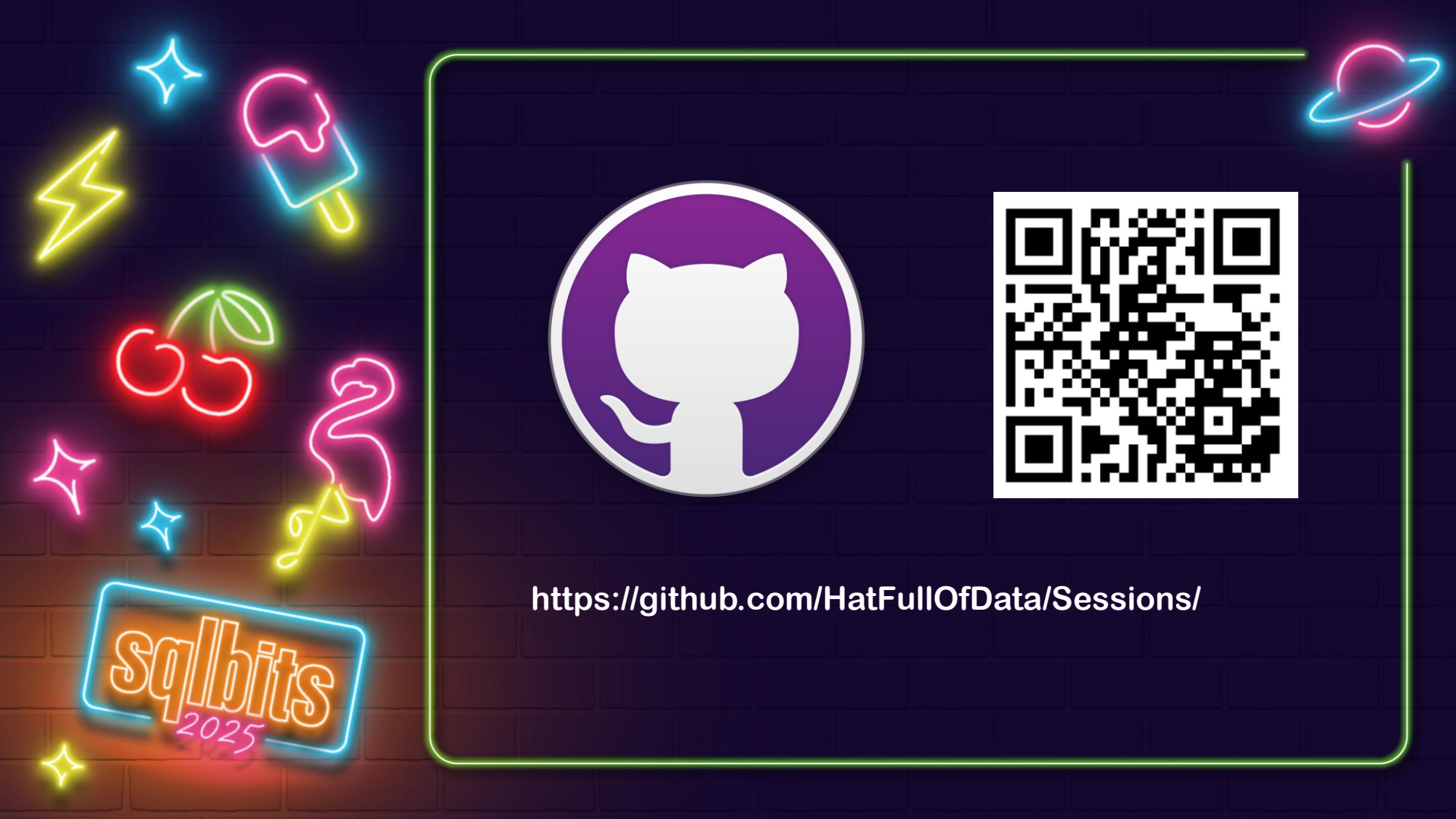
```
{
  {"Value1","Value2"},
  {"Value3","Value4"}
}
```



Check Alternatives







https://github.com/HatFullOfData/Sessions/

Thank You

Don’t forget to leave feedback in the app!