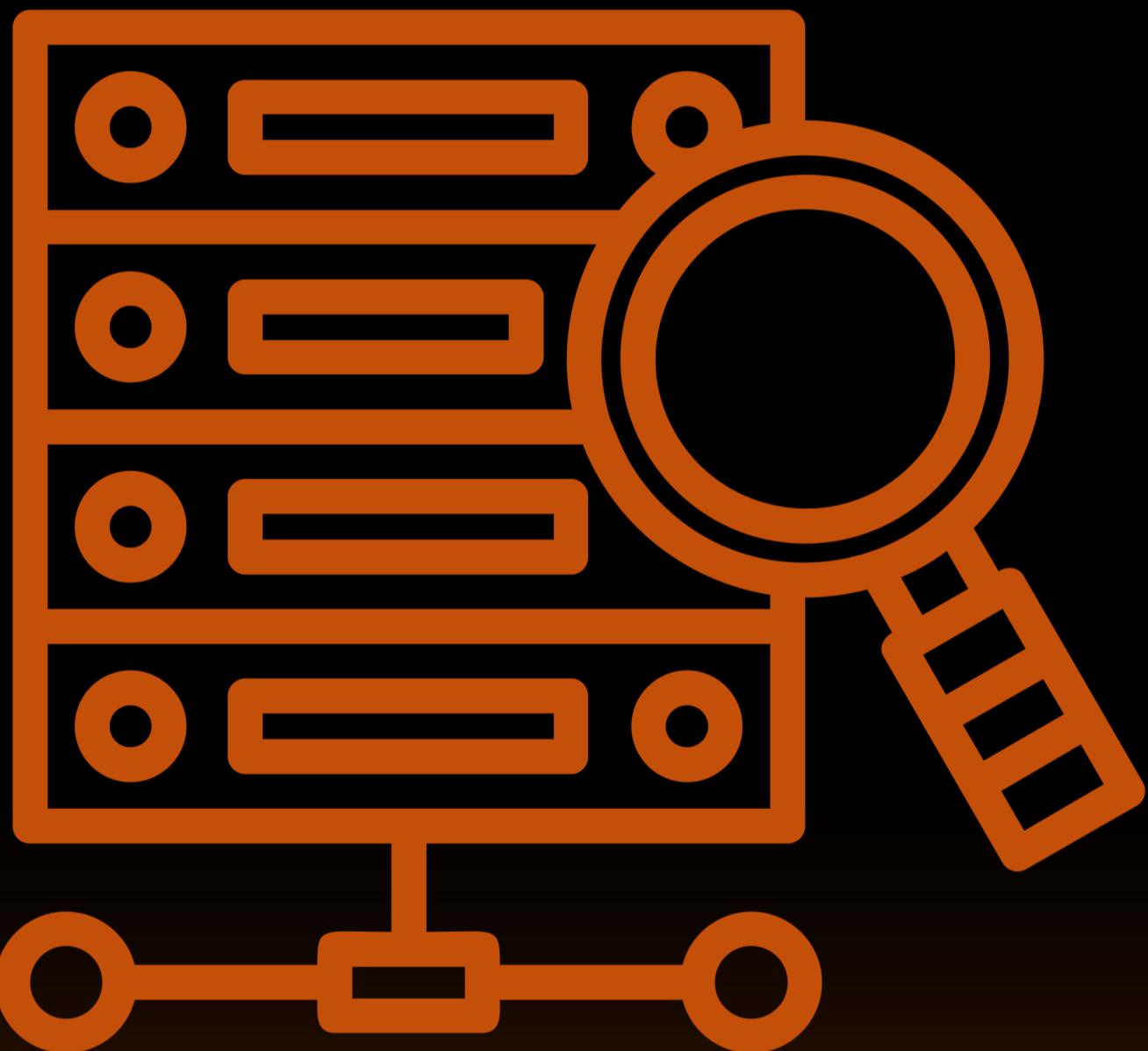


SERVICENOW

`.getEncodedQuery()`

EXPLAINED WITH EXAMPLES



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THE POWER OF .GETENCODEDQUERY()

In ServiceNow, the `.getEncodedQuery()` method attached to a GlideRecord object serves as a great **debugging tool**.

It **translates** the **internal query** used by your **GlideRecord** into a easy-readable string format, showing the **exact parameters** sent to the **database**.



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EXAMPLE OF USAGE

```
1 var childIncGR = new GlideRecord("incident");
2 childIncGR.addActiveQuery();
3 childIncGR.addQuery("parent_incident",
4 '39ee6f141b9739d834a233bd8b4bcb52');
5 childIncGR.addQuery("incident_state", "!=" , "6");
6 childIncGR.query();
7 gs.log(childIncGR.getEncodedQuery(), 'lukiszum');
```

and the log:

```
lukiszum:
active=true^parent_inciden
t=39ee6f141b9739d834a233bd
8b4bcb52^incident_state!=6
```

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“SHOW DATA” OF TABLE

As you see by using `.getEncodedQuery()` i have **exact parameter** returned.

Now ,as I expect **lots of incident** to be returned by Query, I go to the **incident** table by clicking “Show Data”:

```
var childIncGR = new GlideRecord("incident")  
childIncGR.addActiveQuery();  
childIncGR.addQuery("parent_incident");  
childIncGR.addQuery("incident_state");  
childIncGR.query();
```

Show Definition
Show Data
Find References



PASTE QUERY IN URL



VPN 🔒 dev220683.service-now.com/incident_list.do?sysparm_filter_pinned=true&sysparm_query=

ion upgrade requires additional permissions. Go to the extensions manager to accept the upgrade.

Incidents Number Search

AND OR Add Sort ⚡

— oper — — value —

ber ▾	Opened	Short description
010001	2024-04-09 04:24:19	asdadasdad
009009	2018-08-30 01:06:16	Unable to access the shared folder.
009005	2018-08-31 21:35:21	Email server is down.
009004	2018-09-01 06:13:30	Defect tracking tool is down.

When I open **incident table** the **URL** ends with **sysparm_query=** (blank).

Lets **paste** our **encoded** Query here...

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NOW WE GET EXACT FILTERS



dev220683.service-now.com/incident_list.do?sysparm_filter_pinned=true&sysparm_query=active=true^parent_incident

Incidents Number Search

Run Save... AND OR Add Sort ⚡

All of these conditions must be met

Active	is	true	AND	OR	X
Parent Incident	is	INC0010001	AND	OR	X
Incident state	is not	Resolved	AND	OR	X

All > Active = true > Parent Incident = (empty) > Incident state != Resolved

Now we can easily see **all records** that are returned by this **query** and make sure it returns **correct results**.

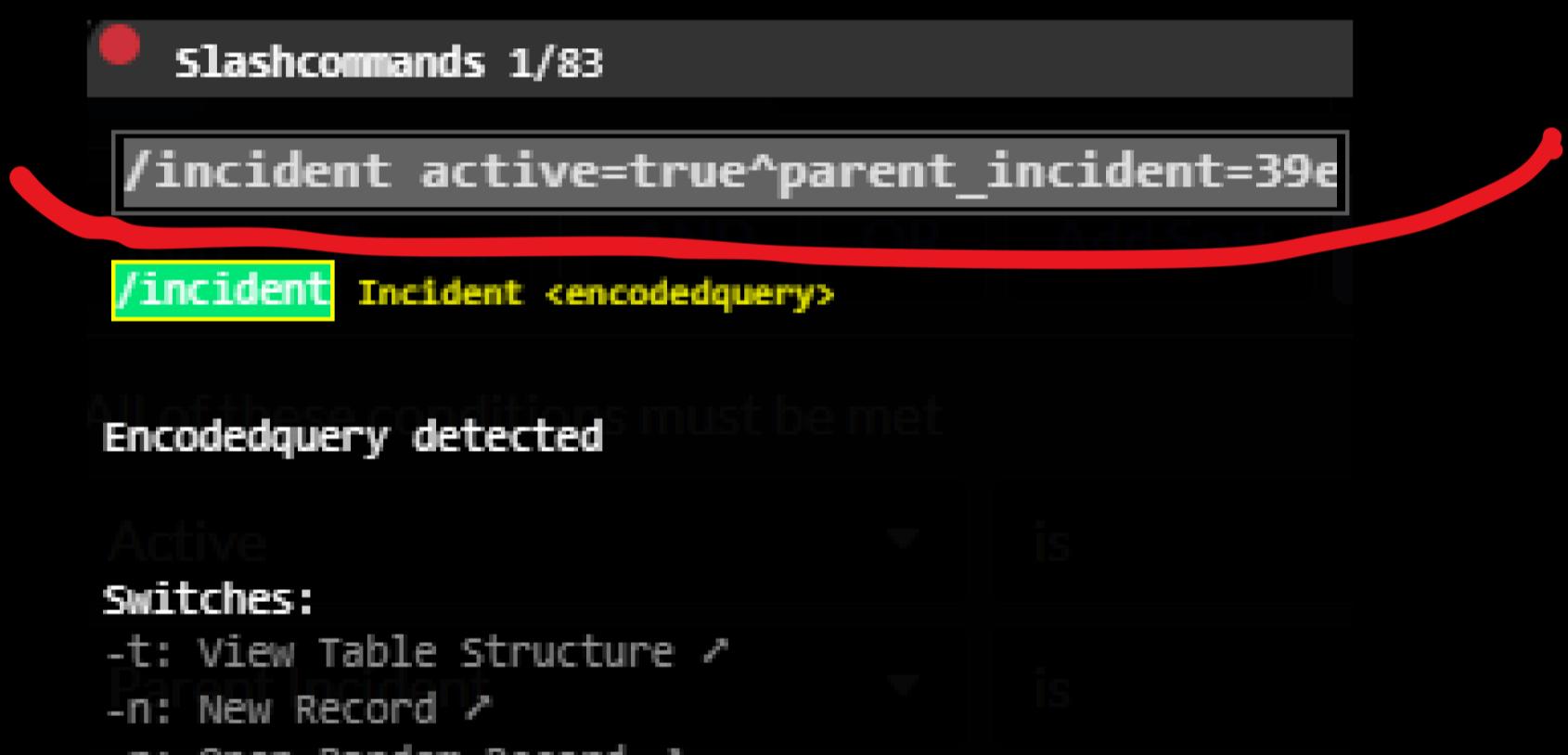
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SNUTILS

By the way, if you have **SNUtils** installed then you can just hit "/" and type

"**/incident <paste query>**" like this:



Hit **enter** and you go to **Inc table** and get **all filters**.

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DOUBTS

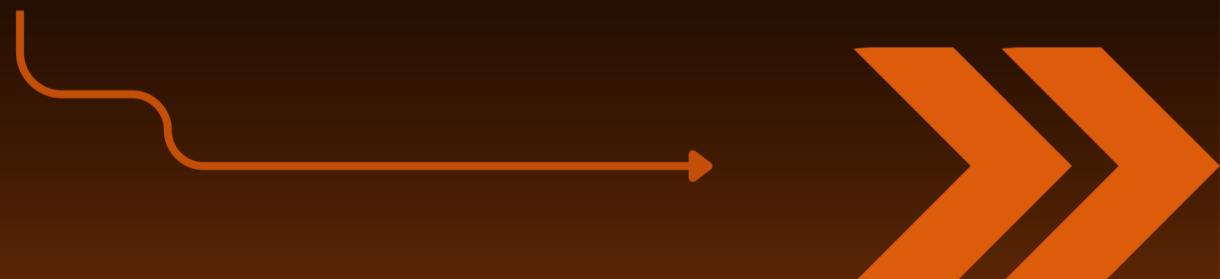
You may say okay this `.addEncodedQuery()` looks cool, but **i can read few lines at once** that look like this:

```
childIncGR.addActiveQuery();
childIncGR.addQuery("parent_incident",
'39ee6f141b9739d834a233bd8b4bcb52');
childIncGR.addQuery("incident_state", "!=" , "6");
```

Well ofc, but there a cases when the entire Query is not so **obvious**.

It looks more like this...

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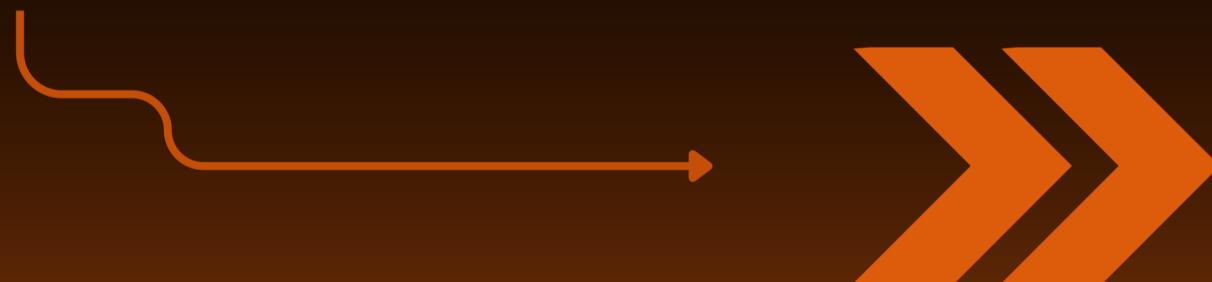


MULTIPLE CONDITIONS

```
9  var excludeStateClosed = true;
10 var urgentOnly = false;
11
12 // Conditionally add a query to exclude closed incidents
13 ✓ if (excludeStateClosed) {
14     childIncGR.addQuery('incident_state', '!=', '6');
15 }
16
17 // Conditionally add a query for urgent incidents
18 ✓ if (urgentOnly) {
19     childIncGR.addQuery('urgency', '1');
20 }
21
22 childIncGR.query();
23 gs.log(childIncGR.getEncodedQuery(), 'lukiszum');
```

In **complex conditions** it may be really **useful** to make sure what **exact query is returned**.

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BUSINESS RULES

Another example may be in a **Business Rule**.

Lets imagine a scenario:

User resolves **Master Incident**.

As he resolves **Master Incident** he wants all **Child Incidents** to also be **resolved**. (As **issue for all incidents** is solved by solving **Master**).

Problem is that he can **see/edit Master Incident**, but **Child Incidents** are not **visible** to him because of **ACL**.



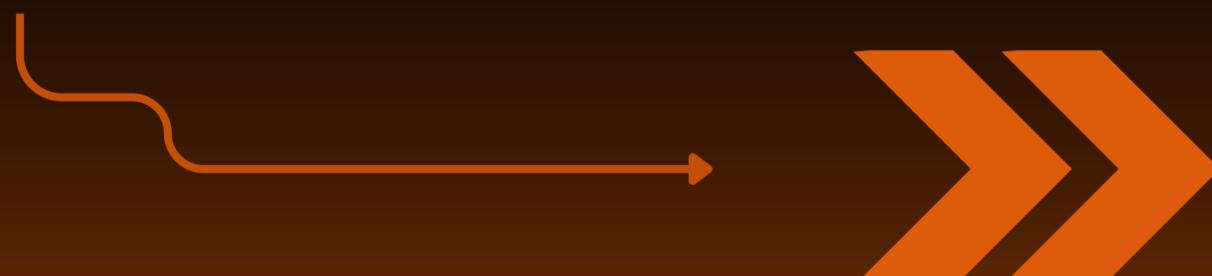
BUSINESS RULES

There is OOTB “Update Child Incidents” BR with code like this: **(except .getEncodedQuery() line which i added)**

```
62 ✓function resolveChildIncidents() {  
63     //check if update is valid or aborted before updating  
64     child incidents  
64     if(current.isActionAborted())  
65         return;  
66  
67     var incident = new GlideRecord("incident");  
68     incident.addActiveQuery();  
69     incident.addQuery("parent_incident", current.sys_id);  
70     incident.addQuery("state", "!=" , IncidentState.RESOLVED);  
71     incident.query();  
72     gs.log(incident.getEncodedQuery(), 'lukiszum');  
73     var msg = "";
```

What will this log show for **User** that **cannot see Child Incidents** because of **ACL** ?

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QUERY + ACL FILTERS

Expected result would be this:



```
"active=true^parent_incident=39ee6f141b9739d83  
4a233bd8b4bcb52^incident_state!=6"
```

But in reality the query is waaay longer as it also applied configured ACL for this user

```
"active=true^parent_incident=39ee6f141b9739d83  
4a233bd8b4bcb52^incident_state!=6^u_appdomain=NULL^ORu_service_recipient=fb0a6bb3dbc47f84  
0029....." (depending on ACL)
```



RETURNS

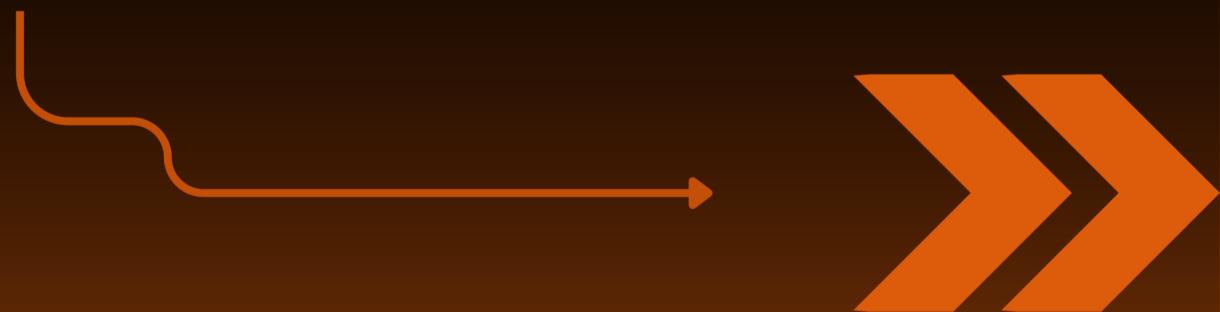
Thanks to `.addEncodedQuery()` we could now see if it returns any result for the user.

It turns out for the **long query it doesn't**, while for **expected/short query it would**.

It is because of how ACL work.

When a user resolves a **parent** incident, the business rule that updates child incidents operates in the **context of the user's session**.

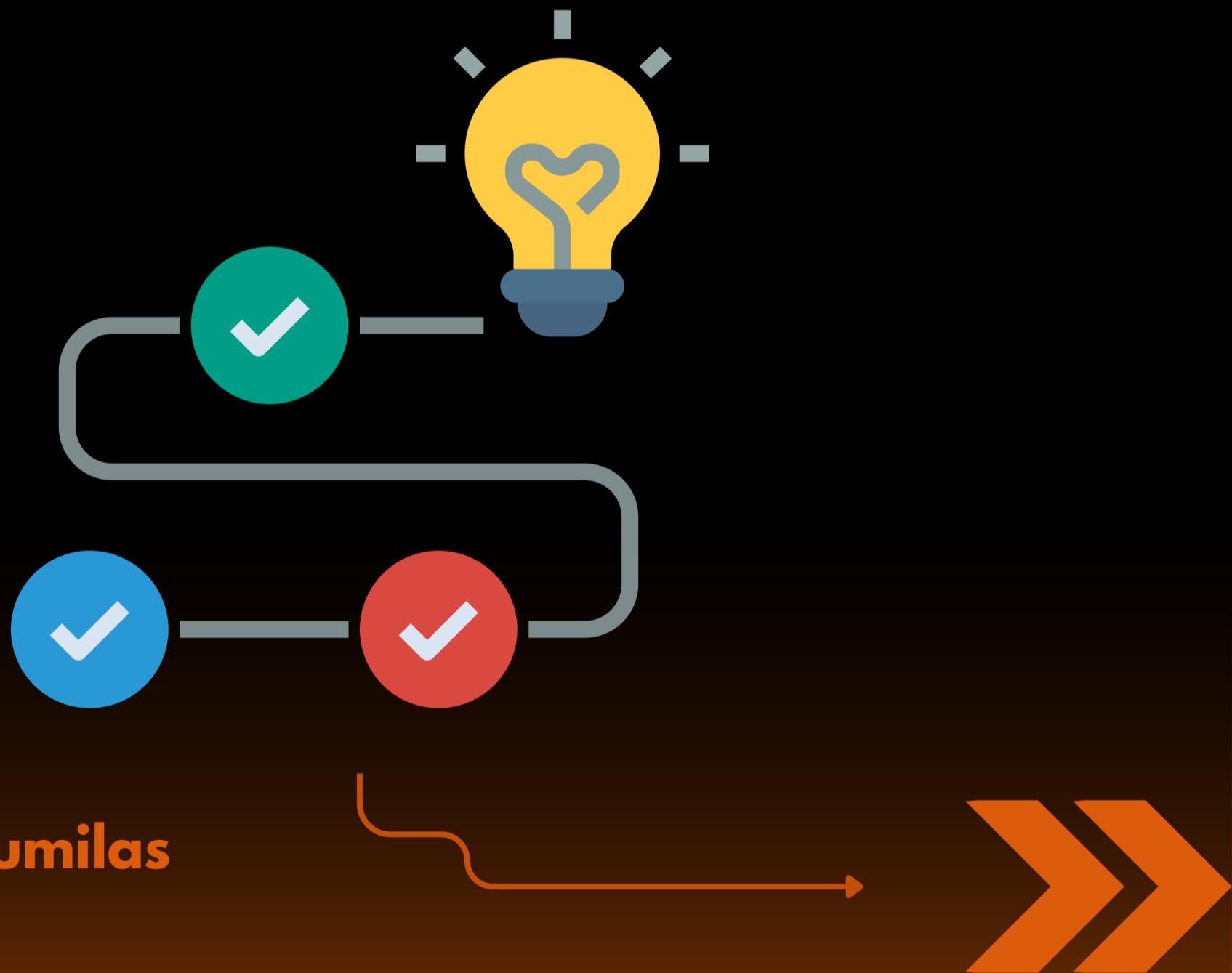
It respects the user's roles and permissions.

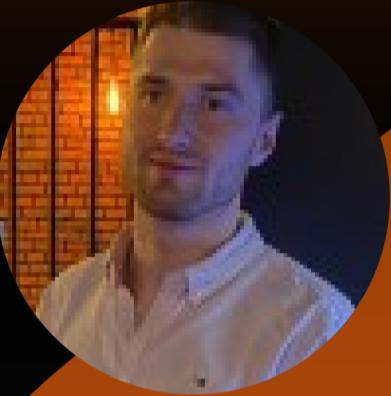


CONCLUSION

As you can see `.getEncodedQuery()` method is a great **debugging tool**.

Whenever i'm not sure about what Query returned i use this method.





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