

Demistificirani APEX Condition-i

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BI
LOG



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Što su uvjeti?

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♥ APEX

Konzalting i razvoj poslovnih rješenja

Migracije Forms > APEX, APEX edukacije, custom razvoj

Naša APEX rješenja:

Akira - HR software

Product Studio - Upravljanje portfeljem i životnim ciklusom proizvoda

Phoenitian - Sveobuhvatno upravljanje osigurateljnim poslovnim
procesima

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Ranije sysadmin, pa nastavnik

Od 2011. radim kao Oracle programer u BiLog d.o.o., fokus na APEX-u

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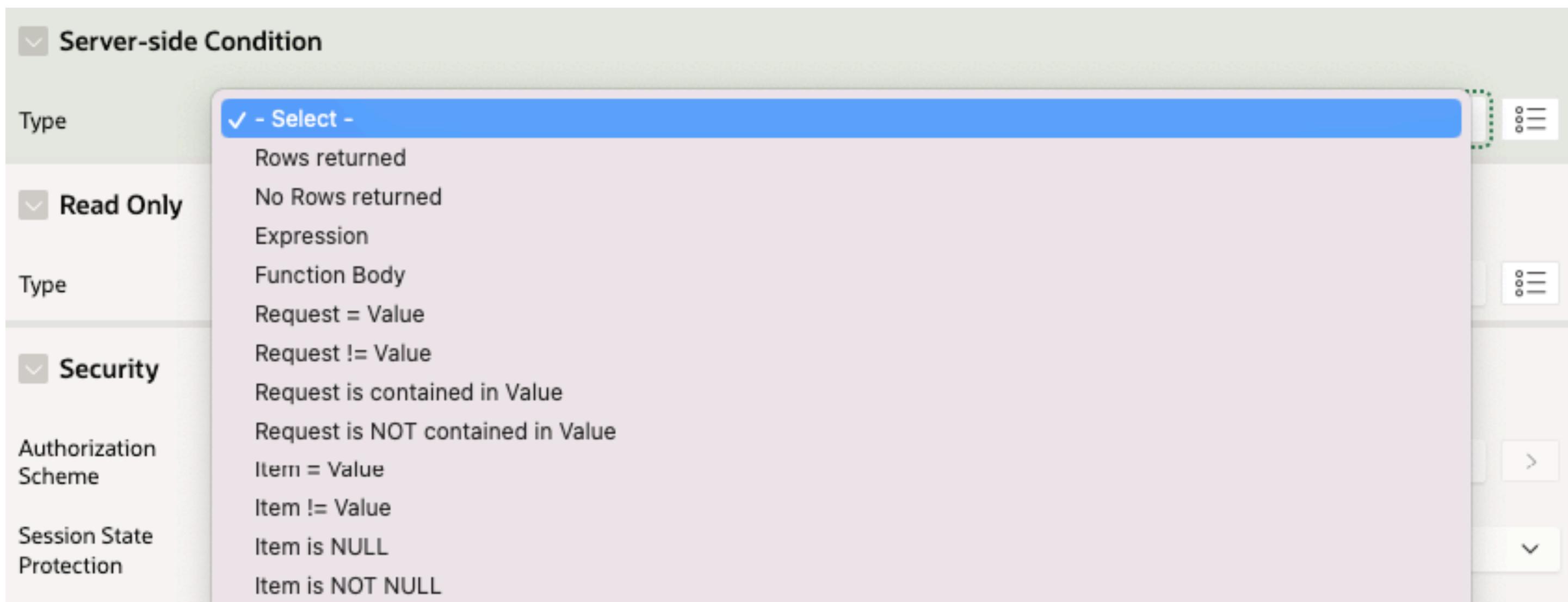


IZVRŠITI,
ili NE IZVRŠITI,
pitanje je sad.

Što su uvjeti?

Kontrole renderiranja ili procesiranja

Izrazi koji evaluiraju u TRUE ili FALSE

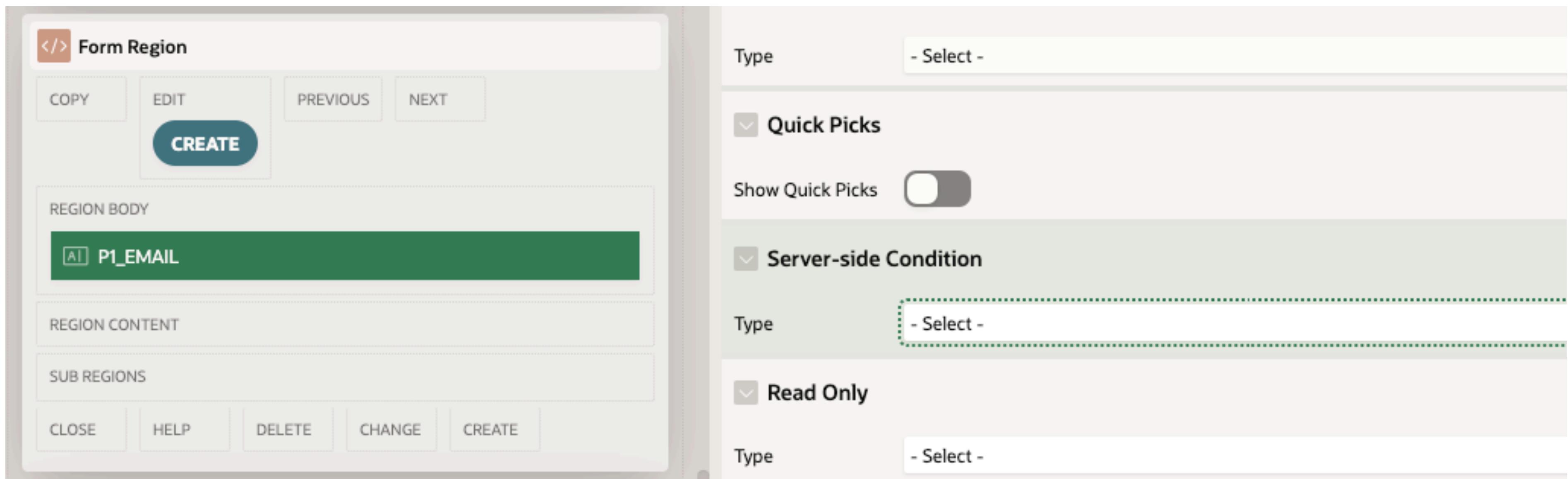


✓ - Select -

- Rows returned
- No Rows returned
- Expression
- Function Body
- Request = Value
- Request != Value
- Request is contained in Value
- Request is NOT contained in Value
- Item = Value
- Item != Value
- Item is NULL
- Item is NOT NULL
- Item is zero
- Item is NOT zero
- Item is NULL or zero
- Item is NOT NULL and NOT zero
- Item contains no spaces
- Item is numeric
- Item is NOT numeric
- Item is alphanumeric
- Item is in colon delimited list
- Item is NOT in colon delimited list
- User Preference = Value
- User Preference != Value
- Current Page = Page
- Current Page != Page
- Current Page is in comma delimited list
- Current Page is NOT in comma delimited list
- Current Page is in Printer Friendly Mode
- Current page is NOT in Printer Friendly Mode
- Page/Region is Read Only
- Page/Region is NOT Read Only
- User is Authenticated (not public)
- User is the Public User (user has not authenticated)
- Inline Validation Errors displayed
- Inline Validation Errors NOT displayed
- Current Language = Value
- Current Language != Value
- Current Language is contained in Value
- Current Language is NOT contained in Value
- Never

Za što se koriste?

Renderiranje Item-a, Region-a ili Button-a



Za što se koriste?

Izvršavanje procesa

The screenshot shows a software interface for managing processes. The top navigation bar includes tabs for 'Rendering', 'Processing' (which is selected), 'Dynamic Ac...', and 'Process'. The left sidebar lists various events and sections: 'After Submit', 'Validating', 'Processing' (expanded), 'Processes' (expanded), a prominent green button labeled 'Save Data' with a circular arrow icon, 'After Processing', and 'Ajax Callback'. The right panel contains configuration fields: a 'Filter' search bar, 'Display Location' set to 'Inline in Notification', a 'Server-side Condition' section with dropdowns for 'When Button Pressed' and 'Type', and a 'Process' section with a 'Process' tab and a 'Filter' search bar.

Za što se koriste?

Izvršavanje dinamičkih akcija

The screenshot shows the Oracle APEX 'Dynamic Actions' configuration screen. The left sidebar lists actions categorized by event type: 'Actions Fired on Page Load', 'Events' (with 'Page Load' and 'Change' sub-items), 'Click', and 'Dialog Closed'. The 'P1_CURRENCY - On Change - Set P1_CODE' action under 'Change' is highlighted with a green border. The right panel displays the configuration details for this specific action:

- Dynamic Action**: The main title.
- Filter**: A search bar.
- Client-side Condition**: A section with a checked checkbox and a 'Type' dropdown set to '- Select -'.
- Advanced**: A section with a checked checkbox and a 'Event Scope' dropdown set to 'Static'.
- Server-side Condition**: A section with a checked checkbox and a 'Type' dropdown set to '- Select -'.

Za što se koriste?

?

Renderiranje stupaca u Report
regijama

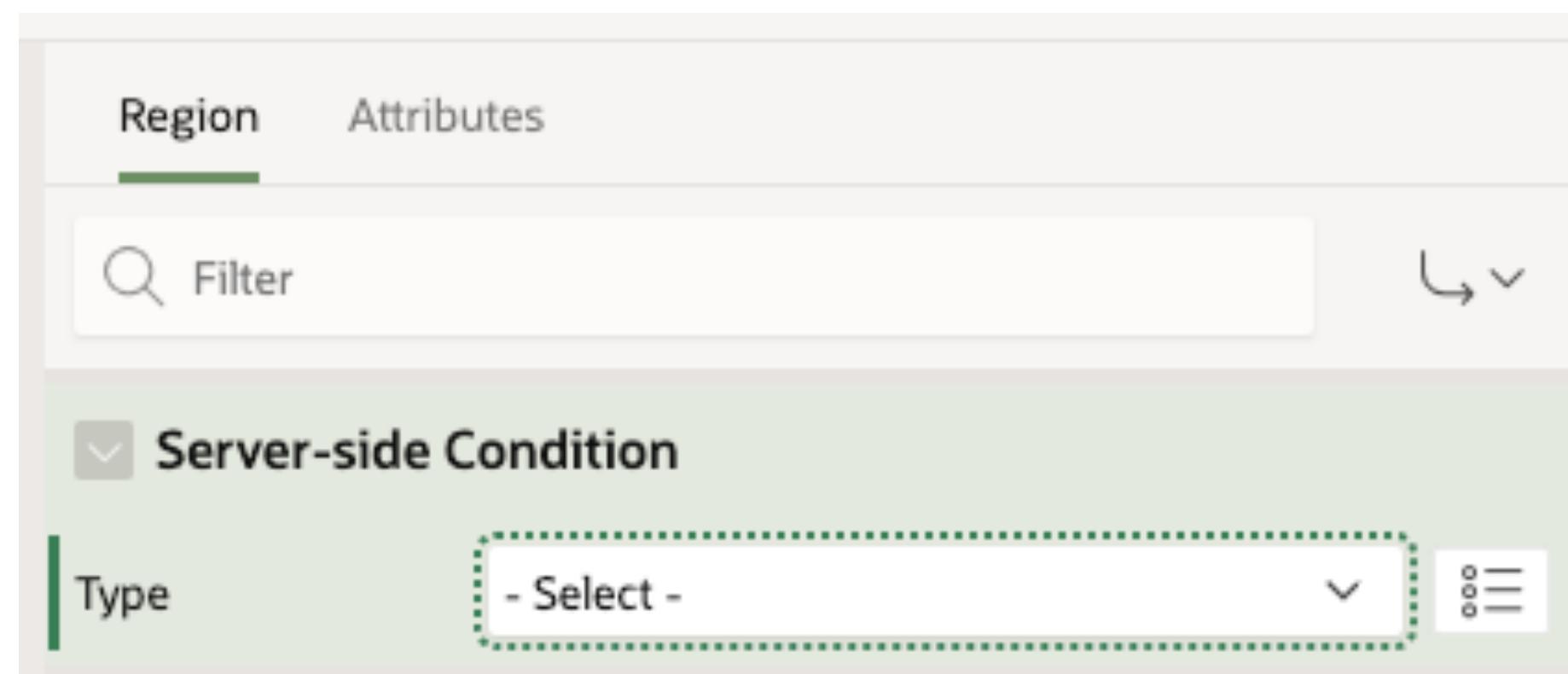
Postavljan je Item-a ili regije na Read-only

Pristup stranicama

Pristup aplikacijama

Vrste uvjeta

Server-side condition



Client-side condition

The screenshot shows the Oracle APEX application builder interface. In the left sidebar, 'APEX Connect 2023 Demo App' is selected. Under 'Dynamic Actions', a specific action named 'Title Region - After Refresh - Show/Hide' is highlighted. This action has two branches: 'True' and 'False'. The 'True' branch contains a condition labeled 'Show Item P1_FILTER'. To the right of the main interface, a detailed view of the 'Client-side Condition' configuration is shown. It includes a dropdown for 'Selection type' set to 'Region', a dropdown for 'Region' set to 'APEX Connect 2023 Demo App', and a large list of condition types. The 'Type' dropdown is currently set to '- Select -'. Other listed types include 'Item = Value', 'Item != Value', 'Item > Value', 'Item >= Value', 'Item < Value', 'Item <= Value', 'Item is null', 'Item is not null', 'Item is in list', 'Item is not in list', and 'JavaScript expression'.

Vrste uvjeta

Read-only condition

The screenshot shows the APEX Connect 2023 Demo App interface. On the left, there is a navigation tree with the following items:

- APEX Connect 2023 Demo App
 - Columns
 - Dynamic Actions
 - Title Region - After Refresh - Show/Hide
 - Region Body
 - P1_FILTER
- Body
- Rendering

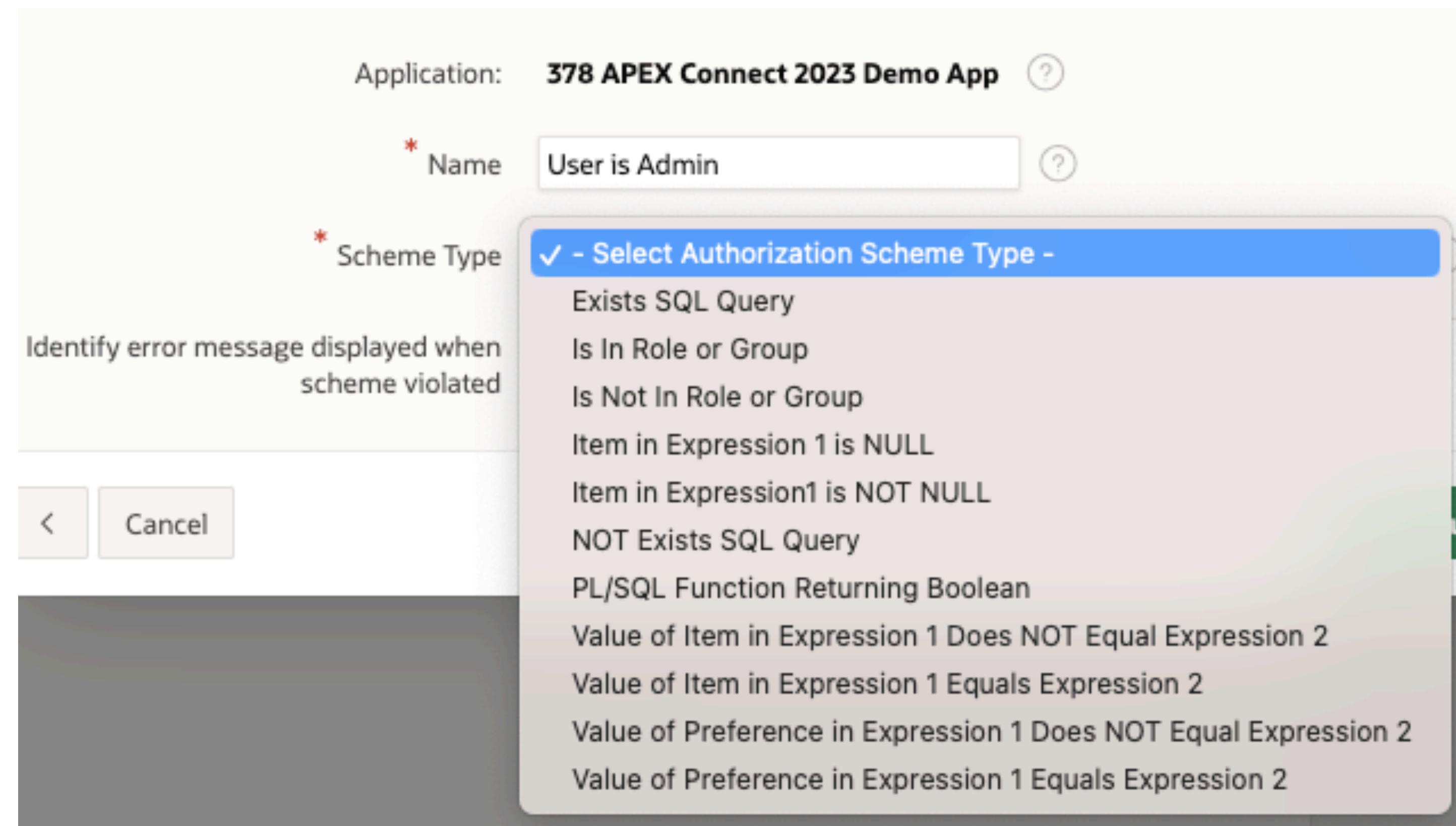
Authorization scheme

The screenshot shows the Authorization Scheme configuration screen. It includes sections for Server-side Condition, Read Only, Security, and Authorization Scheme.

- Server-side Condition:** Type: - Select -
- Read Only:** Type: - Select -
- Security:**
- Authorization Scheme:** - Select -

Vrste uvjeta

Authorization scheme



Vrste uvjeta

Authentication scheme?



Authentication Scheme

Name: My New Auth

Scheme Type: Custom

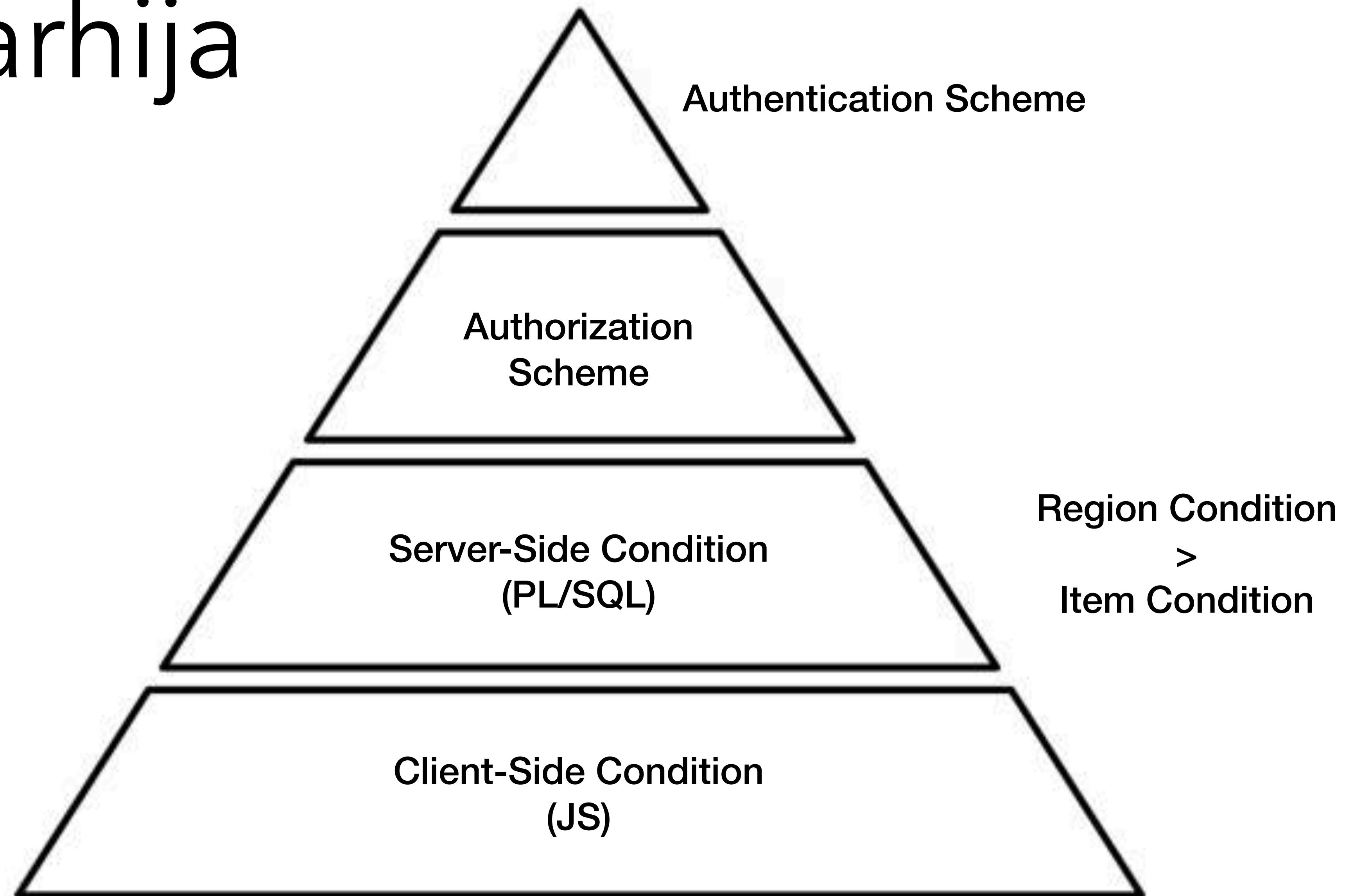
Settings:

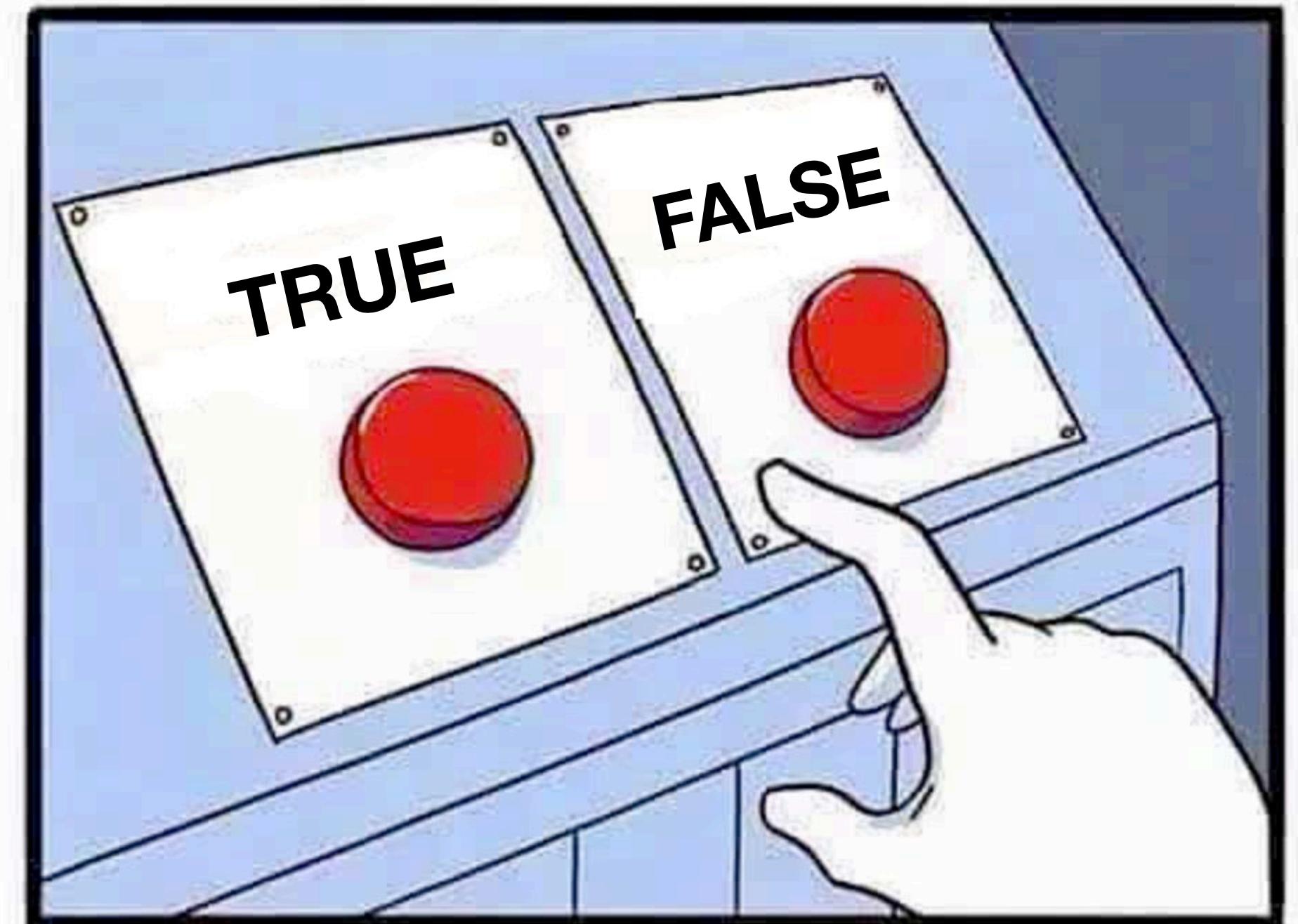
- Sentry Function Name
- Invalid Session Procedure Name

Available Scheme Types:

- Custom
- Database Accounts
- HTTP Header Variable
- LDAP Directory
- No Authentication
- Open Door Credentials
- Oracle APEX Accounts
- Social Sign-In

Hijerarhija





Evaluacija uvjeta

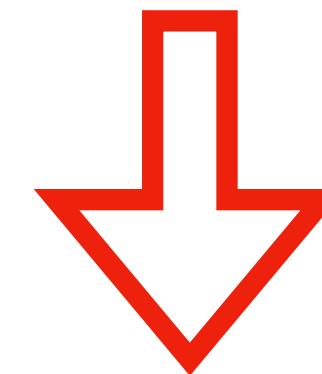
Server-side Condition

Type Expression

Language PL/SQL

PL/SQL Expression

```
:P3_EMPNO is not null  
and pck_sec.user_can_edit(:APP_USER)  
and trunc(sysdate) between :P3_DATE_FROM and :P3_DATE_TO  
and :P3_STATUS in ('NEW', 'WIP')  
and (:P3_DOCUMENT_TYPE = 'QUOTE' or :P3_SEND_DATE is null)
```



0.13777	0.00002	> APEX_APPLICATION_PAGE_REGIONS Employees
0.13779	0.00076	>> APEX_APPLICATION_PAGE_REGIONS Employees
0.13854	0.01416	begin wwv_flow.g_boolean := pck_sec.user_can_edit(:APP_USER) and trunc(sysdate) between :P2_DATE_FROM and :P2_DATE_TO and :P2_STATUS in ('NEW', 'WIP') and (:P2_DOCUMENT_TYPE = 'QUOTE' or :P2_SEND_DATE is null); end;

Server-side Condition

Type

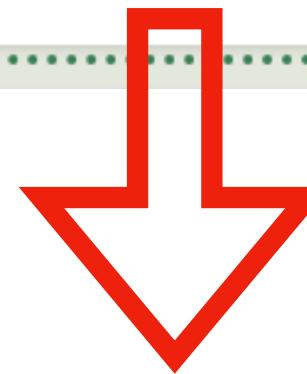
Function Body

Language

PL/SQL

PL/SQL Function Body

```
return pck_p3.show_save_button(  
    i_empno      => :P3_EMPNO  
    ,i_app_user   => :APP_USER  
    ,i_date_from  => :P3_DATE_FROM  
    ,i_date_to    => :P3_DATE_TO  
    ,i_status     => :P3_STATUS  
    ,i_document_type => :P3_DOCUMENT_TYPE  
    ,i_send_date   => :P3_SEND_DATE  
);
```



0.23408

0.00084

>> APEX_APPLICATION_PAGE_REGIONS Employees

```
declare function x return boolean is begin return pck_p3.show_save_button(  
    i_empno      => :P3_EMPNO  
    ,i_app_user   => :APP_USER  
    ,i_date_from  => :P3_DATE_FROM  
    ,i_date_to    => :P3_DATE_TO  
    ,i_status     => :P3_STATUS  
    ,i_document_type => :P3_DOCUMENT_TYPE  
    ,i_send_date   => :P3_SEND_DATE  
);  
return null; end; begin wwv_flow.g_boolean := x; end;
```

0.23493

0.05531

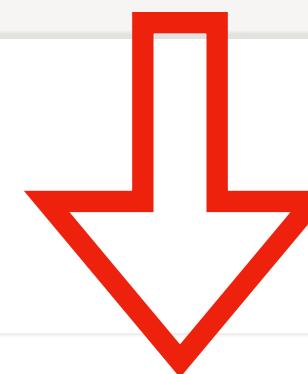
Server-side Condition

Type

Item is NOT NULL

Item

P2_COLUMNS



1.37776	0.00030	>> APEX_APPLICATION_PAGE_REGIONS Employees
1.37806	0.00109	is_ok_to_display p_required_patch=>,p_security_scheme=>,p_display_when_type=>ITEM_IS_NOT_NULL,p_di hen_cond=>P2_COLUMNS,p_display_when_cond2=>,p_component=>
1.37915	0.00075	standard_condition p_condition_type=>ITEM_IS_NOT_NULL,p_condition=>P2_COLUMNS,p_condition2=>
1.37990	0.00032	Found item P2_COLUMNS idx=1 type=VARCHAR2 filter=false value=JOB:HIREDATE:SAL:DEPTNO:COMM
1.38022	0.00026	<< APEX_APPLICATION_PAGE_REGIONS Employees

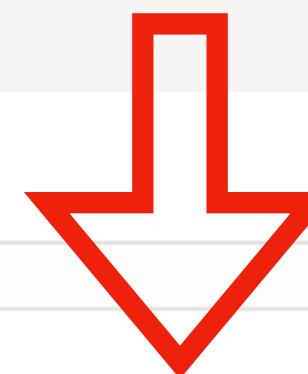
* Full Trace

</> Filter

- Region Body
 - P2_COLUMNS
 - Dynamic Actions
 - P2_COLUMNS - On Change - Refresh Report**
 - P2_APP_USER

Employees

Type	Item = Value
Item	P2_APP_USER
Value	DHUHA



Employees

Show Columns

Job Hired Salary Commission Department

Search: Home App 378 Page 2 Session Debug Quick Edit Customize

Elements Console Sources Performance insights Network Performance Memory Application Security Lighthouse Recorder AdBlock

```

<script src="/i/libraries/apex/tooltipManager.js?v=23.1.0-16"></script>
<script src="/i/libraries/apex/theme.js?v=23.1.0-16"></script>
<script src="/i/libraries/apex/pwa.js?v=23.1.0-16"></script>
▼<script type="text/javascript">
...
  apex.da.initDaEventList = function(){
  apex.da.gEventList = [
  {"name":"P2_COLUMNS - On Change - Refresh
Report","triggeringElementType":"ITEM","triggeringElement": "P2_COLUMNS","conditionElement": "P2_APP_USER","triggeringConditionType": "EQUALS","triggeringConditionExpression": "DHUHA",
[{"eventResult":true,"executeOnPageInit":false,"stopExecutionOnError":true,"affectedElementsType": "REGION","affectedRegionId": "R6332046055239595540",javascriptFunction:apex.da.refr
} == $0
</script>
```

Najbolje prakse

Koristite ugrađene uvjete

The image displays two screenshots of an Oracle APEX application's process configuration interface. Both screenshots show a 'Processing' tab selected.

Left Screenshot:

- Server-side Condition:** A section under 'Process'.
- Type:** Expression
- Language:** PL/SQL
- PL/SQL Expression:** `:REQUEST = 'CREATE' and :P6023_TYPE_CODE in ('D', 'F')`

Right Screenshot:

- Server-side Condition:** A section under 'Process'.
- When Button Pressed:** - Select -
- Type:** Item is in colon delimited list
- Item:** P6023_TYPE_CODE
- List:** D,F

A large red arrow points from the 'PL/SQL Expression' field in the left screenshot to the 'List' field in the right screenshot, indicating that the expression has been expanded into its component parts.

Najbolje prakse

Koristite ugrađene uvjete

Koristite brzi izbornik kada odabirete vrstu uvjeta

- ✓ - Select -
- Rows returned
- No Rows returned
- Expression
- Function Body
- Request = Value
- Request != Value
- Request is contained in Value
- Request is NOT contained in Value
- Item = Value
- Item != Value
- Item is NULL
- Item is NOT NULL
- Item is zero
- Item is NOT zero
- Item is NULL or zero
- Item is NOT NULL and NOT zero
- Item contains no spaces
- Item is numeric
- Item is NOT numeric
- Item is alphanumeric
- Item is in colon delimited list
- Item is NOT in colon delimited list
- User Preference = Value
- User Preference != Value
- Current Page = Page
- Current Page != Page
- Current Page is in comma delimited list
- Current Page is NOT in comma delimited list
- Current Page is in Printer Friendly Mode
- Current page is NOT in Printer Friendly Mode
- Page/Region is Read Only
- Page/Region is NOT Read Only
- User is Authenticated (not public)
- User is the Public User (user has not authenticated)
- Inline Validation Errors displayed
- Inline Validation Errors NOT displayed
- Current Language = Value
- Current Language != Value
- Current Language is contained in Value
- Current Language is NOT contained in Value
- Never

Server-side Condition

Type	Never	☰
Security		Clear Selection
Authorization Scheme	- Select -	Rows returned
Configuration		Item = Value
Build Option	- Select -	Item is NULL
		Item is NOT NULL
		Never

Najbolje prakse

Koristite ugrađene uvjete

Koristite brzi izbornik kada odabirete vrstu uvjeta

Neka budu čim kraći kada koristite tip "Expression"

Napravite funkcije u paketima za one složenije

Tree view on the left:

- P3_COMM
- P3_DEPTNO
- Dialog Footer
 - Buttons
 - Close
 - CANCEL
 - Delete
 - DELETE
 - Next
 - SAVE

Details view on the right:

- Server-side Condition**
 - Type: Expression
 - Language: PL/SQL
 - PL/SQL Expression:

```
:P3_EMPNO is not null  
and pck_sec.user_can_edit(:APP_USER)  
and trunc(sysdate) between :P3_DATE_FROM and :P3_DATE_TO  
and :P3_STATUS in ('NEW', 'WIP')  
and (:P3_DOCUMENT_TYPE = 'QUOTE' or :P3_SEND_DATE is null)
```
 - Security

Dialog Footer

</> Buttons

Close

>  CANCEL

Delete

 DELETE

Next

 SAVE

 CREATE

Post-Rendering

Server-side Condition

Type

Expression

Language

PL/SQL

PL/SQL Expression

```
pck_p3.show_save_button(  
    i_empno          => :P3_EMPNO  
    ,i_app_user      => :APP_USER  
    ,i_date_from     => :P3_DATE_FROM  
    ,i_date_to       => :P3_DATE_TO  
    ,i_status         => :P3_STATUS  
    ,i_document_type => :P3_DOCUMENT_TYPE  
    ,i_send_date     => :P3_SEND_DATE  
)
```

```
create or replace package body pck_p3 as

    function show_save_button(
        i_empno          in number
      ,i_app_user       in varchar2
      ,i_date_from     in date
      ,i_date_to       in date
      ,i_status         in varchar2
      ,i_document_type in varchar2
      ,i_send_date     in date
    ) return boolean is
        v_ret boolean := false;
    begin
        if i_empno is not null
        and pck_sec.user_can_edit(i_app_user)
        and trunc(sysdate) between i_date_from and i_date_to
        and i_status in ('NEW', 'WIP')
        and (i_document_type = 'QUOTE' or i_send_date is null)
        then
            v_ret := true;
        end if;

        return v_ret;
    end show_save_button;
end;
```

```
create or replace package body pck_p3 as

    function show_save_button(
        i_empno          in number
      ,i_app_user       in varchar2
      ,i_date_from     in date
      ,i_date_to       in date
      ,i_status         in varchar2
      ,i_document_type in varchar2
      ,i_send_date     in date
    ) return boolean is
        v_scope  logger_logs.scope%type := 'pck_p3.show_save_button';
        v_params logger.tab_param;
        v_ret    boolean := false;
    begin
        logger.append_param(v_params, 'i_empno', i_empno);
        logger.append_param(v_params, 'i_app_user', i_app_user);
        logger.append_param(v_params, 'i_date_from', i_date_from);
        logger.append_param(v_params, 'i_date_to', i_date_to);
        logger.append_param(v_params, 'i_status', i_status);
        logger.append_param(v_params, 'i_document_type', i_document_type);
        logger.append_param(v_params, 'i_send_date', i_send_date);
        logger.log('START', v_scope, null, v_params);

        if i_empno is not null
```

Najbolje prakse

Koristite ugrađene uvjete

Koristite brzi izbornik kada odabirete vrstu uvjeta

Neka budu čim kraći kada koristite tip "Expression"

Napravite funkcije u paketima za one složenije

Ojačajte sigurnost svoje aplikacije - uvijek koristite Server-side umjesto Client-side uvjeta kada je to moguće

Q

U

I

Z

1. Koji button će biti prikazan?

Item P5_REQUEST

Default

Type Static

Static Value

CREATE

Q:

- a) Button 1
- b) Button 1 and 3
- c) None

A: b)

Button 1

Button 2

Button 3

Server-side Condition

Type Item = Value

Item P5_REQUEST

Value CREATE

Server-side Condition

Type Item = Value

Item P5_REQUEST

Value SAVE

Server-side Condition

Type Item is in colon delimited list

Item P5_REQUEST

List CREATE:SAVE

2. Koji proces će se izvršiti?

Item P6_VALUE

Default

Type Static

Static Value

10

Button SAVE

Behavior

Action Submit Page

Q:

- a) Process 1
- b) Processes 1 and 2
- c) Processes 1, 2 and 3

A: b)

Process 1

Server-side Condition

When Button Pressed - Select -

Type Item = Value

Item P6_VALUE

Value 10

Process 2

Server-side Condition

When Button Pressed - Select -

Type Expression

Language PL/SQL

PL/SQL Expression

```
:REQUEST = 'SAVE' and :P6_VALUE = 10
```

Process 3

Server-side Condition

When Button Pressed SAVE

Type Item = Value

Item P6_VALUE

Value 20

3. Koja regija će biti prikazana?

Q (when selecting DEPT 30):
a) EMP only
b) SAL only
c) EMP and SAL

The screenshot shows the application structure on the left. It includes an Item section, a Region Body section containing P7_DEPTNO, and sections for EMP and SAL. Under P7_DEPTNO, there are two Dynamic Actions: "P7_DEPTNO - On Change - Refresh Reports" and "P7_DEPTNO - On Change - Show SAL". At the bottom, there is a blue navigation bar with a user icon and the text "dhuha ▾".

The screenshot shows the configuration for the "P7_DEPTNO - On Change - Show SAL" dynamic action. It has two states: True (Show) and False (Hide). The True state is set to "Show". The False state is set to "Hide". The condition for this dynamic action is defined in the Client-side Condition tab.

The screenshot shows the Client-side Condition configuration. The Type is "Item = Value", the Item is "P7_DEPTNO", and the Value is "30". This means the SAL data will only be displayed when the value selected in the P7_DEPTNO item is 30.

Client-side Condition

Type	Item = Value
Item	P7_DEPTNO
Value	30

Server-side Condition

Type	Expression
Language	PL/SQL
PL/SQL Expression	:APP_USER = 'KING'

- Q (when selecting DEPT 30):
- a) EMP only
 - b) SAL only
 - c) EMP and SAL

A: a)

The screenshot shows the application structure. It includes an Item node, a Region Body node containing a P7_DEPTNO item, which has Dynamic Actions for "P7_DEPTNO - On Change - Refresh Reports" and "P7_DEPTNO - On Change - Show SAL". Below the Region Body are EMP and SAL items, each with their own columns.

The screenshot shows the configuration for the "P7_DEPTNO - On Change - Show SAL" dynamic action. It defines two states: True (Show) and False (Hide). The condition for the True state is a Client-side Condition where Item = Value (P7_DEPTNO) and Value = 30. The condition for the False state is a Server-side Condition where PL/SQL Expression is :APP_USER = 'KING'.

The screenshot shows the detailed configuration for the Client-side Condition and Server-side Condition defined in the previous step. The Client-side Condition is set to Item = Value for Item P7_DEPTNO and Value 30. The Server-side Condition is set to Expression in PL/SQL language with the expression :APP_USER = 'KING'.

Rezultati

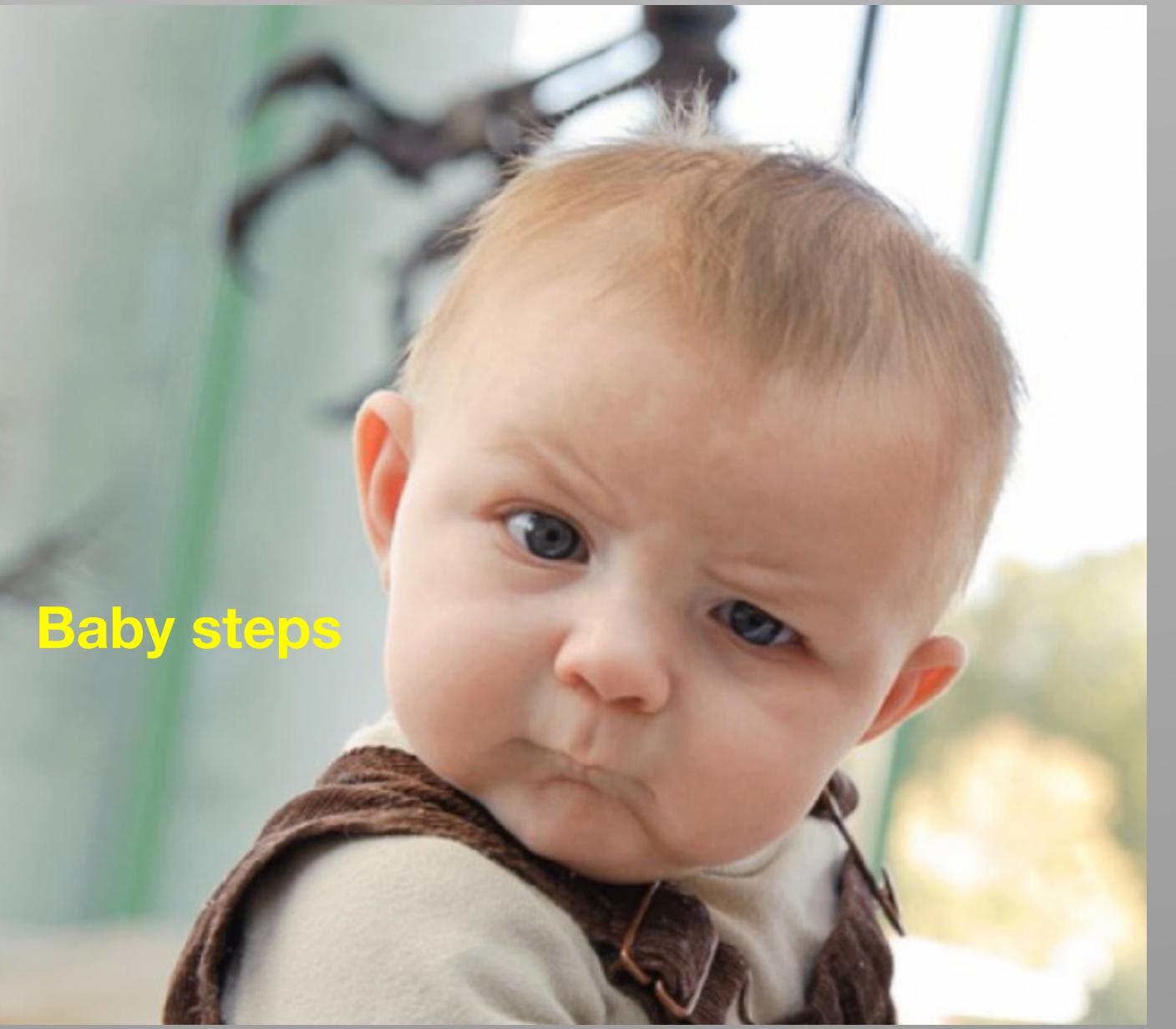
0 / 3



2 / 3



1 / 3



3 / 3



Download

<https://github.com/thehuha/apex-conditions-demistified>

Pitanja



Hvala Vam na pažnji!

