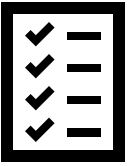


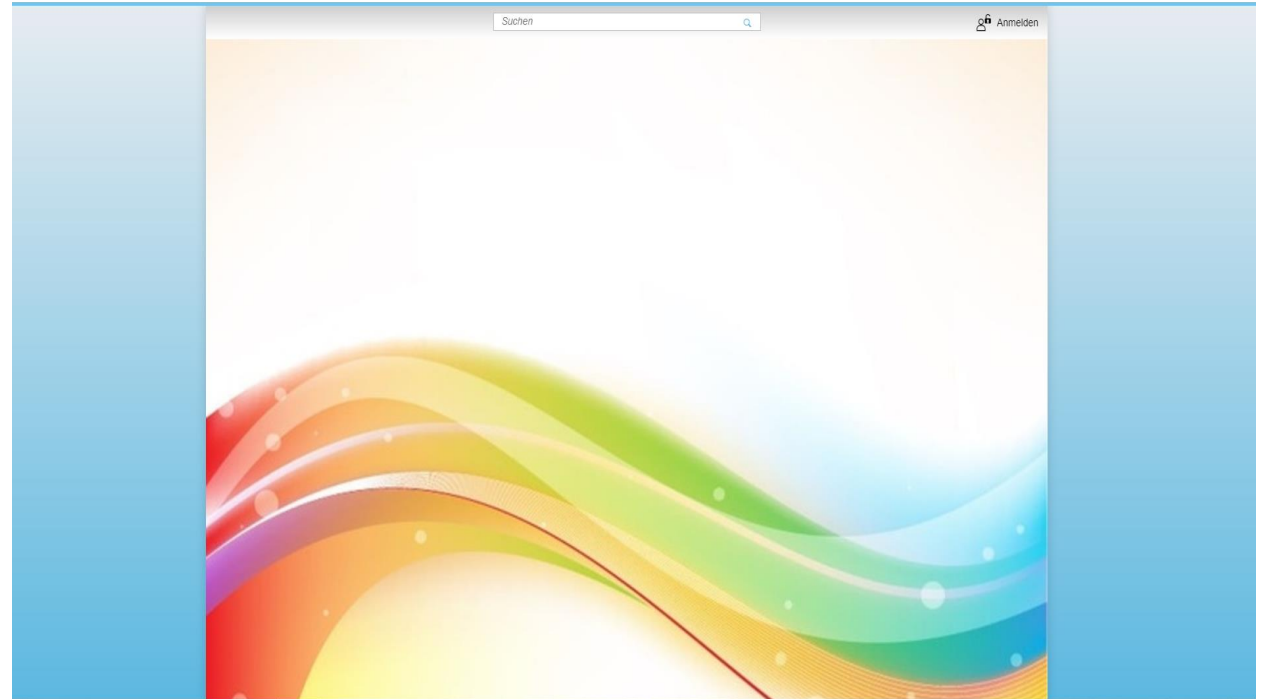
Flawless Integration

Integrate API's

Albrecht Michael
@albrechtmi



- Scope
- API's
- FLP - Basics
- Demo

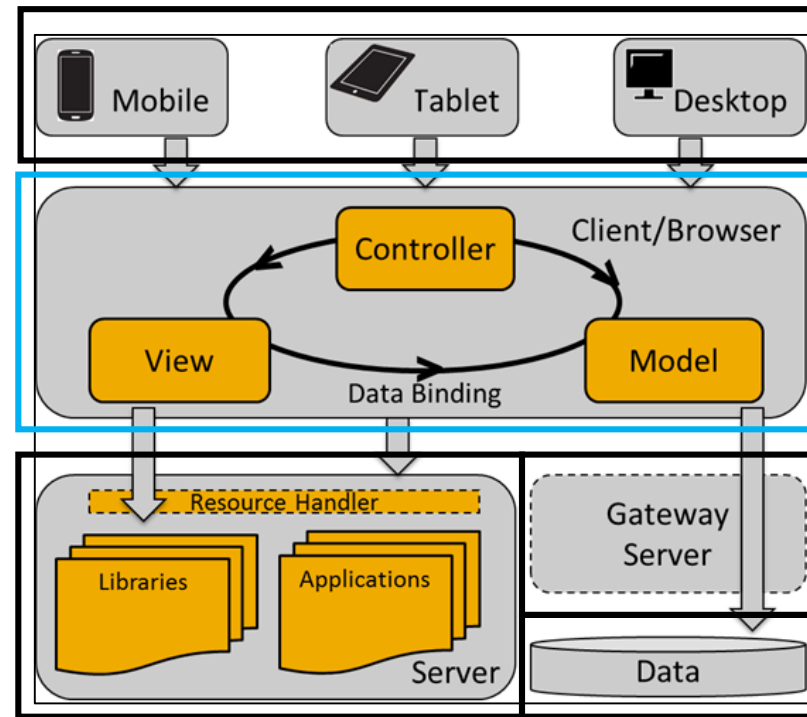




Scope

Launchpad,
SAP Apps,
Custom Apps

SAP Products
NW Gateway
S/4, ERP, SRM, CRM
ASE, HANA



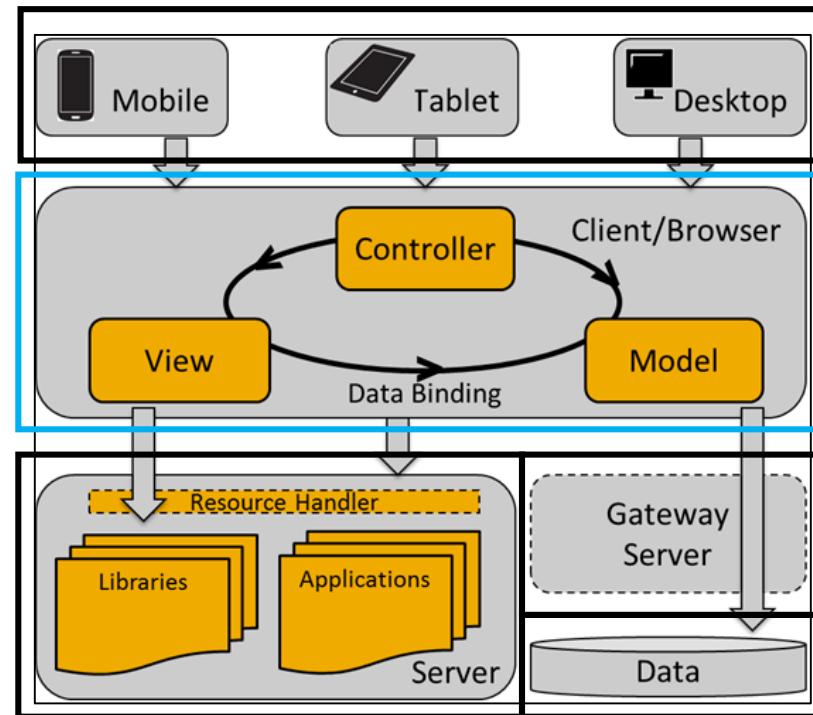
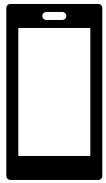
Devices

UI5 Application (Client)

Backend Components



Scope





Scope

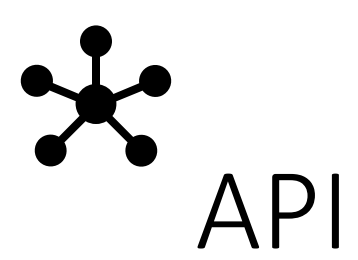
Business

An organization or economic system where goods and services are exchanged for one another or for money.

Every business requires some form of investment and enough customers to whom its output can be sold on a consistent basis in order to make a profit.

Businesses can be privately owned, not-for-profit or state-owned.

Source: <http://www.businessdictionary.com/definition/business.html>

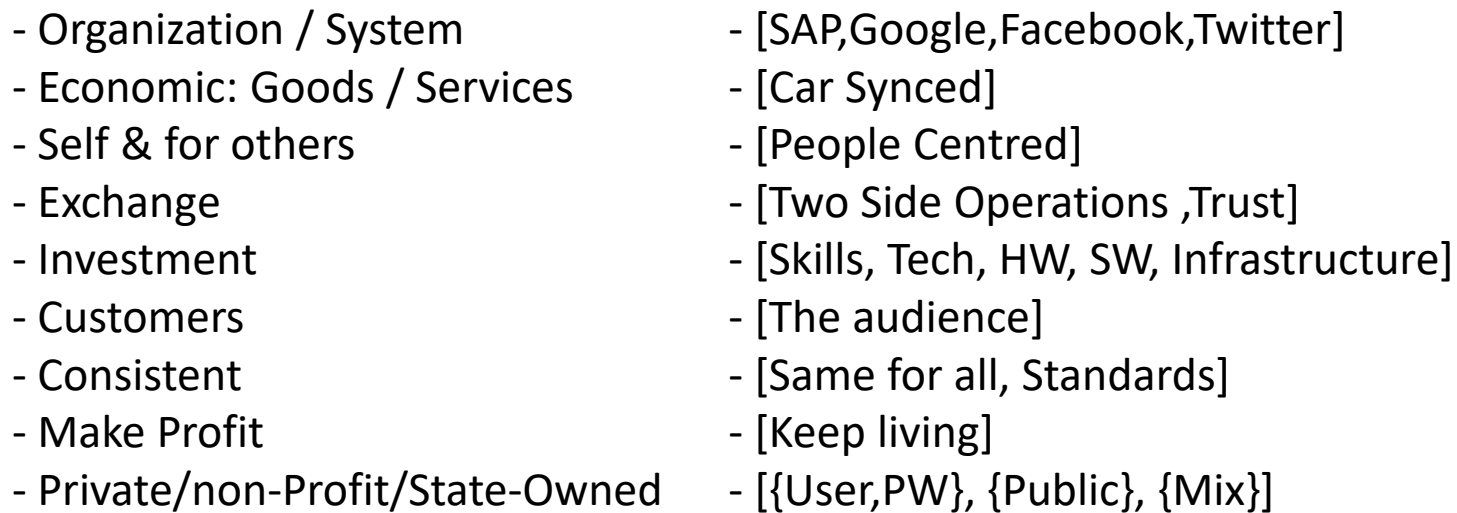


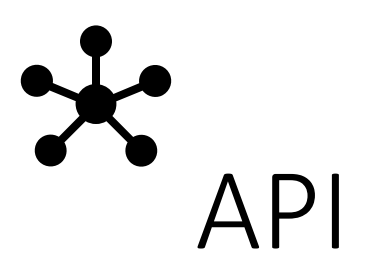
- API - Application Programming Interface ??
 - There is an application
 - I can programm it
 - It's an interface for purposes/problems



```
1 /* This line basically imports the "stdio" header file, part of
2  * the standard library. It provides input and output functionality
3  * to the program.
4  */
5 #include <stdio.h>
6
7 /*
8  * Function (method) declaration. This outputs "Hello, world" to
9  * standard output when invoked.
10 */
11 void sayHello() {
12     // printf() in C outputs the specified text (with optional
13     // formatting options) when invoked.
14     printf("Hello, world!");
15 }
16
17 /*
18  * This is a "main function". The compiled program will run the code
19  * defined here.
20 */
21 void main() {
22     // Invoke the sayHello() function.
23     sayHello();
24 }
```







- Keys / Secrets
- Endpoints
- Formats
- Purpose



OpenUI5/SAPUI5





Social API's



#sitBERN?



Meeting?



Files?










Suchen







Michael

SAP

| | | | |
|---|--|---|--|
| SM34   2 Batch Input Mappe | Gesperrte Benutzer  2 Benutzer | Application Log  1 BALG | Pay Roll  5 Days |
|---|--|---|--|

API-Demos

| | | | |
|---|--|---|--|
| sitBern  0 #sitBern (Twitter API) | Facebook  0 Facebook API | DropBox  0 Drop Box API | Google API  0 Google API |
|---|--|---|--|

Xampp

| | | | |
|---|---|--|---|
| XAMPP   1 oData Provider | PHP MyAdmin   1 Database | WebIDE  UI5 Development IDE | Git  Source Repository |
|---|---|--|---|



Fiori Launchpad - Basics

- UI5 Application / Bootstrap
- Container / DOM Hook
- Shell
- Services (Built in)
- App Container
- Header Information
- oData based

```
<script scr="" />
<div id="content« />
<div<div<div<div/>/>/>/>
sap.ui.shell.<service>
sap.m.*
sap.ui.shell.<header>
sap.ui.model.<model>
```



Fiori Launchpad - Basics

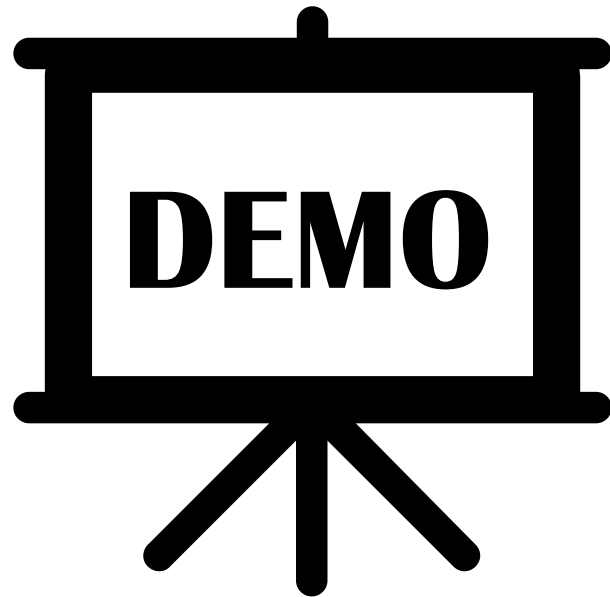
```
<!DOCTYPE html>
<html>
<head>
<meta http-equiv='X-UA-Compatible' content='IE=edge' />
<title>Hello World</title>

<script id='sap-ui-bootstrap'
  src='resources/sap-ui-core.js'
  data-sap-ui-theme='sap_belize'
  data-sap-ui-libs='sap.m'
  data-sap-ui-compatVersion='edge'
  data-sap-ui-preload='async'>
</script>

<script>
  sap.ui.getCore().attachInit(function () {
    jQuery("#content").html("Hello World - UI5 is ready");
  });
</script>

</head>
<body class='sapUiBody'>
  <div id='content'></div>
</body>
</html>
```

Source: <http://openui5.org/getstarted.html>





Albrecht Michael (SAP Senior Developer @ IT Post)



@albrechtmi

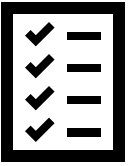
```
<script language="javascript">
```

```
    console.log("thank you for your attention - enjoy #sitBern");
```

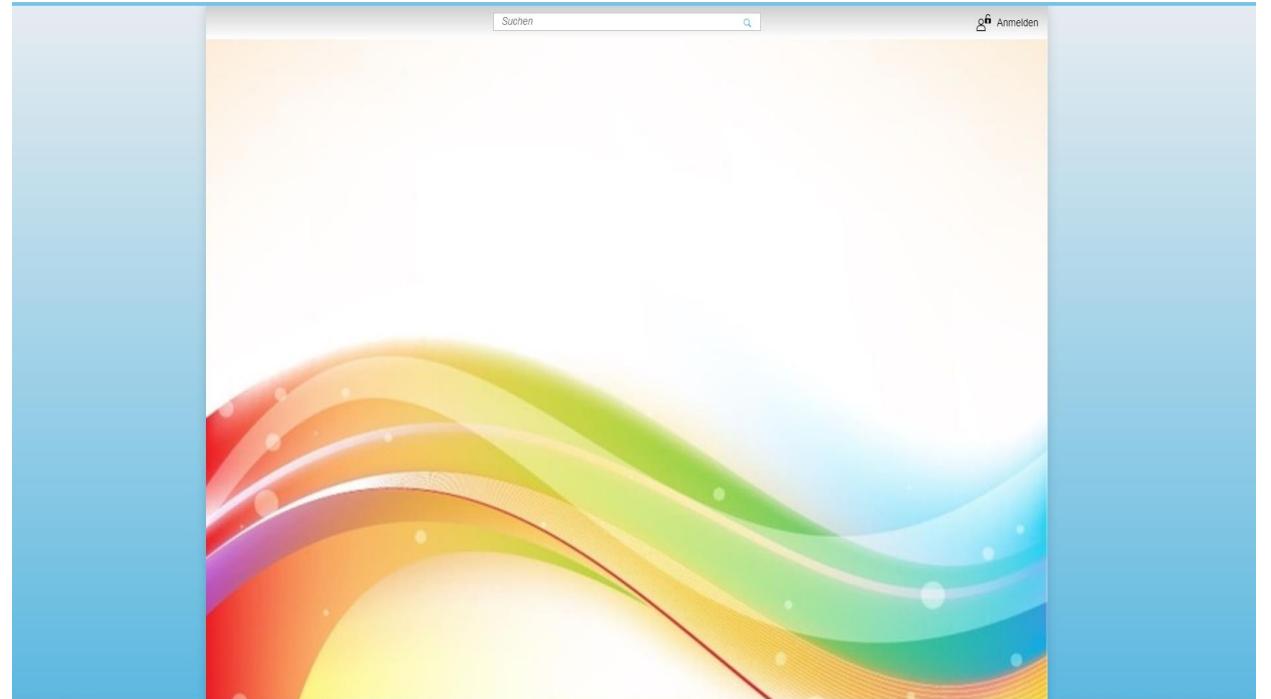
```
</script>
```

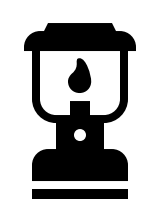
System Insights

Albrecht Michael
@albrechtm



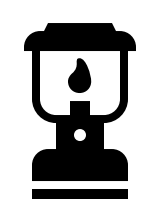
- Scope
- Insights
- Demo





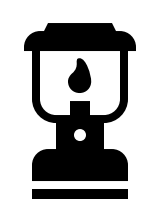
Insights

```
"d": {  
  "Questions": [  
    "What do you want to see?",  
    "Where do can you select the data?",  
    "Who has a benefit of the kpi",  
    "Can i improve processes?"  
  ],  
  "Answers": [  
    "Generic Tiles with KPI",  
    "Custom Tiles",  
    "Graph Tiles"  
  ],  
  "Remeber": [  
    "Select Count",  
    "lines( )",  
    "Refresh Intervals",  
    "Errors",  
    "Web Server!",  
    "Reuse"  
  ]  
}
```

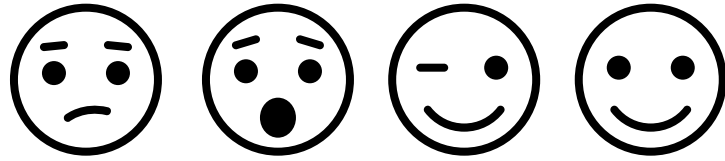


Insights

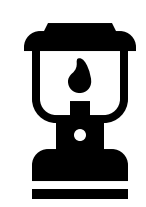
```
{  
  "d": {  
    "icon": "sap-icon://employee",  
    "info": "Benutzer",  
    "infoState": "None",  
    "number": 5,  
    "numberDigits": 1,  
    "numberFactor": "k",  
    "numberState": "Neutral",  
    "numberUnit": "",  
    "stateArrow": "",  
    "subtitle": "",  
    "title": "Gesperrte Benutzer"  
  }  
}
```



Insights



- SEGW => Build Service Entity – Add a solution & operation to the key ;) = Metadata
- Generate funtime objects 😊 (runtime indeed) = DPC /DPC_EXT
- Implement factory using solution & operation as key = <NS>/CL_FLP_KPI_FACTORY
- Build Customizing Table = Reuse Implementation
- Get Entity Data
- *DPC_EXT->GET_ENTITY(iv_solution = 'solution', iv_operation='operation') – The solution
- Object(type cus)->(method_1)[params] – sample
- Build Classes / Add Customizing / Add Tiles

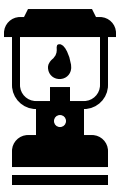


Insights

- Implement factory using solution & operation as key = <NS>/CL_FLP_KPI_FACTORY

```
object = <NS>/CL_FLP_FACTORY=>CREATE(  
  Exporting  
    iv_solution = 'Solution'  
    iv_operation = 'KPI_xyz' ).
```

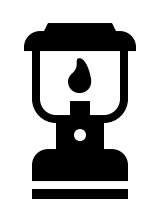
```
method create.  
  select from [solutiontab]  
  into ls_cus  
  where  
    solution = iv_solution and  
    operation = iv_operation.  
  //Error Handling  
  create object rr_object type (ls_cus-class)  
endmethod.
```



Insights

- Build Customizing Table = Reuse Implementation

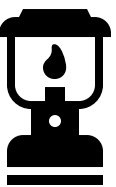
| SOLUTION | OPERATION | CLASS | METHOD |
|----------|-----------|--------------------|----------|
| SOLUTION | KPI_xyz | <NS>/CL_<BLUBBER> | METHOD_1 |
| SOLUTION | KPI_xyz2 | <NS>/CL_<BLUBBER2> | METHOD_n |



Insights

- Get Entity Data

```
try.  
    er_entity = object->(method_1)[params].  
catch <exc> into lr_error.  
    uupps!  
    -> fill entity with error info (solution, operation)  
endtry.
```



Insights

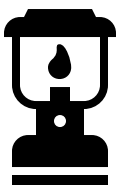
- *DPC_EXT->GET_ENTITY(iv_solution = 'solution', iv_operation='operation') – **The solution**

```
//GET OBJECT INSTANCE OF KPI CLASS IMPLEMENTATION
```

```
try.  
    er_entity = object->(method_1)[params].  
catch <exc> into lr_error.  
    uups!  
    -> fill entity with error info (solution, operation)  
endtry.
```

```
//CALL THE OBJECT METHOD
```

```
try.  
    er_entity = object->(method_1)[params].  
catch <exc> into lr_error.  
    uups!  
    -> fill entity with error info (solution, operation)  
endtry.
```

Insights

```
er_entity = object->(method_1)[params].
```

```
//SELECT APPLICATION LOG ENTRIES
```

```
    SELECT COUNT(*) <BALG_TABLE> INTO er_entity-number WHERE <CONDITIONS>
```

```
//TEXT FOR TILE
```

```
    er_entity-title = 'BLUBBER'
```

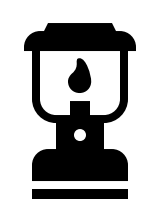
```
//STATES
```

```
    er_entity-stat = mc_success.
```

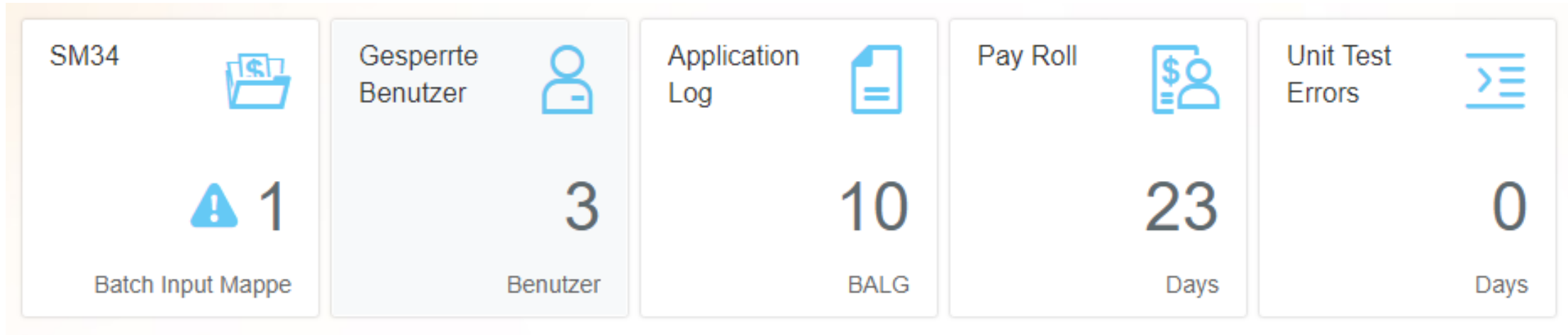
```
//WHATEVER YOU LIKE
```

```
    er_entity-..... = .....
```

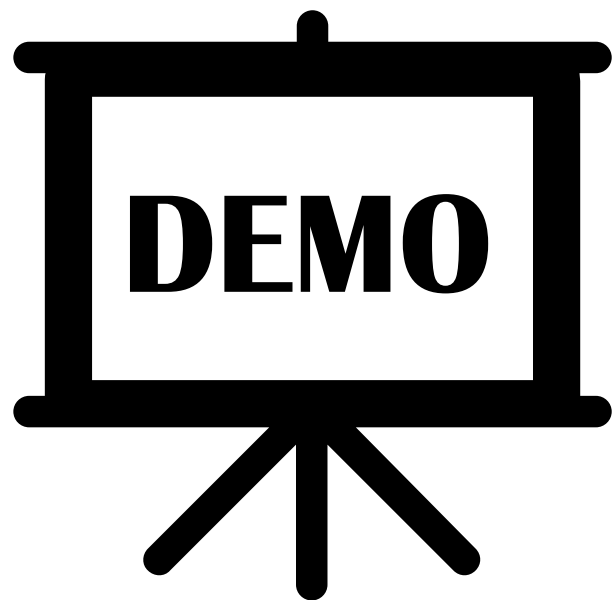
```
RETURN.
```



Insights



```
{
  "d": {
    "KPIS": [
      ["solution1", "operation1", "CL_BATCH_INPUT", "GET_ERROR_MAPS"],
      ["solution2", "operation1", "CL_USER", "GET_LOCKED_USERS"],
      ["solution3", "operation1", "CL_BALG", "GET_ERROR_LOGS"],
      ["solution4", "operation1", "CL_PAYROLL", "GET_DAYS_TO_PAYROLL"],
      ["solution5", "operation1", "CL_UNIT_TEST", "GET_UNIT_TEST_ERRORS"]
    ]
  }
}
```





Albrecht Michael (SAP Senior Developer @ IT Post)



@albrechtmi

```
<script language="javascript">
```

```
    console.log("thank you for your attention - enjoy #sitBern");
```

```
</script>
```