

Creating User Interfaces

With SAP Cloud Platform Workflow, we can create user interfaces for workflows, with user interfaces, user can access the workflow tasks in INBOXES and START WORKFLOW.

In this article, I will be talking about, how to create Custom User Task UI using Environment (Cloud Foundry and Business Application Studio (aka BAS))

In BAS open your workspace, projects folder. Create a Fiori Project with HTML5 module that contains, custom task UI.

Step 1: From Select Template and Target Location, select **SAP Fiori Freestyle Project** and click on Start

Select Template and Target Location

Select the template that best fits the type of application you want to develop.

The template will be generated in the folder specified below and it will contain the relevant files and configurations that will help you create a project quickly and easily.

Specify a target folder path ⓘ *

/home/user/projects



Templates ⓘ *

**Basic Multitarget
Application**

Create a project for

**SAP Fiori
Freestyle Project**

Allows you to accelerate

**Adaptation
Project**

Adaptation Project

Start >

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Step 2: Select Target Running Environment – Cloud Foundry, Template – SAP UI5 Application and click on Next

Target Running Environment

Select the target running environment *

Cloud Foundry

Select the template you want to use *

SAPUI5 Application

Create an SAP Fiori application template to implements a typical floorplan, as specified by

SAP Fiori Worklist Application ODataV4

Create an SAP Fiori Worklist OData V4 application template to

SAP Fiori Worklist Application

Create an SAP Fiori Worklist OData V2 application template to implements a typical

< Start Over

Next >

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Step 3: Enter Project Name and click on Next

Project Name

Enter a project name

TestProject

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Step 4: Select Approuter as “Approuter Managed by SAP Cloud Platform” and enter a name “for Business Solution of the Project” and Click on Next

Approuter Configuration

Select your HTML5 application runtime *

Approuter Managed by SAP Cloud Platform



Enter a unique name for the business solution of the project ?

TestProjectAppRouter

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Step 5: Enter following details

- HTML5 Module Name
- Add Authentication (Note: You should select “**Yes**”)
- Enter Namespace
- Do you want to enable Karma Tests (Note: Leave as prefilled values)
- Click on Next

Basic Attributes

Enter an HTML5 module name

HTML5Module

Do you want to add authentication? *

Yes

Enter a namespace

ns

Do you want to enable Karma tests?

☐ Yes ☒ No

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Step 6:

Enter View Name, and add Data Service as per your requirement and click on Next

View Name

Enter a view name

Do you want to add a data service? *



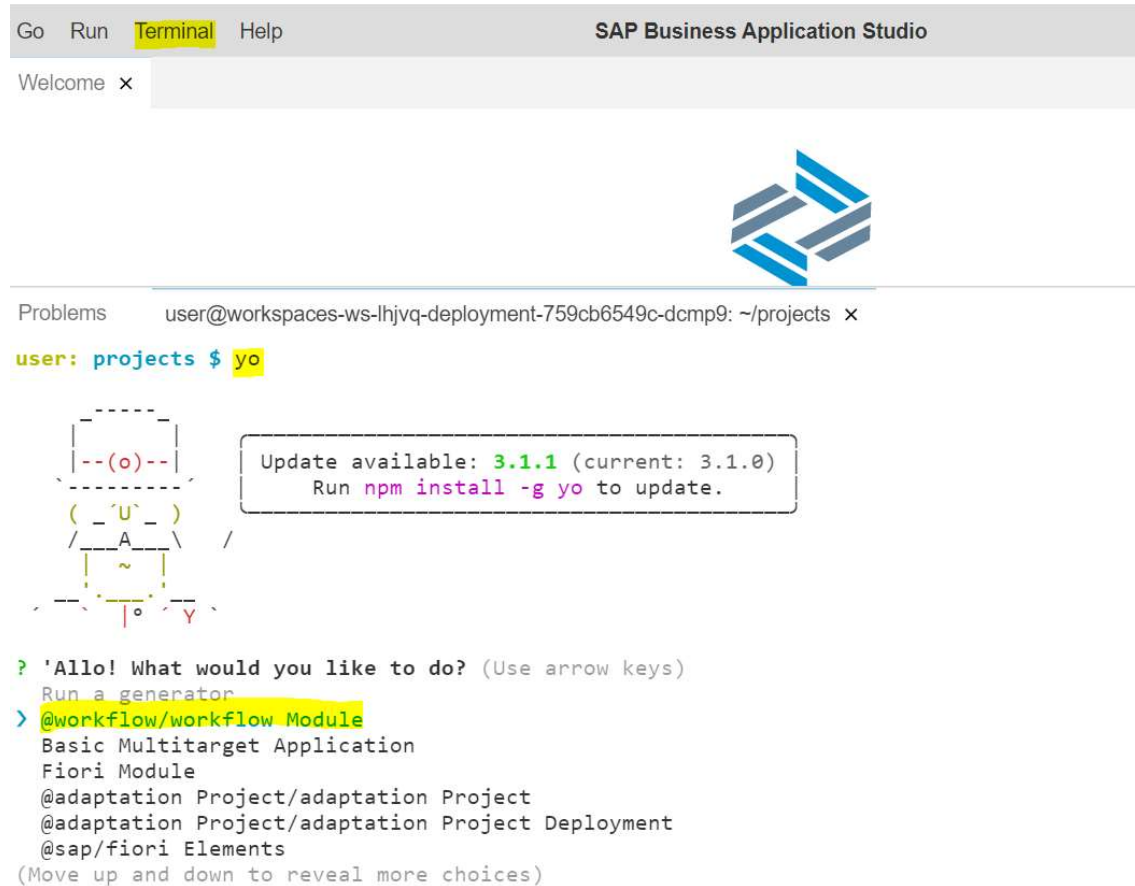
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Step 7: To Create Workflow Module, Go to Terminal Menu >> New Terminal and execute “yo” command and select “@workflow/workflow Module”

Please follow the steps as per workflow template and create a workflow



The screenshot shows the SAP Business Application Studio interface. At the top, there is a menu bar with 'Go', 'Run', 'Terminal', and 'Help'. Below the menu bar, the title bar reads 'SAP Business Application Studio'. The main area displays a terminal window with the following content:

```
Welcome x
```

Problems user@workspaces-ws-lhjqv-deployment-759cb6549c-dcmp9: ~/projects x

```
user: projects $ yo
```

Update available: 3.1.1 (current: 3.1.0)
Run `npm install -g yo` to update.

```
? 'Allo! What would you like to do? (Use arrow keys)
Run a generator
> @workflow/workflow Module
Basic Multitarget Application
Fiori Module
@adaptation Project/adaptation Project
@adaptation Project/adaptation Project Deployment
@sap/fiori Elements
(Move up and down to reveal more choices)
```

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Step 8: Once Workflow is created in Step 7, and User Task, to create Custom UI (SAP UI5 Application)



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Step 9: Go to User Task Properties, Go to User Interface Tab and select SAP UI5 Component and select your appropriate HTML5 application

User Task Properties

< DETAILS **USER INTERFACE** >

* Type

SAPUI5 Component

SAPUI5 Component Details

* HTML5 App Name

Select

Component URL

* SAPUI5 Component

Business Solution Name

Choose User Interface

* Project Name

home/user/projects/TestProject/HTM...

* Application Name

nsHTML5Module

* SAPUI5 Compone...

webapp

OK

Cancel

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User Task Properties

< DETAILS **USER INTERFACE** >

*Type

SAPUI5 Component 

SAPUI5 Component Details

*HTML5 App Name

nsHTML5Module

Select

Component URL

*SAPUI5 Component

ns.HTML5Module

Business Solution Name

TestProjectAppRouter

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Step 10: We have successfully created workflow in Step 9.

Please Note Step 10, is crucial step to successfully run the Custom UI from Workflow

Change the scope of Destination Module

- Navigate to newly created Fiori Project and open mta.yaml file
- Search for destination module “destination-content” suffix
- Change the scope of the destination by replacing “instance” with “subaccount” for the content parameter of the module

```
parameters:
  content:
    instance:
      destinations:
        - Name: TestProjectAppRouter_TestProject_html_repo_host
          ServiceInstanceName: TestProject-html5-app-host-service
          ServiceKeyName: TestProject_html_repo_host-key
          sap.cloud.service: TestProjectAppRouter
        - Authentication: OAuth2UserTokenExchange
          Name: TestProjectAppRouter_uua_TestProject
          ServiceInstanceName: TestProject-xsuaa-service
          ServiceKeyName: uua_TestProject-key
          sap.cloud.service: TestProjectAppRouter
      existing_destinations_policy: ignore
```

Before Screenshot

```
parameters:
  content:
    subaccount:
      destinations:
        - Name: TestProjectAppRouter_TestProject_html_repo_host
          ServiceInstanceName: TestProject-html5-app-host-service
          ServiceKeyName: TestProject_html_repo_host-key
          sap.cloud.service: TestProjectAppRouter
        - Authentication: OAuth2UserTokenExchange
          Name: TestProjectAppRouter_uua_TestProject
          ServiceInstanceName: TestProject-xsuaa-service
          ServiceKeyName: uua_TestProject-key
          sap.cloud.service: TestProjectAppRouter
      existing_destinations_policy: ignore
```

After Screenshot

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Step 11: Example Output of Custom UI

The screenshot displays the SAP My Inbox interface. On the left, a sidebar shows a list of tasks under 'All Tasks (2)'. The first task is 'Approve / Reject Customer Master for 10000000' with a 'Medium' priority. The main area shows the details of this task, titled 'Customer Master Approval Required for New Zealand Customer'. It includes a 'Created On' date of 'Sat Jan 30 2021' and a 'READY' status. The 'Description' is 'Customer Master Approval Required for New Zealand Customer'. Below this, the 'General Data' section lists fields: Name (New Zealand Customer), SearchTerm 1 (NEW ZEALAND), Street Name (2 MANU STREET), City Name (AUCKLAND), Postal Code (2024), Region (AUK), Country (NZ), and Email Address. The 'Bank Information' section contains a table with columns: Record Status, Bank Account, Bank Account Na..., Bank Name, Bank Number, and Country. The table has one row with values: Modified, 123456789, Savings, australian bank, 0301013, and AU. At the bottom right, there are buttons for 'Approve', 'Reject', 'Show Log', 'Claim', and a link icon.

Record Status	Bank Account	Bank Account Na...	Bank Name	Bank Number	Country
Modified	123456789	Savings	australia bank	0301013	AU

Step 12: Summary.

Important steps to remember, while creating Custom UI

1. Step 4 – Approuter Configuration (Approuter Managed by SAP Cloud Platform)
2. Step 5 – Add Authentication (as Yes)
3. Step 10 – Change of scope of Destination