Boost your UI5 skills for creating accessibility apps

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UI5con HYBRID

Agenda

Accessibility Documentation

- Improvements in Demo Kit documentation
- End-user screen reader and keyboard handling documentation

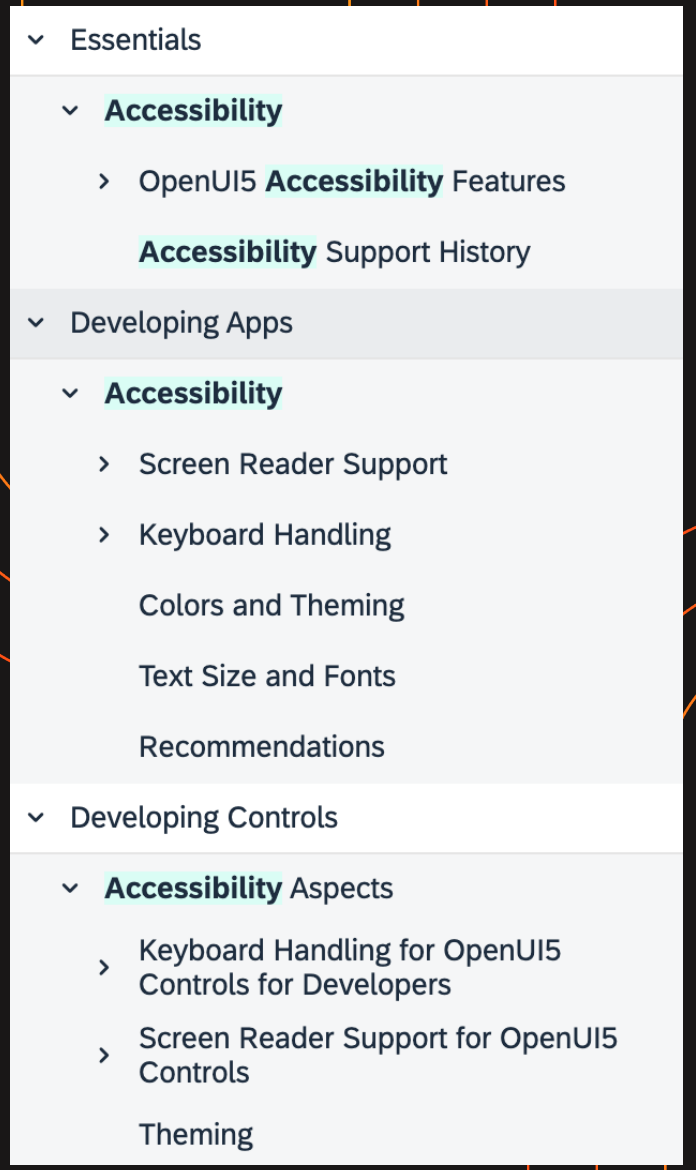
Best Practice Application

- Accessibility-first samples

Accessibility Mission in SAP Discovery Center

- Learning accessibility in practice

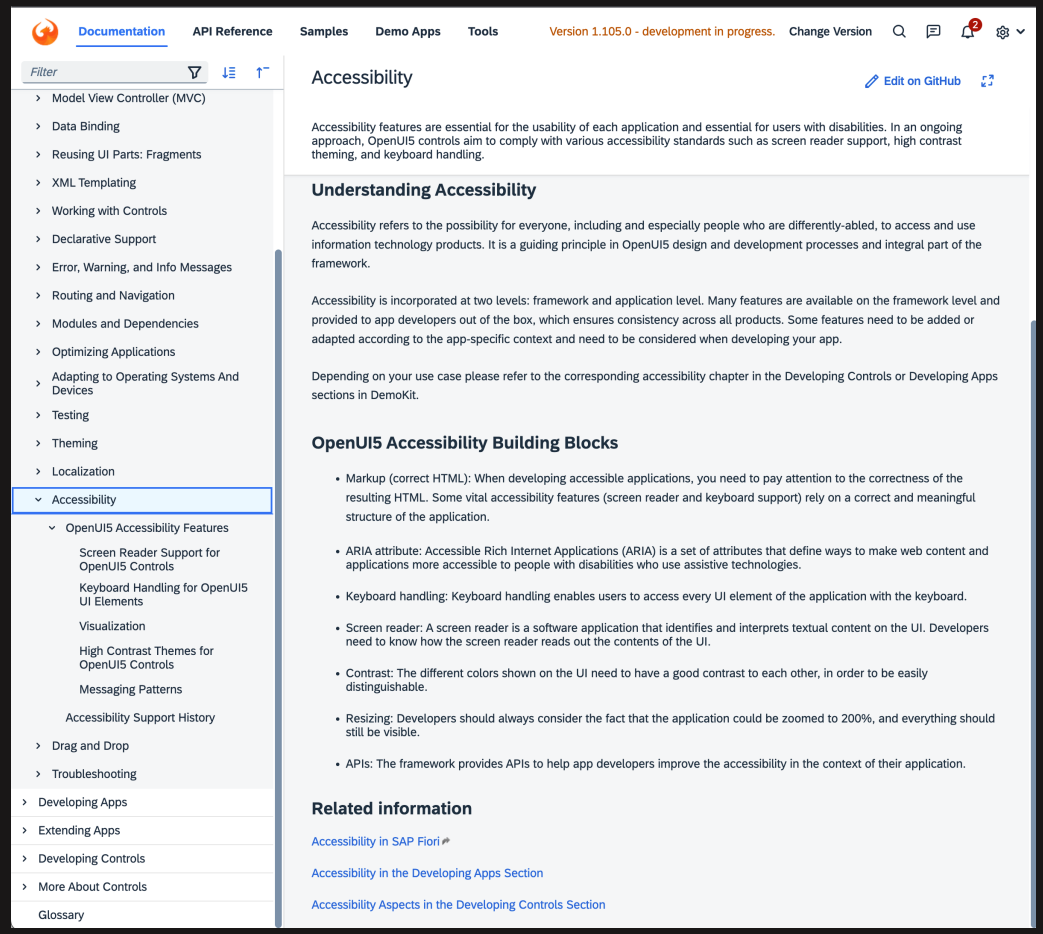
Accessibility Documentation



Accessibility Documentation

Understanding Accessibility

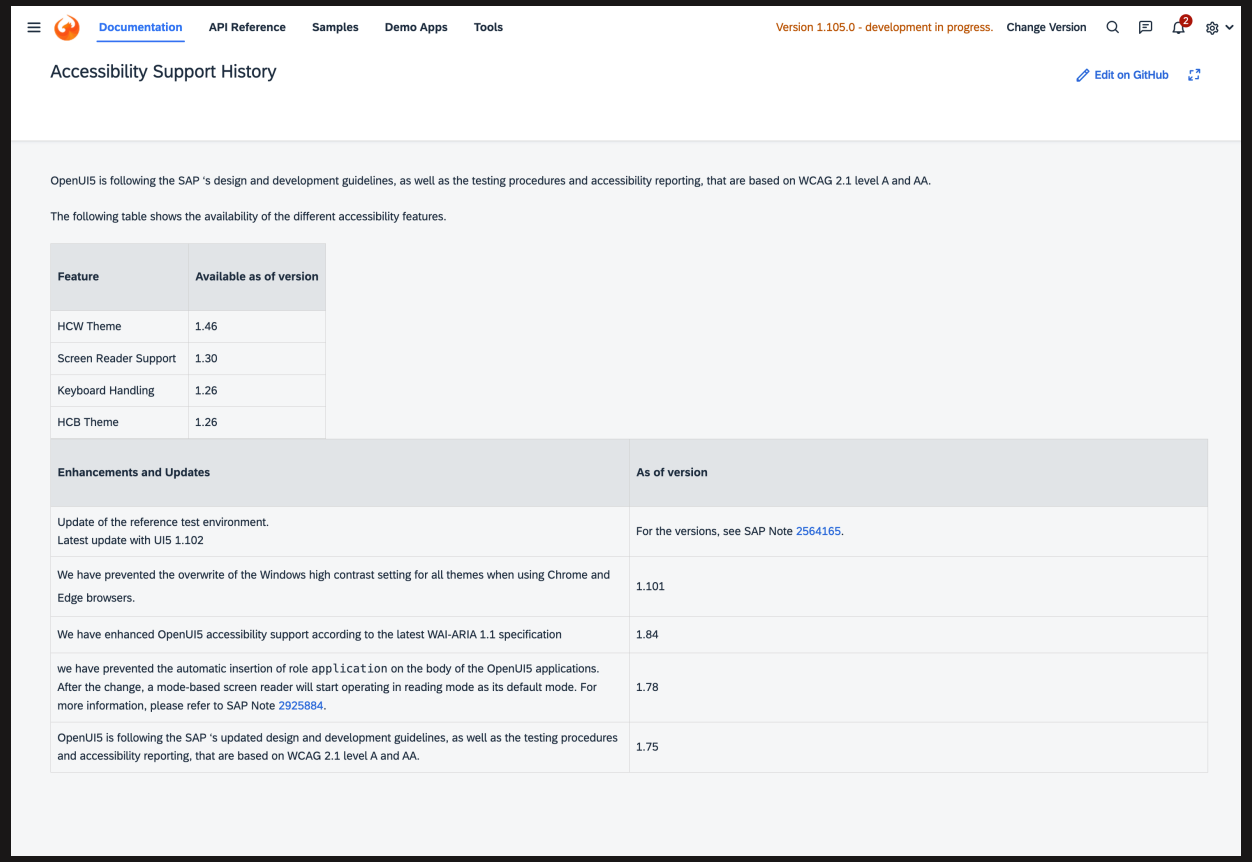
UI5 Accessibility Building Blocks



Accessibility Documentation

Accessibility Support History

- Enhancements
- Updates
- New accessibility concepts
- Important SAP Notes



Documentation | API Reference | Samples | Demo Apps | Tools | Version 1.105.0 - development in progress. | Change Version

Accessibility Support History

Edit on GitHub

OpenUI5 is following the SAP 's design and development guidelines, as well as the testing procedures and accessibility reporting, that are based on WCAG 2.1 level A and AA.

The following table shows the availability of the different accessibility features.

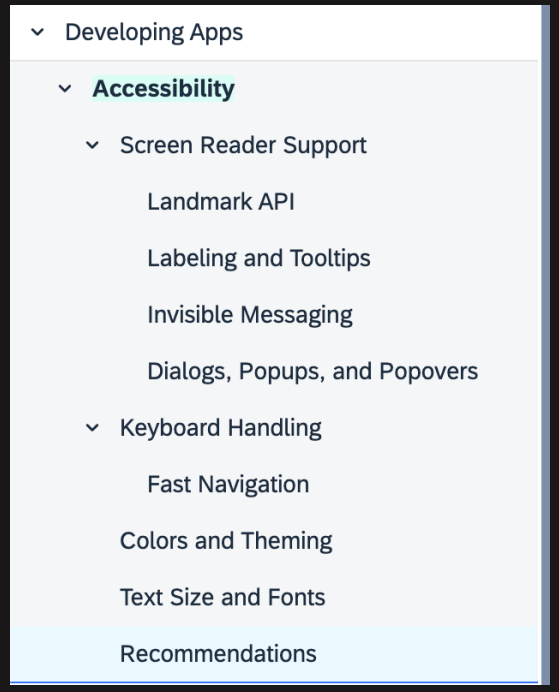
Feature	Available as of version
HCW Theme	1.46
Screen Reader Support	1.30
Keyboard Handling	1.26
HCB Theme	1.26

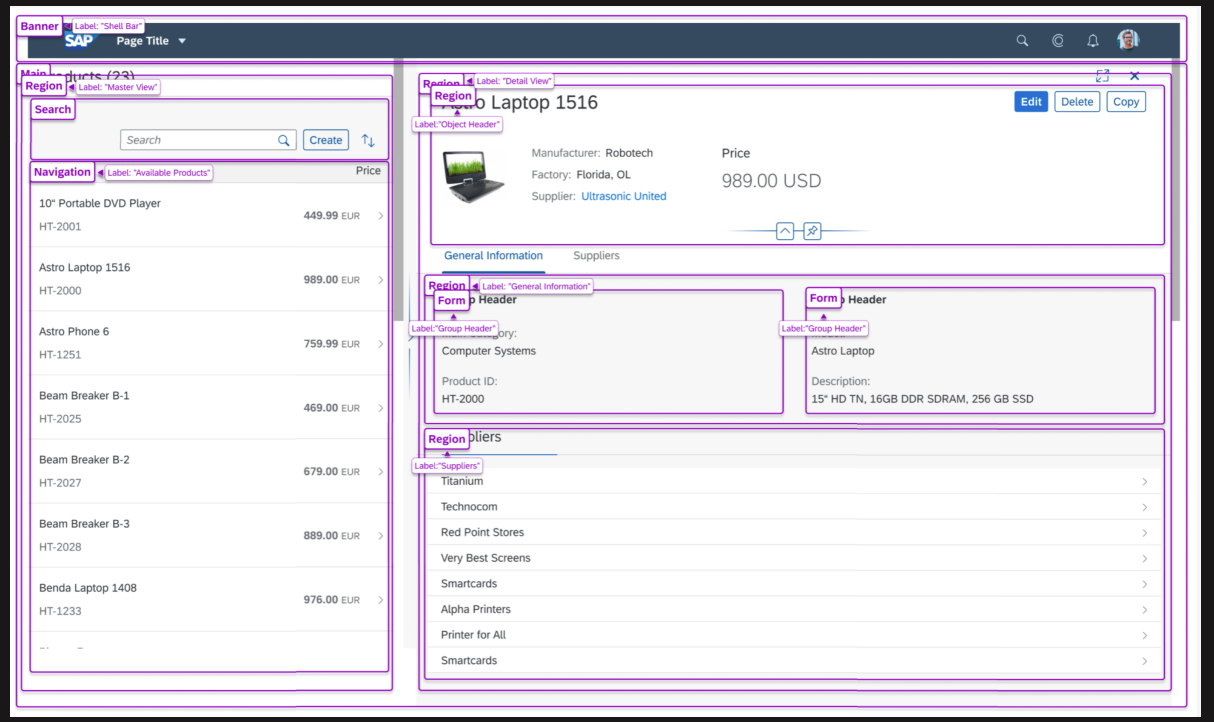
Enhancements and Updates	As of version
Update of the reference test environment. Latest update with UI5 1.102	For the versions, see SAP Note 2564165.
We have prevented the overwrite of the Windows high contrast setting for all themes when using Chrome and Edge browsers.	1.101
We have enhanced OpenUI5 accessibility support according to the latest WAI-ARIA 1.1 specification	1.84
we have prevented the automatic insertion of role `application` on the body of the OpenUI5 applications. After the change, a mode-based screen reader will start operating in reading mode as its default mode. For more information, please refer to SAP Note 2925884.	1.78
OpenUI5 is following the SAP 's updated design and development guidelines, as well as the testing procedures and accessibility reporting, that are based on WCAG 2.1 level A and AA.	1.75

Accessibility Documentation

Developing Apps

- Logical groups
- New recommendations

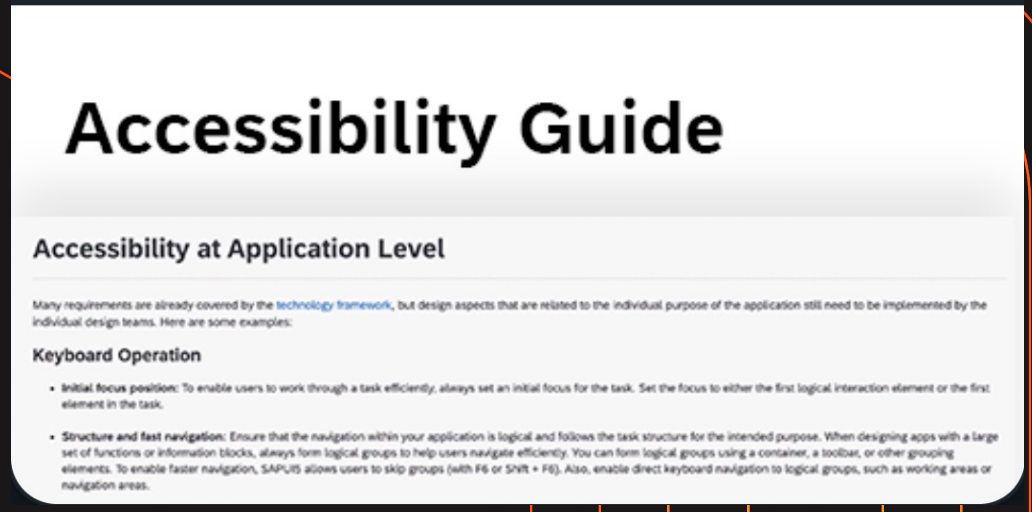




Accessibility Best Practice
Application

Accessibility Guide

The Accessibility Guide provides in-depth information with examples about web accessibility, whether you are a control or application developer, or a business user searching to learn more about web accessibility in the SAPUI5 area.



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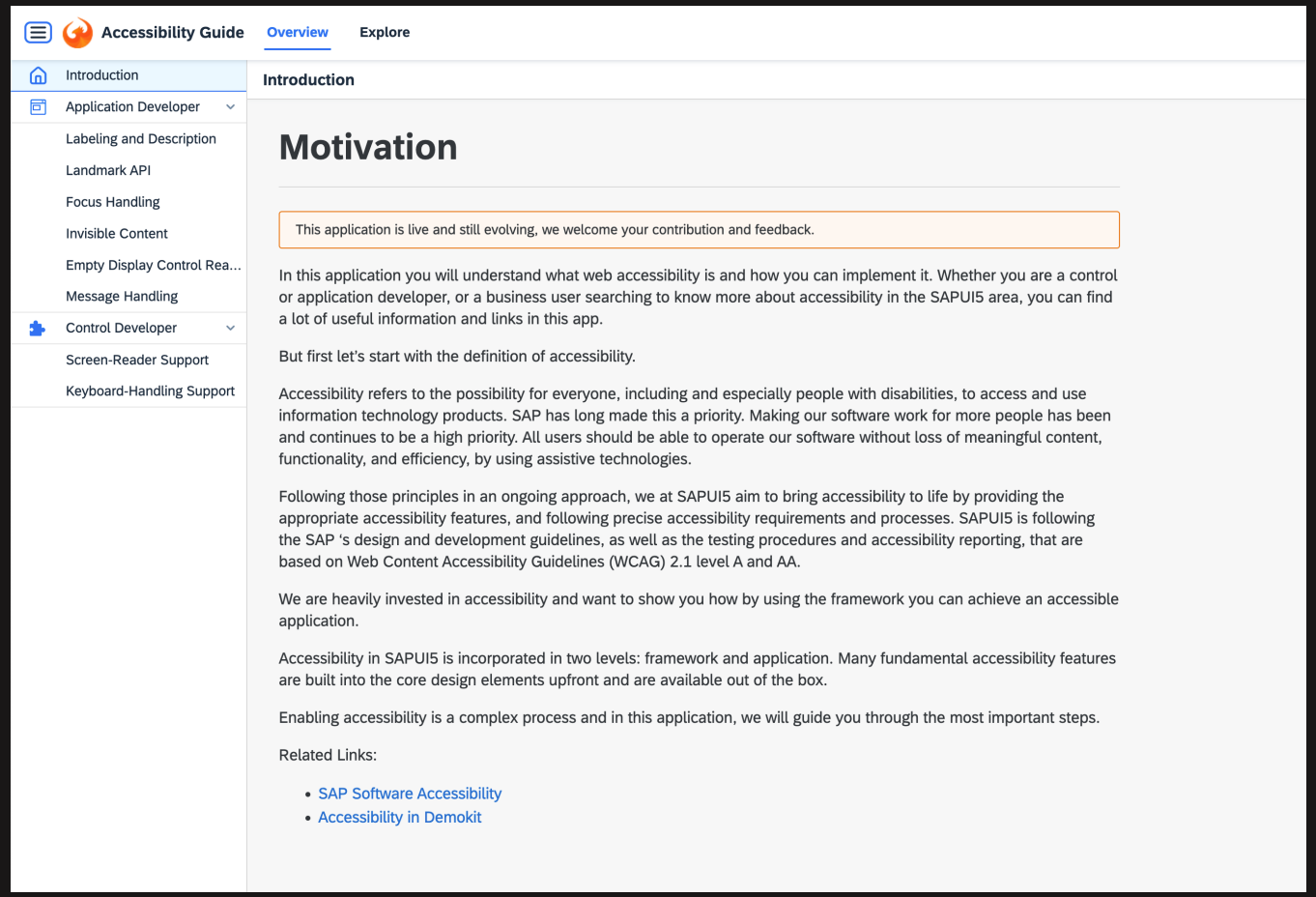
Accessibility Best Practice Application

Located in Demo Kit Tools Page.

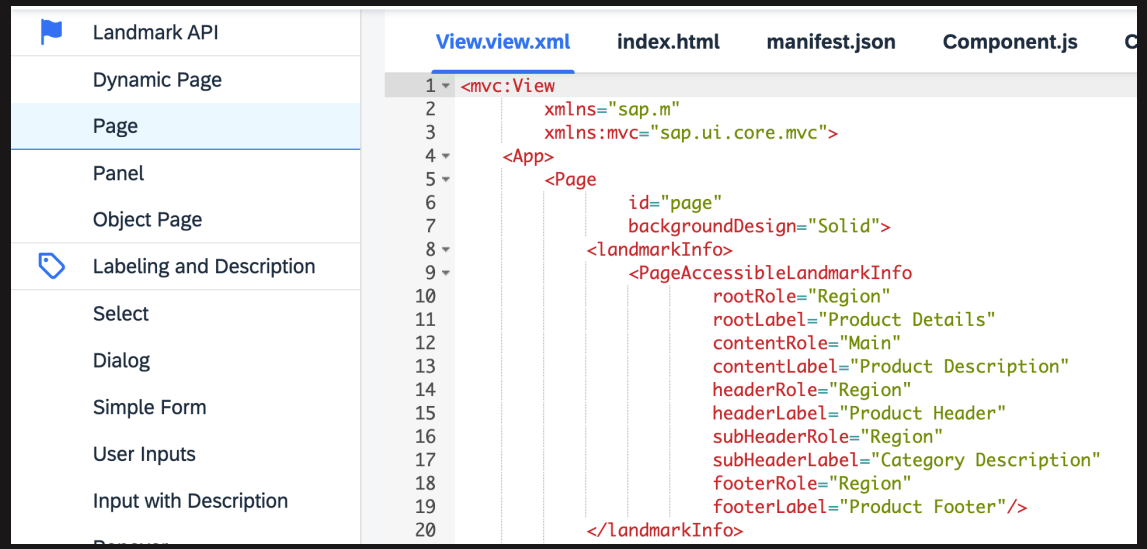
Provides **guidance** for developers to watch and follow best practices when developing accessibility features.

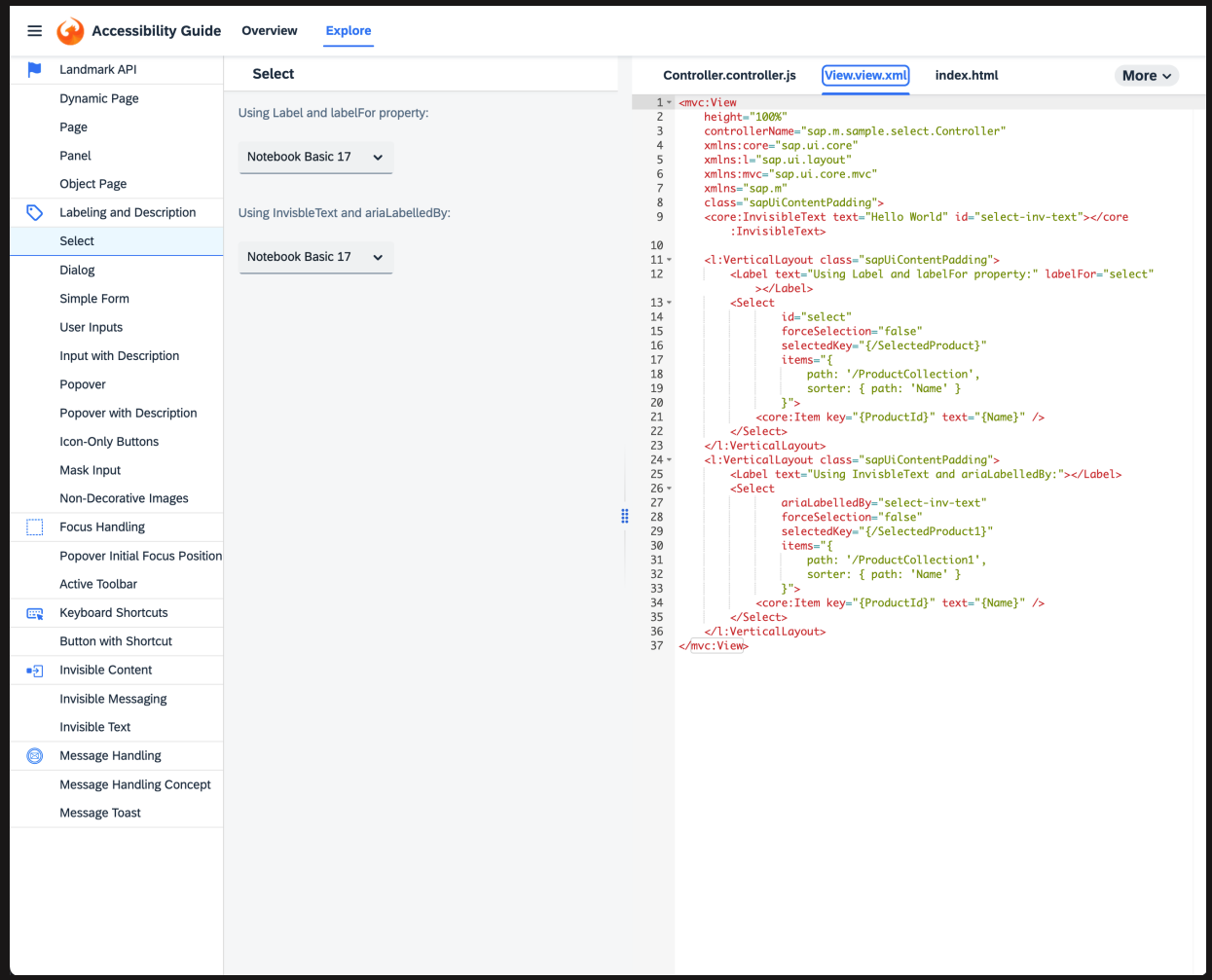


Accessibility Best Practice Application

Complete code examples

Semantically organized content



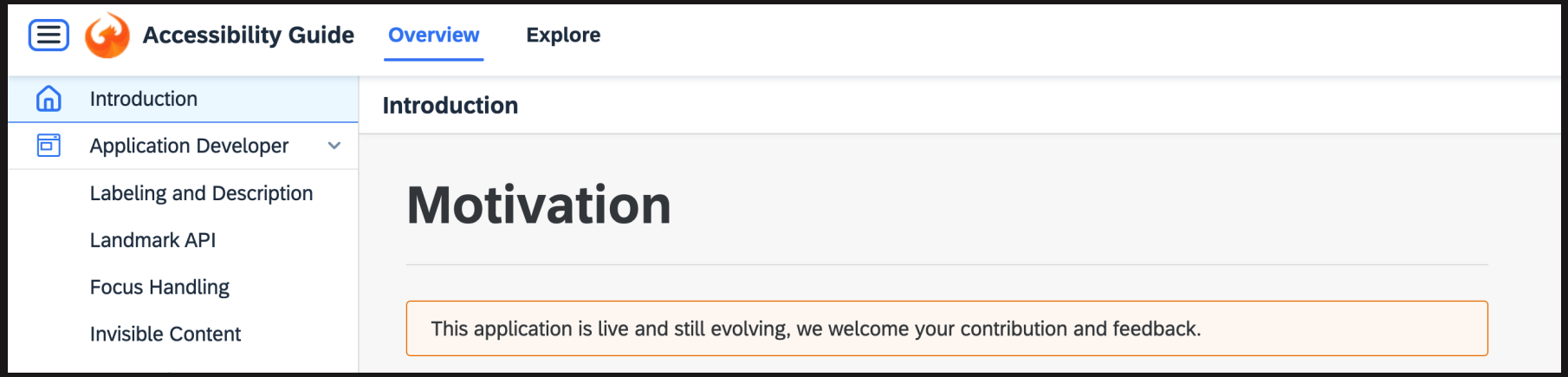


Accessibility Best Practice Application

More to come

Live editor

More contributions



Accessibility Mission in SAP Discovery Center

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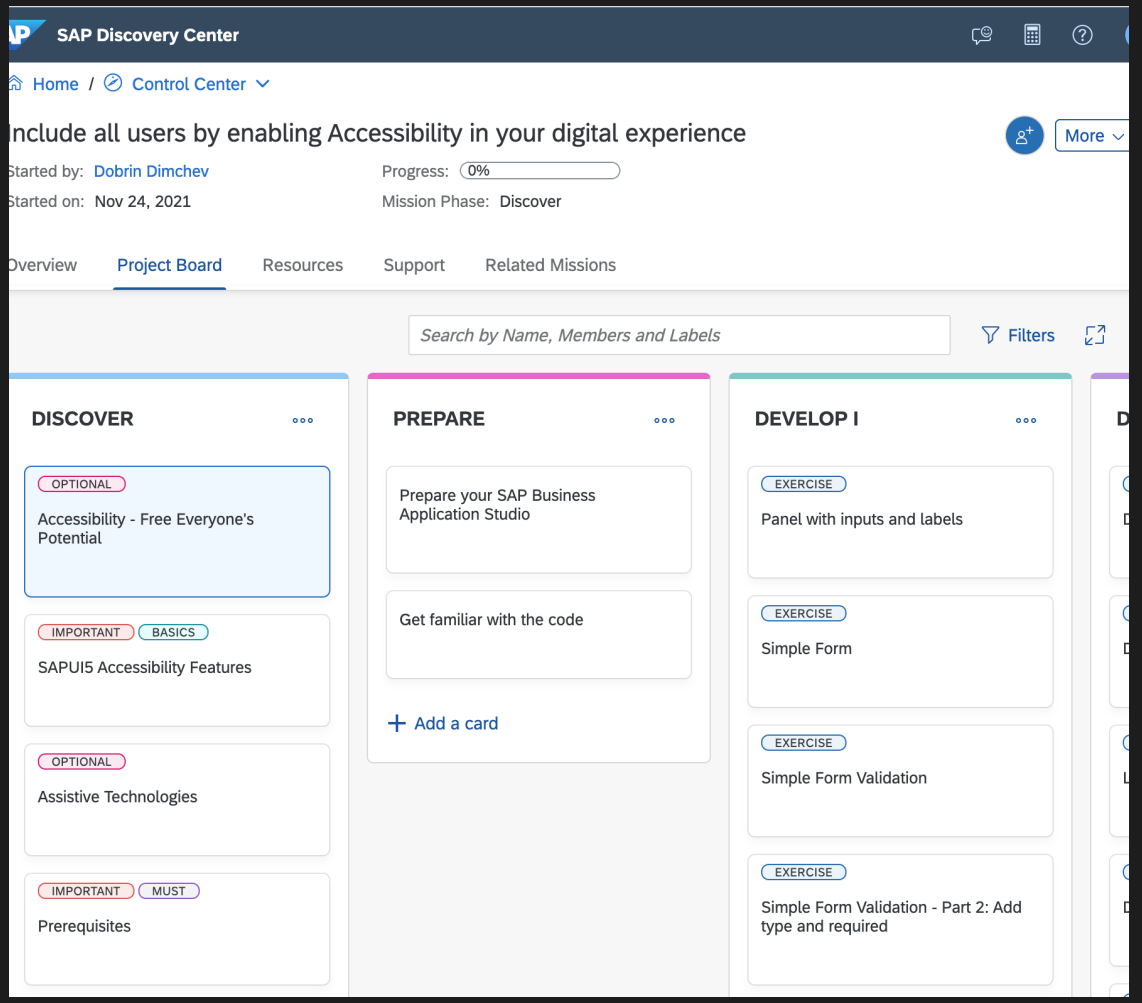
Accessibility mission in SAP Discovery Center

Bring more visibility about accessibility in UI5 and more easily and practically get to know the basic accessibility features and APIs that are offered by the framework.



Accessibility mission in SAP Discovery Center

Develop

- Labeling
- Forms
- Validation
- Dialogs
- Messaging
- Landmark

Panel with inputs and labels

Introduction

In the Todo application, users should first fill a simple form containing inputs and labels.
In this exercise, you are going to learn how to connect the Label controls with the Input controls manually. These examples are based on the `Panel` control and since it is a generic container the labelling functionality should be done manually. Later in this mission you will learn how to use the Form-based approach, and benefit from its features to automatically label the inputs.

Exercise

Initial setup

- Have the application served using the steps from the first exercise.
- Start Jaws screen reader.
- Explore the content of the Panel audible.

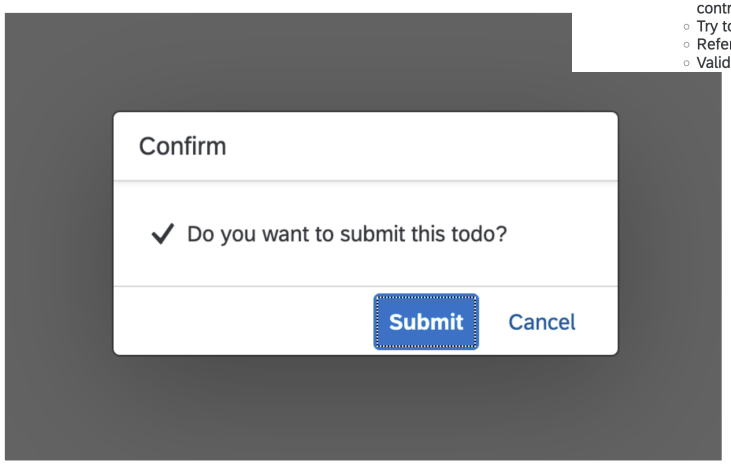
Connect the labels

- Problem: As you may have already noticed, in the initial test with Jaws, the labels of the fields are not read out. Your task is to connect the labels with the relevant input fields.
- Acceptance criteria: Jaws announces the labels of the input fields when they are focused.
- Hints:
  - Enhance the code in the *Todo.view.xml* file.
  - Read more about the Label control and check the available associations on this page: https://ui5.sap.com/#/api/sap.m.Label%23associations
  - Use the `labelFor` *association*. You should pass the ID of the labelled input. For the CheckBox you have two possibilities. The first one is to connect it with `labelFor` like it is described above. The other option is to use the `text` property of the CheckBox and the labelling will be done internally. You can read more about the properties here: https://ui5.sap.com/#/api/sap.m.CheckBox%23controlProperties.
  - Since `labelFor` accepts only one control, for the name inputs of the assignee, try to use the `ariaLabelledBy` association. Read more about the InvisibleText control: https://ui5.sap.com/#/api/sap.ui.core.InvisibleText.
  - Try to create two instances of the control with the relevant texts (“First Name” and “Last Name”).
  - Reference the created controls via the `ariaLabelledBy` association of the inputs. You should pass the IDs of the newly created InvisibleTexts.
  - Validate the panel again with JAWS.

Dialogs

Introduction

Dialogs are common way to provide information to the user after he interacts with
That's why it is important to be fully accessible as very often the selections in them



Exercise

Key Takeaways & Resources

Accessibility Documentation

- https://ui5.sap.com/#/topic/322f55d0cf1e4b459cc1911c899b7a5f
- Essentials, Developing apps and controls
- Enhancements and updates
- Refers to best practice samples

Accessibility Best Practice Application

- https://ui5.sap.com/test-resources/sap/m/demokit/accessibilityGuide/webapp/index.html
- Complete accessibility-first samples

Accessibility Mission

- https://discovery-center.cloud.sap/missiondetail/3530/3571/
- Make your application more accessible to all users

Thank you!

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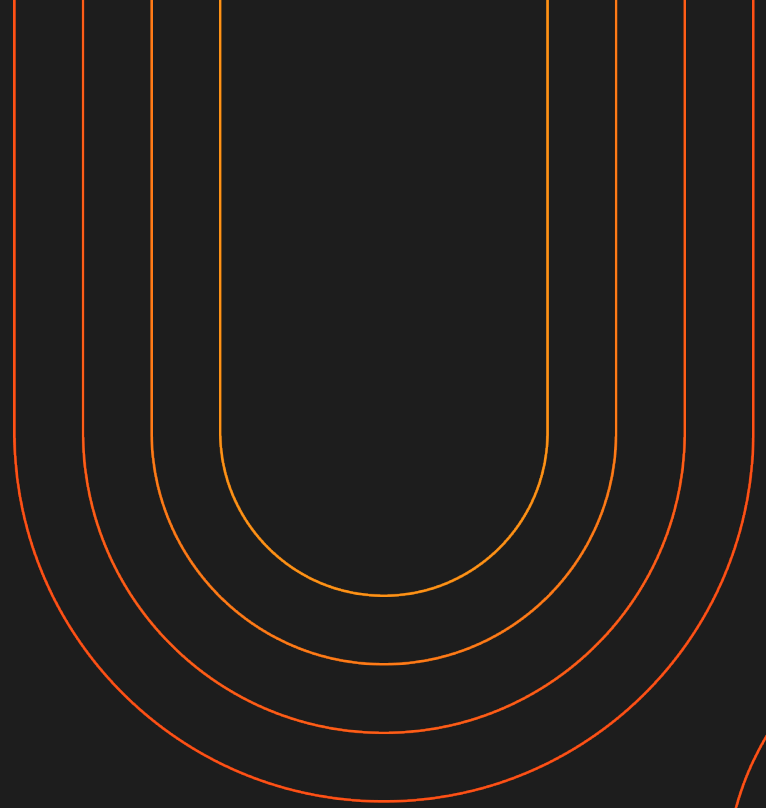

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