

OpenUI5 Road Map

March 2020

PUBLIC



Legal disclaimer

The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. This presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP's strategy and possible future developments, products, and platforms, directions, and functionality are all subject to change and may be changed by SAP at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or noninfringement. This document is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this document, except if such damages were caused by SAP's willful misconduct or gross negligence.

All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

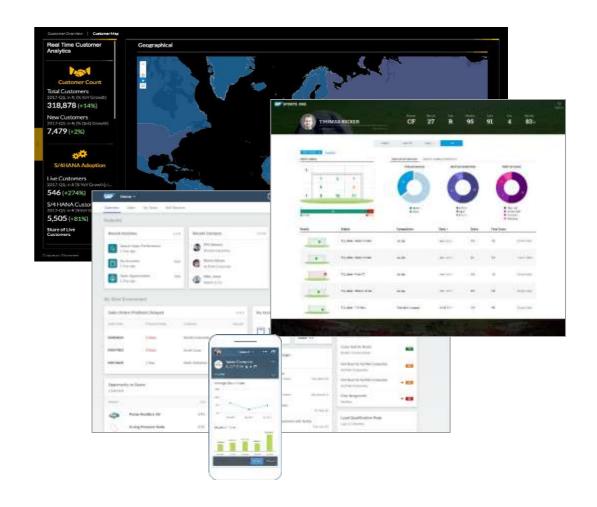
For all recent and planned innovations, potential data protection and privacy features include simplified deletion of personal data, reporting of personal data to an identified data subject, restricted access to personal data, masking of personal data, read access logging to special categories of personal data, change logging of personal data, and consent management mechanisms.

OpenUI5

Product description

OpenUI5 is an open source HTML5 framework designed to build cross-platform, responsive, enterprise-grade web applications. It is the leading UI technology of SAP's user experience strategy.

- Rich set of extensible and theme-able UI controls ensuring a consistent user experience across solutions
- Facilitation of efficient development for designing Web applications
- Built-in support for product standards
- Released under the Apache 2.0 license

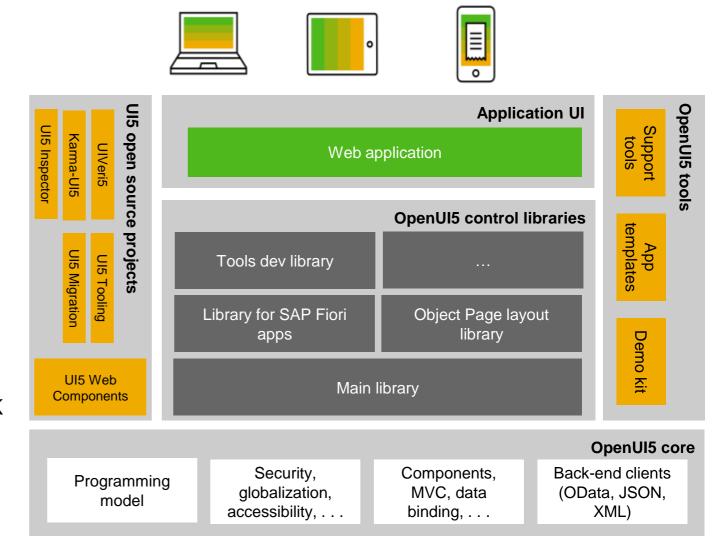


OpenUI5



Key capabilities

- The core serves as the foundation and simplifies Web development.
- OpenUI5 offers ready-to-use UI controls ranging from basic elements to complex UI patterns. Apps benefit from a consistent design language and coherent UX patterns known as SAP Fiori.
- Various tools complement the framework. They assist in building and testing apps as well as diagnosing and resolving issues.
- Besides the tools integrated into the OpenUI5 SDK there are other UI5 open source projects to support the efficient development of web applications.



OpenUI5 core

Product road map overview – Key innovations

Recent innovations

Programming model

- Routing
 - Advanced routing for nested components
 - Title support in nested components
- Formatting: Align ISO currency code display with SAP Fiori guidelines
- Theming: Expose theming parameters as CSS variables (experimental)

OData V2 model

Improved OData V2 messages

OData V4 model

- Improvements of auto-\$expand/ \$select
- Support for analytical table:
 Filtering before aggregation
- Changing of properties without sending them to the back end

Planned Q2/2020¹

Modular core

Consolidated feature configuration

OData V2 model

Messages with multiple targets

OData V4 model

- Actions in separate change sets
- Messages with multiple targets
- Deletion via context binding
- Support for analytical table
 - Visual grouping
 - Multiunit handling
 - Automatic type detection for aggregates

Planned Q3/2020

Modular core

- Minimal core in lightweight scenarios
- Extended universal core w/o dependencies to DOM/jQuery

OData V4 model

- Improved OData V4 messages
- Event bubbling for patchSent and patchCompleted
- Support for analytical table: Support editing of single records

Product direction¹

Modular core

- Startup bundling for self-contained apps
- Advanced bundling through code splitting

Programming model

- Enable XML templating with routing
- Managed object model
- Support of TypeScript and ES6 language features for improved development efficiency, security, and standardization

OData V2 model

Tree: Insert nodes at sibling positions

OData V4 model

- Deferred delete, tree support
- Masking of sensitive data
- Start adopting OData V4.01
- CRUD for collections in transient entities
- Support for analytical table: "Others" section for chart

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

Product road map overview – Key innovations (1/4)

Recent innovations

Planned Q2/2020¹

Planned Q3/2020¹

Product direction¹

General UI control aspects

- Enable semantic rendering (additional controls)
- Accessibility ARIA 1.1 adoption: role application adjustments

SAP Fiori 3

- Quartz Dark theme (finalization)
- Responsive paddings enhancements and negative CSS margins
- UI integration cards
 - Generic and list card loading placeholder
 - Calendar card (experimental)
 - Card Explorer enhancements and schema validation
 - Card attribute formatters
 - Configurable data sources
 - Initial support for MS Adaptive Cards

General UI control aspects

- Enable semantic rendering in complex
 controls
- Accessibility
 - Invisible messaging service for assistive technologies
 - ARIA 1.1 role application adjustments and extended attributes support
 - Support for app-level shortcuts

SAP Fiori 3

- Enable HCB/HCW for Quartz themes (finalization)
- UI integration cards
 - Loading placeholder for all card types
 - Basic design-time support
 - Calendar card productization
 - Action hooks for host environment
 - Destination support
 - Extended support for MS Adaptive Cards

General UI control aspects

- Enable semantic rendering (finalization)
- Accessibility: ARIA 1.1 adoption (finalization)

SAP Fiori 3

- Quartz theme round-offs
- UI integration cards:
 - Extended design-time support
 - Caching and preview
 - Support for microcharts in list card
 - View switch and filtering features for card content area
 - Support badge concept

General UI control aspects

- Integration of UI5 Web Components as OpenUI5 controls
- Accessibility enhancements

SAP Fiori 3

 UI integration cards: Enhancements based on stakeholder's feedback

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

Product road map overview – Key innovations (2/4)

Recent innovations

Layouts, floorplans, frameworks Layouts

- Dynamic page: Align UX of header with header in floorplans
- Better integration of wizard to dynamic page layout
- Object Header: Enable responsive paddings

Tool purposes

- Info label: Enable icon usage
- Side navigation: Optimized interaction and design

Basic UI elements

Container

- Navigation container: Add old-style slide animation as new type of transmission
- Icon tab bar:
 - Design changes and support for subtabs
 - Enable responsive paddings
- Tab container: Enable responsive paddings

Planned Q2/20201

Layouts, floorplans, frameworks Layouts

- Object page: Section visibility API
- Grid list/grid container: Keyboard navigation

Tool purposes

Responsive splitter: Design enhancements

Basic UI elements

Container

- Panel: Enlarge active area to include complete header area for expand/collapse
- Icon tab bar:
 - Improved responsiveness
 - Drag-and-drop support

Product direction¹

Layouts, floorplans, frameworks

Enhancements based on customer feedback

Basic UI elements

Container

Icon tab bar/tile: Support badge concept

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

Product road map overview – Key innovations (3/4)

Recent innovations

Display

- Message box: New emphazisedAction property to specify which action of the created dialog will be emphasized
- Notification list item: New authorAvatarColor property to manage the avatar background color
- ObjectStatus: Three additional colors in indication color palette

User input

- Multi-input/multi-combo box: Remove "1 item" label and display truncated token
- Select
 - Introduce new required property
 - Additional visual capabilities
- Color palette: New "Recent Colors" section, showing last 5 recently used colors

Planned Q2/20201

Display

- Avatar, button: Support badge concept
- Message strip: Accessibility enhancement to support dynamic creation

User input

- Keyboard shortcuts for application actions (button)
- Align behavior of input controls
 - Filtering and selection
 - Focus visualization updates
- Input: Option to add link to value state text details
- (Multi) Input: Input sticky column headers for tabular suggestions
- Rich text editor uses tinyMCE v4
- Button: New type Attention
- Color palette: API to select a color

Product direction¹

Display

Text: Support badge concept

User input

- Add placeholder string as ARIA label when no label is available in input
- Step input: Minimum sensible width

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

Product road map overview – Key innovations (4/4)

Recent innovations

Date-time input

- Date range selection
 - Possibility to pick months and years
 - Depending on display format months or years can be selected as ranges
- Planning calendar: Enable custom color for special dates

Table

- Responsive table: Auto pop-in mode
- List: Inverted info text in StandardListItem
- Tables:
 - Message when all columns are hidden
 - Message strip support (DataStateIndicator)

Planned Q2/2020¹

Date-time input

- Fiscal period picker: Select fiscal periods, quarters, weeks, and years
- Planning calendar: Stacking of appointments in 1 month view

Table

■ Tables: Optimized column width

Product direction¹

Date-time input

- Single/planning calendar
 - Aligning appointment details and sizes of appointments
 - Possibility to have time intervals of less than 30 min

Table

- Support OData V4 analytical capabilities in tables
- Enhancements based on feedback

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

OpenUI5 tools and documentation

Product road map overview – Key innovations

Recent innovations

Planned Q2/20201

Product direction

Tools

- Support assistant: Record app data
- New test recorder

Demo kit

- Demo kit filtering is highlighting search terms
- Samples
 - Adapt control samples to latest best practices
 - New Initial page pattern sample
- Demo app: Planning calendar and single planning calendar combined as new demo app

Documentation

- Updates on control lifecycle
- Updates on layouting
- New chapters on accessibility and performance best practices

Demo kit

- Enhance localization functionality of the documentation app and content
- SEO improvements

Demo kit

Dev guide SEO improvements

Planned Q3/2020

 Provide edit capabilities in code samples

Demo kit

 Central instance demo kit for all OpenUI5 releases

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

OpenUI5 – Complementary open source projects

Product road map overview – Key innovations

Recent innovations

Planned Q2/2020¹

Planned Q3/2020¹

Product direction¹

UI5 Inspector

Support of OData

UIVeri5

- Support for fiori_3_dark theme
- Group and filter spec files
- Extend declarative module syntax

UI5 Web Components

- Official extensibility support and documentation
- Performance improvements
- New UI elements
 - Carousel
 - Segmented button
 - Message toast
 - Product switch
 - File uploader
- Align configuration options and CSS variables with OpenUI5

UI5 Inspector

 Enable generic OData network panel

UI5 Tooling

- Handling of SAPUI5 resources
- Improve devopment experience in SAPUI5 projects

UIVeri5

 Multiple spec files support in UIVeri5

UI5 Web Components

- New UI elements
 - Time picker
 - Upload collection
 - Date time picker
- Theming parameters update

UI5 Inspector

- UI5 registry inspector
- Additional control data Events and aggregations

UI5 Tooling

 Further improved extensibility to adopt to project-specific environments

UIVeri5

- Execution of UIVeri5 tests in common IDEs
- Yeoman-based wizards for UIVeri5 tests in common IDEs

UI5 Web Components

- Full compatibility with UI theme designer
- Documentation

UI5 Inspector

Enhance debugging capabilities

UI5 Tooling

 Integration of more advanced features into common IDEs

UIVeri5

Enhancements based on stakeholder adoption

UI5 Web Components

- Additional new UI elements
- Integrate with common IDEs
- OpenUI5 integration in the rendering layer

^{1.} This is the current state of planning and may be changed by SAP at any time without notice.

Thank you.



Follow us









www.sap.com/contactsap

55743enUS (20/03)

© 2020 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platforms, directions, and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See www.sap.com/copyright for additional trademark information and notices.

