

## **OpenUI5** Road Map

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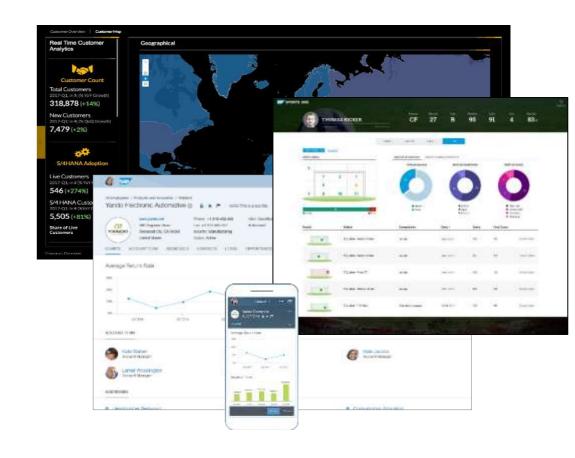
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### **OpenUI5**

### **Product description**

OpenUI5 is an open source client-side JavaScript framework designed to build cross-platform, responsive, enterprisegrade Web applications. It is the leading UI technology of SAP's user experience strategy.

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

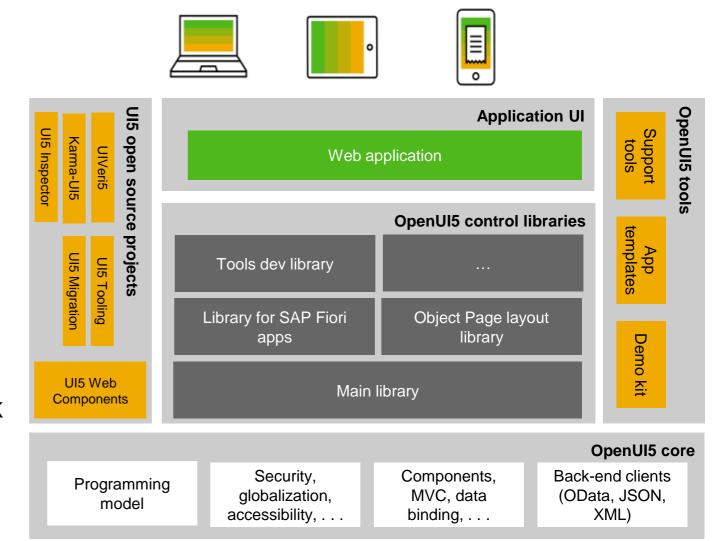


### **OpenUI5**



### **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**

#### Modular core

 Additional complementary asynchronous APIs

#### **Programming model**

- CLDR v35.1: Support new Japanese era
- Nested components: Enhanced navigation concept
- Support shortcuts (commands)
- Number format: Support lenient parsing

#### **OData V4 model**

- Server-driven paging
- Setting of HTTP headers
- Binding of operation parameters

#### **Planned Q1/2020<sup>1</sup>**

#### Modular core

Consolidated feature configuration

#### **Programming model**

Advanced routing for nested components

#### OData V2 model

- Improved OData V2 messages
- Messages with multiple targets

#### **OData V4 model**

- Improvements of auto-\$expand/\$select
- Support for analytical table
  - Filtering before aggregation
  - Visual grouping
- Changing of properties without sending them to the back end
- Messages with multiple targets

#### Planned Q2/2020

#### Modular core

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

#### OData V4 model

- Deferred delete
- Error messages in changesets
- Support for analytical table
  - Multiunit handling
  - Automatic type detection for aggregates
  - "Others" section for chart

#### Product direction<sup>1</sup>

#### Modular core

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

#### **Programming model**

- Enable XML templating with routing
- Managed object model

#### **OData V2 model**

Tree: Insert nodes at specified sibling positions

#### OData V4 model

- Tree support
- Masking of sensitive data
- Start adopting OData V4.01
- CRUD (create-read-update-delete) for collections in transient entities

<sup>1.</sup> This is the current state of planning and may be changed by SAP at any time without notice.

### Product road map overview – Key innovations (1/5)

#### **Recent innovations**

#### **General UI control aspects**

- Drag and drop: New property to specify size of drop indicator
- Icons
  - Feedback icon (new)
  - Style polishing in various icons

#### **SAP Fiori 3**

- SAP Quartz Dark theme (experimental)
- SAP Quartz theme: Title alignment changes
- Enable responsive paddings for most controls
- UI integration cards
  - Consume cards via custom element
  - Static resource handling for i18n files, icons, and images
  - Enhanced cross-site request handling for credentials

#### **Planned Q1/2020<sup>1</sup>**

#### **General UI control aspects**

- Convert complex controls to semantic rendering
- Accessibility: Invisible messaging service for assistive technologies

#### **SAP Fiori 3**

- SAP Quartz Dark theme
- UI integration cards
  - Loading and preview modes
  - Basic design-time support
  - Calendar card
  - Card date-time parameters
  - Card attribute formatters
  - Configurable data sources
  - Integration with MS Adaptive Cards
- High Contrast Black, High Contrast White themes for accessibility
- Responsive paddings in all controls

#### **Planned Q2/2020<sup>1</sup>**

#### **General UI control aspects**

 Accessibility: Keyboard shortcuts and ARIA role description

#### **SAP Fiori 3**

- UI integration cards
  - Caching and preview
  - Action hooks for host environment
- Finalizing High Contrast Black, High Contrast White Themes for accessibility

#### Product direction<sup>1</sup>

#### **General UI control aspects**

- Semantic rendering (round offs)
- SAP Quartz theme (round offs)
- Accessibility role description finalization
- Integration of UI5 web components via OpenUI5 controls
- Introduction of CSS variables

#### **SAP Fiori 3**

UI integration cards improvements

<sup>1.</sup> This is the current state of planning and may be changed by SAP at any time without notice.

### Product road map overview – Key innovations (2/5)

#### **Recent innovations**

### Layouts, floorplans, frameworks Layouts

- Page: Enable responsive paddings
- Dynamic page: Align UX with header in floorplans
- Flexible column layout
  - Visual redesign of column separator
  - New methods to leverage rendering capabilities
- Grid layout
  - Grid list: Responsive column layout
  - Responsive grid layout for MS IE11
  - Grid container

#### **Floorplans**

- Object page: Focusable element API and Improved avatar integration
- Wizard: Enable responsive paddings and new background design property

#### **Tool purposes**

Responsive splitter: Paginator capability

#### **Planned Q1/2020<sup>1</sup>**

### Layouts, floorplans, frameworks Layouts

- Dynamic page: Header: align UX with header in floorplans
- Object page: Section visibility API
- Panel: Enlarge active area to trigger expand/collapse

#### **Tool purposes**

Info label: Enable icon usage

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### Product road map overview – Key innovations (3/5)

#### **Recent innovations**

#### **Basic UI elements**

#### **Action**

Button: Enhance button type options

#### Container

- Avatar group (new, experimental)
- Tab container: New background design property

#### Display

- Access truncated text for label, text, and title controls
- Avatar: Additional background color options.
- Avatar control moved to sap.m library

#### **Filter**

Product switch (new control, experimental): Single-level navigation menu

#### Planned Q1/2020<sup>1</sup>

#### **Basic UI elements**

#### Container

Avatar group

#### Display

- Message strip: Accessibility enhancement to support dynamic creation
- Value state: Allow links in values state text

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### Product road map overview – Key innovations (4/5)

#### **Recent innovations**

#### **Popover**

Action sheet: Provide context information with close event

Popover: Responsive paddings

Quick view: Handling long texts

#### Message popover

groupItems and navigateBack APIs

#### **Notifications**

Redesign for SAP Fiori 3

#### Slider

Wheel slider (new): Cyclic scrolling

#### **User input**

- File uploader: Event when uploading empty file
- Link: Enable change target in adaptation mode
- Value state text of inputs: Display text on multiple lines in (multi) combo box/input

#### **Planned Q1/2020<sup>1</sup>**

#### **User input**

- Update of TinyMCE version in Rich text editor
- Focus handling alignment
- Keyboard handling improvements
- Align behavior of input controls
  - Filtering and selection
  - Composition language handling
- Color picker: Enhance "Recent Colors"
- Value state text of inputs: Insert link
- Select: Additional visual capabilities

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### Product road map overview – Key innovations (5/5)

#### **Recent innovations**

#### **Date-time input**

- Date range selection: Optional footer to confirm selection
- Planning calendar
  - Enable custom colors for special dates
  - Expose row header to be reachable from outside
  - New event for view change

#### **Table**

List/tables: Highlighting of a single row

#### **Planned Q1/2020<sup>1</sup>**

#### **Date-time input**

- Fiscal period picker (new):
   Possibility to select fiscal periods,
   quarters, weeks, and years
- Date range selection:
  - Possibility to pick months and years
  - Depending on display format months or years can be selected as ranged
- Planning calendar:
  - Stacking of appointments in 1 month view
  - Enable custom color for special dates
- (Single) planning calendar: Possibility to have time intervals less than 30 min
- Review the level of support for assistive technologies

#### **Table**

Message Strip support for tables

#### Planned Q2/2020

#### **Date-time input**

- Enhance fiscal period picker
- Aligning planning calendar and single planning calendar
  - Appointment details
- Sizes of appointments
- Planning calendar appointment list improvement

#### **Table**

- Support OData V4 analytical capabilities in tables
- List/tables: Optimized column width

#### Product direction<sup>1</sup>

#### **Date-time input**

Improve support of assistive technologies

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### **OpenUI5 tools and documentation**

### Product road map overview – Key innovations

#### **Recent innovations**

#### Demo kit

- Search highlighting
- Card explorer: New integration section
- Search-engine-optimized URLs
- Adapt control samples to best practices

#### Planned Q1/2020<sup>1</sup>

#### **Support assistant**

Recording of app data

#### Demo kit

- Modularization
- Version-independent demo kit
- Adapt control samples to best practices
- Card explorer: Allow download of samples

#### **Documentation**

- Update on control lifecycle
- Updated on layouting
- New accessibility chapter

#### Planned Q2/2020<sup>1</sup>

#### Demo kit

 Provide edit capabilities in code samples

#### Product direction<sup>1</sup>

#### Demo kit

- Dev guide SEO improvements
- Central instance demo kit

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### **OpenUI5 – Complementary open source projects**

### Product road map overview – Key innovations

#### **Recent innovations**

#### **UI5 Web Components**

- Product switch
- New NPM packages (icons, theme base and tools) to allow for extensibility
- playground

#### **UI5 Inspector**

New release

#### **Planned Q1/2020<sup>1</sup>**

#### **UI5 Web Components**

- Document and officially announce extensibility
- New UI elements:
  - Time picker
  - Message toast
- Documentation, tutorials, and best practice apps
- New features for inputs to better implement adaptive cards

#### **UI5 Tooling**

- Proxy support
- Integration of more advanced features into common IDEs

#### **UI5 Inspector**

Support of OData

#### Planned Q2/2020<sup>1</sup>

#### **UI5 Web Components**

- New UI elements:
  - Date range selection
  - Tree
- Configuration adapter for OpenUI5

#### **UI5 Tooling**

Mock server for OData V4 model

#### **UIVeri5**

 Multiple spec files support in UIVeri5

#### Product direction<sup>1</sup>

#### **UI5 Web Components**

Support for common IDEs

#### **UIVeri5**

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

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