UI Theme Designer

Agenda

Theming in SAPUI5

UI Theme Designer
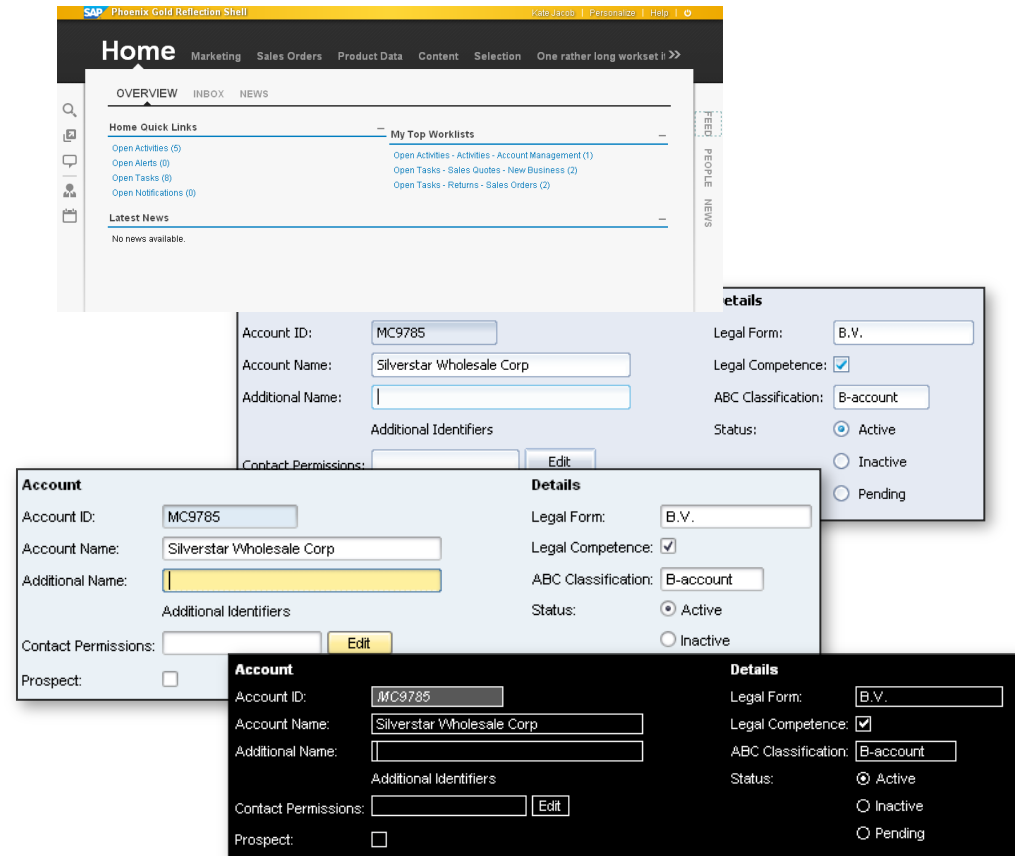
Internal

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Theming in SAPUI5

Control Style and Themes: Supported themes

Themes shipped with UI5:
- Gold Reflection
- High Contrast Black

See all these themes showcased in an [example]

Adjusting styles

In some cases one needs to adjust parts of the theme using CSS

- One can add <style> or <link> tags in the HTML <head> tag to include new styles
  - These styles are always processed after the UI5 CSS from the themes
  - As the last processed CSS wins in case of multiple same CSS rules, the custom CSS always overwrites the standard UI5 CSS
  - The parts to be overwritten can be determined using tools like Firebug
  - It is also important to know that the id given to a control is also the id that the topmost HTML element of this control gets. Thus, this id can be used as a reference in CSS

- Using the addStyleClass method that every UI5 control has
  - One can add a CSS class to the top level HTML element of the UI5 control
  - See an example here

Theming in SAPUI5

See general SAPUI5 theming concept

- Based on CSS
- In addition: CSS Parameters (see next slide)
- CSS files are separated by control at development time
  - Additionally: global.css, shared.css
- Every theme uses „base" theme CSS plus specific theme related CSS files on top
- Generator merges files and appends specific themes to base theme
  - Replaces CSS Parameter usages
  - Optional compression/optimization
  - Automatic right-to-left generation (For RTL languages like Hebrew)
  - One CSS file per control library (**library.css**)
  - SAPUI5 uses LESS to handle the CSS parameters (it also allows calculations, mix-ins,...)
- UI5 Framework handles theme switching at runtime

CSS Parameters

UI5 offers two main options to adjust themes
- Adjusting standard CSS directly with standard tools
- Changing parameters for the main features of a theme

Parameters
- Some values (often: colors) used for different elements
- Parameters: write once, reference often
- Parameters are mixed into the CSS of the controls
- The parameters are usually set in central files
- Using the LESS generator the parameter values are inserted and CSS only files are generated

```
@sapUiTextColor: #000000; /* text color is 'black' */


button {
   color: @sapUiTextColor; /* current text color */
   [...]
}
```

CSS Parameters

Parameter values can be read at runtime with a JavaScript API
- This allows transferring UI5 theme parameters to own HTML parts
- Useful when one uses technology which cannot be influenced by CSS directly:
  - Canvas
  - WebGL

```
jQuery.sap.require("sap.ui.core.theming.Parameters");
var myColor = sap.ui.core.theming.Parameters.get("sapUiSemanticErrorColor"));
```

UI Theme Designer

UI Theme Designer

Parameters can be easily modified using the upcoming UI Theme Designer
- Easy CSS-free theming/branding as long as mainly colors need to be changed
- Live preview in real applications
- Other SAP UI technologies like Web Dynpro are also covered

Info Pages: SAP Fiori - Public

- **SAP Fiori - SAP User Experience Community**

- **Marketplace - Apps - SAP Fiori**

- **help.sap.com/Fiori** – Technical docs

- **SAP Community Network (SCN) – SAP Fiori - QA**

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