

# Migrating a comprehensive theme from the legacy frontend to the MFE

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<https://tinyurl.com/edx2023-mfe-branding>

# A quick look at the Comprehensive Theming

[https://edx.readthedocs.io/projects/edx-installing-configuring-and-running/en/latest/configuration/changing\\_appearance/theming/](https://edx.readthedocs.io/projects/edx-installing-configuring-and-running/en/latest/configuration/changing_appearance/theming/)

# Templates

- Modifying existing text.
- Adding new elements.
- Modifying the behavior of existing components.
- Changing the content of emails sent with edx-ace (registration confirmation, password reset, etc.).

# CSS

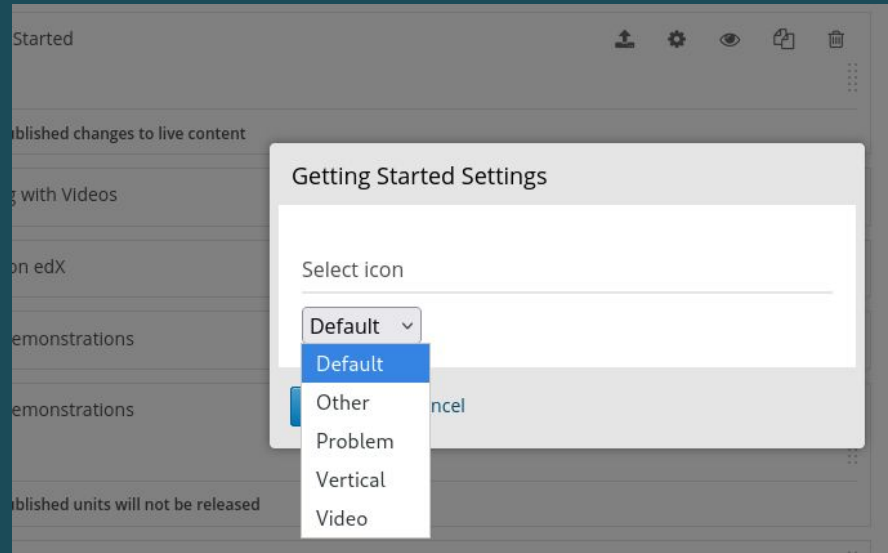
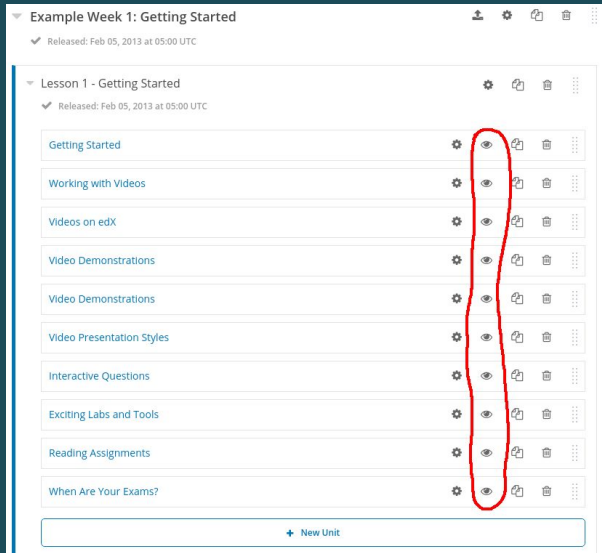
Changing the colors/sizes/placement/existence of the existing elements.

# JavaScript (static assets)

More specific use-cases. Examples:

- Reordering fields on the Account Settings page.
- Adding custom fields to the Account Settings page.
- Modifying the number of results of the dashboard search functionality.
- Customizing input behaviors.

# JavaScript: adding new functionalities

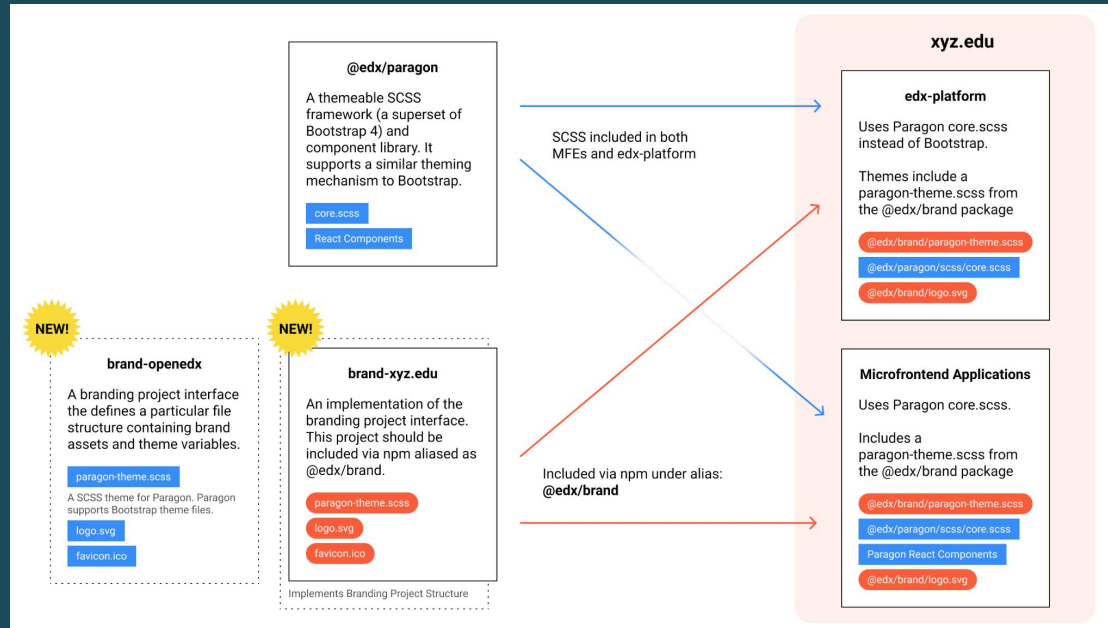


<https://github.com/open-craft/custom-unit-icons-theme>

# Translations

- `i18n/conf/locale/en/LC_MESSAGES/django.po`
- `lms/static/js/i18n/en/djangojs.js`

# MFE Branding



Source:

<https://open-edx-proposals.readthedocs.io/en/latest/architectural-decisions/oep-0048-brand-customization.html>



# Do I really need this override?

```
1 ## CUSTOM: This template overrides enrollment redirection.
2
3 <namespace name='static' file='../static_content.html' />
4 <inherit file="course_about.html" />
5
6 <!--
7 from django.utils.translation import gettext as _
8 from django.urls import reverse
9 from openedx.core.django.lib.js_utils import js_escaped_string
10 from openedx.core.django.lib.markup import HTML
11 %>
12
13 <block name="js_extra">
14   <script type="text/javascript">
15     (function() {
16       $('#register').click(function(event) {
17         $('#class_enroll_form').submit();
18         event.preventDefault();
19       });
20
21       $('#class_enroll_form').on('ajax:complete', function(event, xhr) {
22         if (xhr.status == 200) {
23           if (xhr.responseText == "") {
24             location.href = "${reverse('courseware', args=[str(course_id)] | n, js_escaped_string)}"; // CUSTOM: Redirect to the courseware instead of the dashboard.
25           }
26           else {
27             location.href = xhr.responseText;
28           }
29         } else if (xhr.status == 403) {
30           // redirect unauthenticated user to the login page
31           location.replace("${reverse('signin_user') | n, js_escaped_string}?next="+ encodeURIComponent("${request.path | n, js_escaped_string}"));
32         } else {
33           $('#register_error').text(
34             (xhr.responseText ? xhr.responseText : "${_("An error occurred. Please try again later.") | n, js_escaped_string}"));
35           .css("display", "block");
36         }
37       });
38     })(this)
39   </script>
40
41   <script src="${static.url('js/course_info.js')}"></script>
42 </block>
43
44 ${HTML(parent.body())}
```

```
403 - # Otherwise, there is only one mode available (the default)
404 - return HttpResponse()
405 + if should_redirect_to_courseware_after_enrollment():
406 +     return HttpResponse(reverse('courseware', args=[str(course_id)]))
407 + else:
408 +     return HttpResponse()
```

<https://github.com/openedx/edx-platform/pull/31715>

# edx-simple-theme

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# edx-simple-theme usage

1. Clone <https://github.com/open-craft/edx-simple-theme>.
2. In the `edx-simple-theme` directory, run:  
`echo -e "@import 'common-variables';\n" > lms/static/sass/_lms-overrides.scss`
3. Create the `lms/static/sass/common-variables.scss` file with variables defined in the *README*. E.g.:

```
■ $main-color: #00a608;  
■ $link-color: $main-color;  
■ $btn-primary-bg: $main-color;  
■ $btn-secondary-bg: $btn-primary-bg;  
■ $color-nav-main: crimson;  
■ $course-nav-menu-color-main: #8C8179;  
■ $course-nav-menu-color-active: $color-nav-main;  
■ $course-nav-menu-color-hover: $link-color;  
■ $course-nav-menu-border-bottom-color: transparent;  
■ $wrapper-preview-menu-color: $main-color;
```

```
■ $btn-primary-bg: $main-color;  
■ $btn-secondary-bg: $btn-primary-bg;  
■ $btn-primary-color: #fff;  
■ $btn-secondary-color: $btn-primary-color;  
■ $btn-primary-hover-bg: #fff;  
■ $btn-secondary-hover-bg: $btn-primary-hover-bg;  
■ $btn-primary-hover-color: $main-color;  
■ $btn-primary-border-color: $main-color;  
■ $btn-secondary-hover-color: $btn-primary-hover-color;  
■ $btn-secondary-border-color: $btn-primary-border-color;  
■ $btn-primary-hover-border-color: $main-color;  
■ $btn-secondary-hover-border-color: $btn-primary-hover-border-color;
```

# Installing a Comprehensive Theme (devstack)

```
from .common import _make_mako_template_dirs, _make_locale_paths
ENABLE_COMPREHENSIVE_THEMING = True
DEFAULT_SITE_THEME = "edx-simple-theme"
COMPREHENSIVE_THEME_DIRS = ["/edx/src/themes"]
TEMPLATES[1]["DIRS"] = _make_mako_template_dirs
PREPEND_LOCALE_PATHS = [f"/edx/src/themes/{DEFAULT_SITE_THEME}/i18n/conf/locale"]
LOCALE_PATHS = _make_locale_paths
derive_settings(__name__)
```

edx-platform/lms/envs/devstack.py

```
# This allows you to quickly compile the theme for the selected service
# make quick-theme THEME=theme_name SYSTEM=(lms or studio)
quick-theme:
  docker exec -it edx.${COMPOSE_PROJECT_NAME}.${SYSTEM} bash -c \
    'source /edx/app/edxapp/edxapp_env && \
    cd /edx/app/edxapp/edx-platform/ && \
    paver compile_sass --system=${SYSTEM} --theme-dirs /edx/src/themes --themes ${THEME}'
```

devstack/options.local.mk

# Installing an MFE branding package (devstack)

```
# This allows you to quickly install the theme in the selected MFE.  
# make mfe-theme THEME=theme_name MFE=learning  
mfe-theme:  
| docker exec -it edx.${COMPOSE_PROJECT_NAME}.frontend-app-${MFE} bash -c \  
| 'npm i @edx/brand@file:/edx/app/src/themes/${THEME}/'
```

devstack/options.local.mk

# Installing edx-simple-theme (Ansible deployment)

```
EDXAPP_ENABLE_COMPREHENSIVE_THEMING: true
EDXAPP_DEFAULT_SITE_THEME: edx-simple-theme
EDXAPP_THEME_VERSION: main
edxapp_theme_name: '{{ EDXAPP_DEFAULT_SITE_THEME }}'
edxapp_theme_source_repo: https://username:password@gitlab.com/organization/{{ EDXAPP\_DEFAULT\_SITE\_THEME }}.git
_EDXAPP_COMPREHENSIVE_THEME_DIR: /edx/app/edxapp/themes
EDXAPP_COMPREHENSIVE_THEME_DIRS:
  - '{{ _EDXAPP_COMPREHENSIVE_THEME_DIR }}'
EDXAPP_PREPEND_LOCALE_PATHS:
  - '{{ _EDXAPP_COMPREHENSIVE_THEME_DIR }}/{{ EDXAPP_DEFAULT_SITE_THEME }}/i18n/conf/locale'
MFE_DEPLOY_NPM_OVERRIDES:
  - '@edx/brand@git+{{ edxapp_theme_source_repo }}#{{ EDXAPP_THEME_VERSION }}'
```

# Future improvements

- Design tokens: <https://github.com/openedx/paragon/pull/1929>
- Modular Micro-frontend domains:  
<https://github.com/openedx/open-edx-proposals/pull/410>
- Common stylesheet for all MFEs: <https://github.com/openedx/frontend-platform/pull/351>

# Thank you



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