iLab Design Guidelines

The iLab Design Guidelines are intended to create a uniform and intuitive standard for design. This guide will not solve ever problem, but should

Visual Design

Typography

Code

```
body {
  ...
  font-family: Lato,'Helvetica Neue',Arial,Helvetica,sans-serif;
  font-size: 14px;
  ...
}
```

Guidelines

- Use a base font size from semantic 14px for paragraph fonts. All other fonts should be scaled from this with rem.
- Use the default sans serif fonts in the Semantic package.
- iLab does not currently support multiple font styles and they should be avoided.
- A line 66 characters long, counting spaces characters and is generally considered the optimal size for a line's length.

Capitalization

Use consistent capitalization. Capitalization conveys meaning (e.g., importance). Inconsistencies like capitalization can disorient users.

These are general guidelines for text within the app.

Guidelines

- Use sentence case when the text is a complete sentence (subject + predicate/verb + full stop punctuation).
  - Sentences should be used to provide assistance to users.
- Use title case for headers, actions and labels.
- Avoid use of all caps because it slows down users making text difficult to read.

Currency

Many of iLab's views include financial information. Financial users have conventions for displaying currency and financial data that iLab should support.

Guidelines

- For USD, EUR, GBP, CAD, AUD and CHF, there should always be two digits after the radix (i.e., decimal point). Secondarily, European or other international users should be able to swap the radix and display of comma and decimal point delimiters. Currencies should always be preceded by their symbol $, €, even if a subtotal.
- For some currencies, that may not have a symbol like Norwegian krone, the label should be after.
- When calculating the items total cost, call the column with the calculated value "Amount".
- For some currencies, their should be no space between the symbol.
- For tables that have currencies, the table heading and the values should be right aligned, so that the decimal points are aligned.

Date Formats

Dates should be in the default format, ideally by user selected but potentially organizationally determined or at least defined by the locale.

Dates can take different formats in different contexts. For example, within the context of a weekly calendar, the date in the day's column heading may be shortened to either Mon 3/14 or Mon 14/3.

Code

Code	Example	Label
yyyy/mm/dd	2020/10/04	ISO, default
mm/dd/yyyy	10/04/2020	US, default
dd/mm/yyyy	04/10/2020	International, default
%m %d	Oct 4	US/Intl., short
%m %d	Wed 15/12, Wed 12/15	US/Intl. calendar
%I:%M %p	4:41 AM, 4:42 PM	
%h:%M	4:41, 16:42	

Guidelines

- Use the core's timezone by default.

Alignment

Guidelines

- Avoid adjusting the indentation that is built into Semantic UI's CSS.
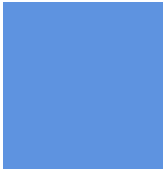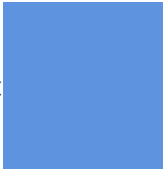- Text should be left aligned, except in cases of tables (e.g., currency) and marketing.

Color

Use grayscale first. After that, add one color to add focus. Add additional colors at your own peril.

Design Palette

To match iLab's enterprise-wide styling, please use the following colors. Please note that we are using the default colors from the Semantic UI library for most buttons.

Name	Hex Code	Swatch

iLab Blue (main color)	#548DD4	
Darker Blue	#376092	
Darker Grey	#777777	
Highlight Orange	#FA7921	
Highlight/Background Grey	#CCCCCC	
Dark Grey for Font	#222222	

Accessibility

We must take accessibility into account when designing and developing interfaces. iLab is reviewing the U.S. Governments Section 508 Standards as a potential guideline.

Breadcrumbs

Use breadcrumbs to help give users a sense of where they are in iLab and help then navigate back and sideways.

University of Port Hope › Flow Cytometry Facility › **Zeiss LSM 780 NLO - Trained and Untrained**

Buttons & Actions

Buttons are to take actions on a form or other work.

Code

```
%button.ui.black.basic.button.cancel
  Back
%button.ui.primary.button
  Create Item
```

Guidelines

- The primary button should be colored (i.e., high contrast).
- The action that advances the users goal should be the furthest right.

Back   Create Item

- Actions should be grouped together to the right of the content, without being orphaned.
- Use title case as elaborated by the OSX spec
- Secondary buttons should be basic or links.
- Avoid using the standard button style. In a few usability tests, users have said that the button looks disabled.

Avoid this Button

- Avoid using the conditional button. The conditional button lacks visual distinction between the primary and secondary action.

Neither   or   Nor

Button Color and Styling Guidelines

Using the conventional and consistent button colors and styling speeds a user's work and prevents mistakes. First, identify what type of action button is taking - Positive: Updates, sends or adds information. - Positive with redirect to new page. - Neutral: Makes no changes or goes back - Negative: Delete, destroy, remove or block information. Second, identify the primary action - Usually the primary action is the positive action. - Make the primary action the highest contrast and most prominent. - When positive and negative actions are together, make the positive the primary.

Negative   Positive

Neutral   Negative

Neutral   Negative   Positive

Reserve green for when a user will be redirected after taking the positive action.

Back   Remove Session   Start Session   Start Session and Logout

Inputs

Inputs, specifically text, should direct the user as to what information should be entered.

Code

Guidelines

- Size inputs to reflect the data that will be entered. For example, a phone number input should be 10 or 12 characters long.
- Make placeholder text the secondary label because it's often too low of contrast to ensure accessibility.
- Rows of inputs:
  - When adding a row of inputs, always place the cursor in the next row.
  - If removing the row only destroys a connection between two records, and is easily recovered, us a red "X" on the row.
  - If removing the row will destroy data that cannot be easily derived (e.g., name, date, PO number), use a trash can icon and display an alert warning.

Filters

iLab uses many different types of filter controls.

Search

Search inputs are special types of inputs.

Code

To get the borders to look right on this search

Add the following CSS

```
.ui.left.action.input input {
    border-top-right-radius: 0;
    border-bottom-right-radius: 0;
}

.ui.left.action.input input + button {
    border-top-right-radius: 0.285714rem;
    border-bottom-right-radius: 0.285714rem;
}
```

Guidelines

- If the primary means for interesting with the page is search, make sure it is prominent.
- Avoid using Semantic UI's fuzzy search.
- Add placeholder text that provides context despite it being low contrast.

Tables

Tables are best for organizing structured datasets where each row represents a record.

Code

A basic striped table

```
%table.ui.striped.table
  %thead
    %tr
      %th Item
      %th Description
      %th.right.aligned Qty
      %th.right.aligned Unit Price
      %th.right.aligned Amount
  %tbody
    %tr
      %td Scans
      %td CT Scan
      %td.right.aligned 20
      %td.right.aligned 30.00
      %td.right.aligned 600.00
```

You may also include a footer that includes information like a total or summary.

```
%tfoot
  %tr
    %th 3 People
    %th 2 Approved
```

```
%th
```

Here's the CSS to make rows hover-able

```
tr i.fa-pencil-square-o {
    visibility: hidden;
}
tr:hover i.fa-pencil-square-o {
    visibility: visible;
}
```

Guidelines

- Tables should be minimally responsive or scrollable for small widths.
- Actions on a table row should not be visible unless the row is hovered by a user.

Name	Email	Phone
Audrey Bahrani	audrey.bahrani@ilabsolutions.com	555.543.2109
Bas Van Der Brugge	bas.vanderbrugge@ilabsolutions.com	
Danielle Bird	danielle.bird@ilabsolutions.com	555.123.4567
Darah Arcila	darah.arcila@ilabsolutions.com	(555) 098-7654

- Use the datatables.net filter
- Avoid zebra-striping tables. [Research] indicates that zebra striping does not improve speed or accuracy of answering questions with data, although users do indicate an aesthetic preference for zebra striping. If used, remove the table lines.
- Never use the ribbon label `class="ui ribbon label"`

Item	Description	Qty	Unit Price	Amount
Scans	CT Scan	20	30.00	600.00
Scans	MRI	20	30.00	600.00
Services	Scans Services	5	50.00	250.00
Services	Scans Services	5	50.00	250.00
Services	Scans Services	5	50.00	250.00
Services	Scans Services	5	50.00	250.00
Services	Scans Services	5	50.00	250.00
Services	Scans Services	5	50.00	250.00

	Grand Total	$2700.00

Forms

Forms are an essential way users interact with iLab and they are how users achieve their goals. Therefore, iLab forms should be straightforward and fast to complete.

Code

Creating fields that are not the full width of the grid

```
.ui.form
  %h4.ui.header Reservation Time
  .fields
    .five.wide.field
      %label Minimum Minutes
      %input{:placeholder => "Min.", :type => "text"}
    / five wide field
    .five.wide.field
      %label Maximum Minutes
      %input{:placeholder => "Max.", :type => "text"}
    / five wide field
```

Guidelines

- Forms should be a single column, except for things like first name and last name or city and post code or other related data.

Reservation Time

Minimum Minutes   **Maximum Minutes**

Min.   Max.

- Avoid using sentences in form labels.
- Use help text to assist users in completing forms. Typically this should be placed in a popup.
- Use the right case
    - Use Title Case for labels. For example: "Header Logo", "Header Height", "Tab Color"
- Checkboxes, toggles, and radio buttons may have labels that use sentence case, even if they are not complete sentences.
- Use a button labeled Back, since that is a normal way to interact with web applications.
- Avoid Cancel buttons.
- Never use Reset buttons.

Reference: Here's some excellent research and guidance for buttons and labels on building good forms.

Modals

Modals prevent users from interacting with the background while focusing on a specific task. For modals iLab uses a Semantic modal and the Magnific popup library. All new work should use the Semantic version.

Modals should be cancelled by three methods: (1) click a cancel button, (2) hit escape on the keyboard, (3) click outside of the modal on the window overlay.

Code

The basic init for a modal.

```
$('.ui.modal')
  .modal()
;
```

Guidelines

- Place an X inside the upper right hand corner of the modal.
- Size modals to the content. Use large for more details or image content. Use small for content usually placed in alerts (e.g., "Do you want to set your password?")
- Never change the animation or the background options (e.g., no blur).

More guidelines:

Apple provides succinct guidance in it's iOS Human Interface Guidelines:

> Keep modal tasks simple, short, and narrowly focused. You don't want your users to experience a modal view as a mini app within your app. If a subtask is too complex, people can lose sight of the main task they suspended when they entered the modal context. Be especially wary of creating a modal task that involves a hierarchy of views, because people can get lost and forget how to retrace their steps. If a modal task must contain subtasks in separate views, be sure to give users a single, clear path through the hierarchy, and avoid circularities. For guidelines on using modal views, see Modal View.

> Always provide an obvious and safe way to exit a modal task. People should always be able to predict the fate of their work when they dismiss a modal view.

Popups & Assistance

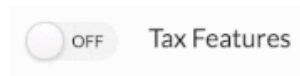Popups provide additional information and assistance to help users complete their work.

Code

```
<i
  class="circular info icon link blue"
  data-content="Hello. This is helpful message"
  data-variation="">
</i>
```

Guidelines

- Use popups to provide assistance to users to complete the goal.
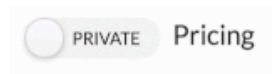- Please make text easy to understand and focused.

Checkboxes & Toggles

Checkboxes and toggles are used for options.

Guidelines

- Use the checkbox for multi-select list situations.
- Use the toggle boolean settings. On/off, true/false, public/private.
- Avoid using the radio button for a single option.
- Positive or on should be green. Negative or off should be grey. There are few exceptions.
- Place the label on the right hand side.
- Labels could be full sentences or incomplete sentence.
- Add text clarifying that is "On" or "Off".
- Label things in the affirmative. For example:

    - **Do not hide banner message (UNCLEAR)**
    - **Hide banner message (CLEARER)**
    - **Show banner message (CLEAR)**
- Never include question marks in labels. For example:
    - "**Turn on airplane mode?**" vs. "**Airplane Mode**"
    - "**Activate Tax Feature?**" vs. "**Tax Features**"

Panels

Panels group and divide content.

Labels

Use labels sparingly. Labels draw a user's attention so they should only be used to highlight things that are new or important.

References

1. Block, Element, Modifier (BEM)
2. 18F U.S. Design Standards
3. iOS Human Interface Guidelines (Accessed Apr 2016)
4. OS X Human Interface Guidelines (Accessed Apr 2016)