# MEEC - ADInt

# **Laboratory 9**

In this laboratory students will learn how develop dynamic web pages using UI elements.

### 1 Fomantic-ui

### https://fomantic-ui.com/

https://www.tutorialspoint.com/jqueryui/jqueryui environment setup.htm

Fomantic is a development framework that helps create beautiful, responsive layouts using human-friendly HTML.

Fomanti provide a large set of HTML elements that can be freely use in web pages.

These elements have a uniform visual style across the page and add functionalities that regular HTML elements to not provide (for instance calendar element)

#### 1.1 Import libraries

https://fomantic-ui.com/introduction/getting-started.html#using-a-cdn-provider

To use the provided widgets it is necessary to import the corresponding JavaScript library and CSS style by adding the following lines to the <HEAD></HEAD> part of the HTML file:

```
<script src="https://cdn.jsdelivr.net/npm/jquery@3.3.1/dist/jquery.min.js">
</script>
<link rel="stylesheet" type="text/css"
href="https://cdn.jsdelivr.net/npm/fomantic-ui@2.8.7/dist/semantic.min.css">
<script
src="https://cdn.jsdelivr.net/npm/fomantic-ui@2.8.7/dist/semantic.min.js">
</script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script><
```

From this moment on, it is possible to use the available widgets along the regular HTML Elements

#### 1.2 UI Elements

## https://fomantic-ui.com/ (menu on the left)

Fomantic provide more than 50 elements split into the following categories:

- Elements
- Collections

- Views
- Modules

After configuring the <head></head> of the document. It is necessary co place the HTML elements in the page.

IN order to know what HTML code to place on the page it is necessary to look it at the documentations.

### 1.2.1 Simple UI elements

The simple UI elements only require the inclusion of HTML code in the correct place. The code to place on the page depends on the element and its possible configurations.

The Fomantic-ui documentation presents examples of the various possible configurations for each UI element.

A button will require the following HTML code:

#### <button class="ui button">Button 1

as described in the documentation:

## https://fomantic-ui.com/elements/button.html



Other UI element require different code.

For instance a checkbox will require something like:

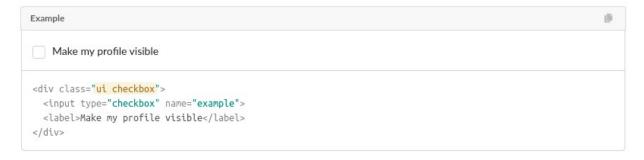
```
<div class="ui checkbox">
    <input type="checkbox" name="example">
    <label>Make my profile visible</label>
```

#### </div>

as described in the documentation:

## https://fomantic-ui.com/modules/checkbox.html

https://fomantic-ui.com/modules/checkbox.html



#### 1.2.2 Complex UI elements

More complex elements need to be activated in the end of the HTML file.

For example the calendar widget requires the following code to run:

```
$('#standard_calendar').calendar();
```

as presented in the documentations

The additional code should be put in the end of the HTML file, inside a <script></script> element before the </html> tag:

The elements that require this additional code to be activates need an identifier.

In the previous example the identifier is defined in the HTML code:

```
<div class="ui calendar" id="standard_calendar">
and used in the JavaScript code
$('#standard_calendar').calendar();
```

The following example (fomantic-ui.htm) creates 3 different HTML elements

- input field
- button
- date widget

```
<!DOCTYPE html>
<html>
  <head>
    <Script src="https://cdn.jsdelivr.net/npm/jquery@3.3.1/dist/jquery.min.js">
    </script>
    <link rel="stylesheet" type="text/css"</pre>
        href="https://cdn.jsdelivr.net/npm/fomantic-ui@2.8.7/dist/semantic.css">
    <script
      SrC="https://cdn.jsdelivr.net/npm/fomantic-ui@2.8.7/dist/semantic.js">
    </script>
  </head>
  <body>
    <h3>A button</h3>
      <button class="ui button" id ="button1">Button 1
<br>
    <h3>A text input box</h3>
    <div class="ui input">
```

```
type="text" placeholder="Search..." id =
             <input
"textInput">
    </div>
    <h3>A calendar input box</h3>
    <div class="ui calendar" id="standard_calendar">
      <div class="ui input left icon">
       <i class="calendar icon"></i></i>
       <input type="text" id='timeInput' placeholder="Date/Time">
      </div>
    </div>
    <h3>Random text</h3>
    <div class="ui segment"id="randomText">
       This is <span class="ui red text">red</span> inline text
and this is <span class="ui blue text">blue</span> inline text
and this is <span class="ui purple text">purple</span> inline
text
    </div>
  </body>
  <script>
    $('#standard_calendar').calendar();
  </script>
</html>
```

## 2 Exercise 1

Modify the provided file (fomantic-ui.html) by adding the following elements:

- a slider
- a Textarea (with multiple lines)
- a drop down list (with the values AA BB CC DD)
- a checkbox (with just one option)

https://fomantic-ui.com/modules/slider.html
https://fomantic-ui.com/elements/input.html#textarea
https://fomantic-ui.com/modules/dropdown.html#/usage

https://fomantic-ui.com/modules/checkbox.html#/usage