

2020-10-14 - Front-End-Exam

Mondragon Unibertsitatea.

Computer Science Degree, 3rd course:

Web Engineering I.

You will have 1h 50min to create a web page that shows some citations and their authors.

1. Content

The web page will have 3 main parts:

1. Navigation.
2. Main content.
3. Bottom part.

1.1. Navigation

Navigation will have a logo and some navigation items. When a navigation item is clicked, the page must move to the clicked citation.

See images 1, 3, 5 and 6.

1.2. Citations

Citations will have:

- The name of the author of the citations.
- A button to close the citation.
- An image of the author.
- The text of the citation.

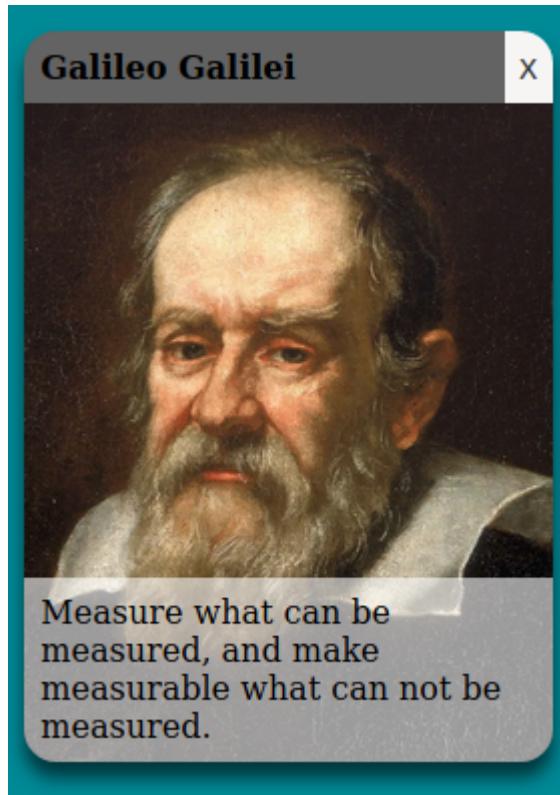


Image 0: Citation

Guillermo Marconi

- Progress happens only if you think that you can always do more.

Jane Goodall

- Technology is not enough by itself. We should also put our hearts.

Galileo Galilei

- Measure what can be measured, and make measurable what cannot be measured.

Rita Levi Montalcini

- Do not be afraid of difficulties: the best arises from them.

Margaret Mead

- Children must be taught how to think, not what to think.

Louis Pasteur

- Chance favours the prepared mind.

1.3. Bottom part

The bottom part will have 2 actions (**Thank theme & Reset**) and a logo.

See images 2, 4, 5 & 6.

2. Styling

Using a mobile-first design, create a web page with the following styling.

Colors:

- Grey: #636363
- Mondragon turquoise: #008996
- Selected: steelblue

2.1. Layouts

There will be 4 different layouts:

- Small layout (<600px)
 - See images 1 & 2.
- Medium layout (>600px & <1024px)
 - See images 3 & 4.
- Large layout (>1024px & <1280px)
 - See image 5.
- Very Large layout (>1280px)
 - See image 6.

Small layout

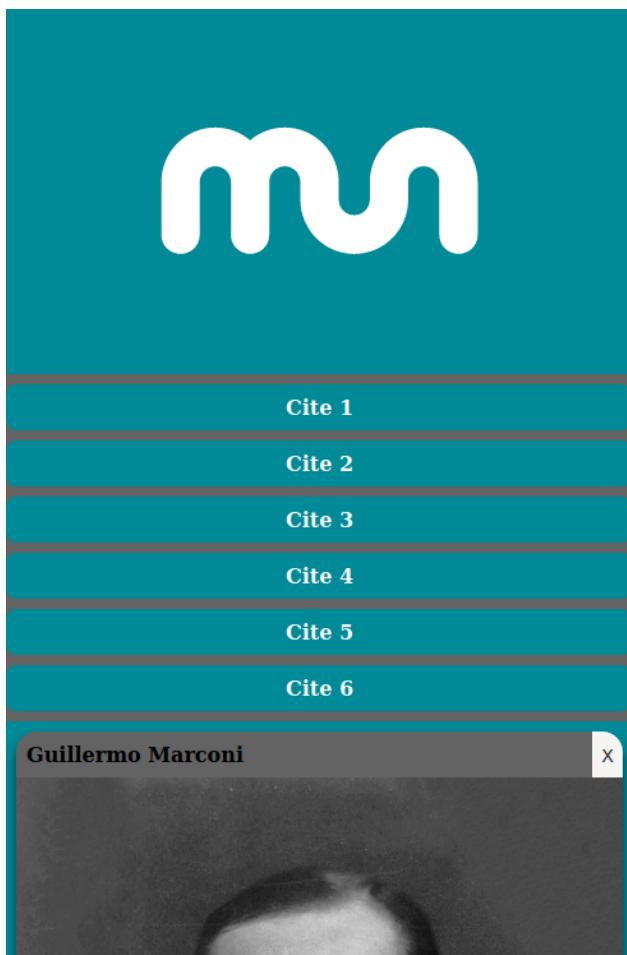


Image 1: Small layout (top).

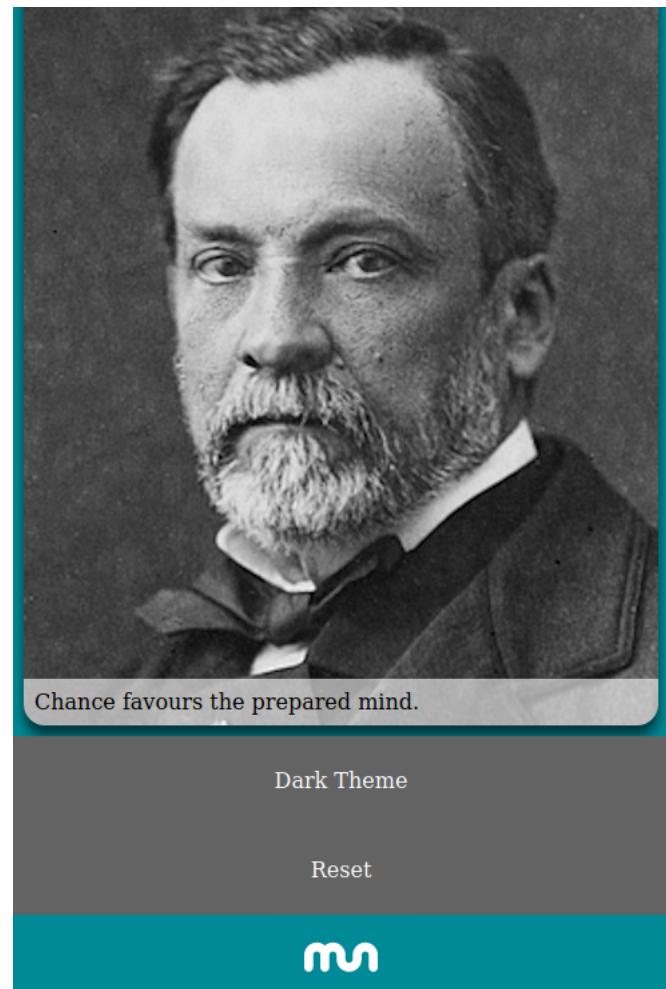


Image 2: Small layout (bottom).

Medium layout

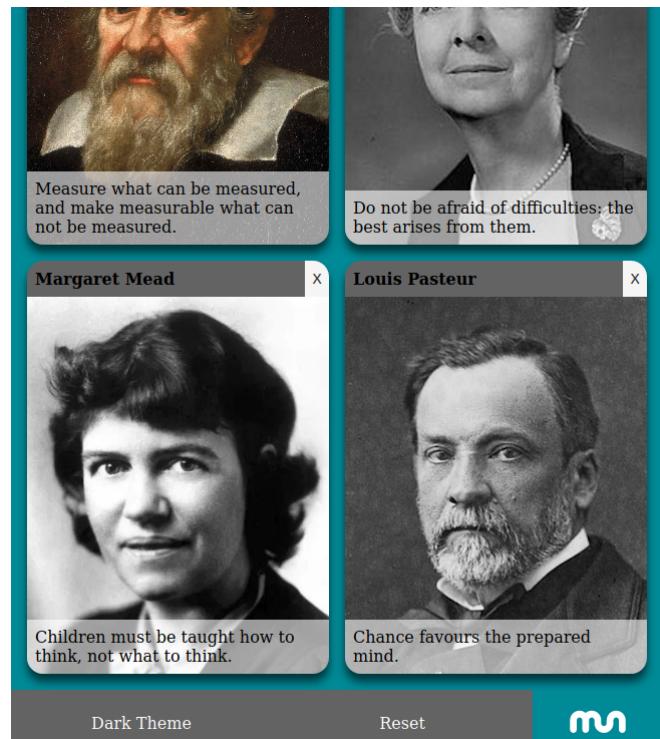


Image 3: Medium layout (top).

Image 4: Medium layout (bottom).

Large layout

Guillermo Marconi X

Progress happens only if you think that you can always do more.

Jane Goodall X

Technology is not enough by itself. We should also put our hearts.

Galileo Galilei X

Measure what can be measured, and make measurable what can not be measured.

Rita Levi Montalcini X

Do not be afraid of difficulties: the best arises from them.

Margaret Mead X

Children must be taught how to think, not what to think.

Louis Pasteur X

Chance favours the prepared mind.

Dark Theme Reset m

Image 5: Large layout.

Very large layout



Cite 1

Cite 2

Cite 3

Cite 4

Cite 5

Cite 6

Guillermo Marconi



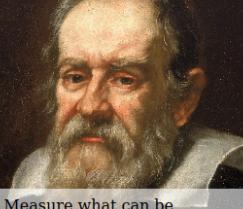
Progress happens only if you think that you can always do more.

Jane Goodall



Technology is not enough by itself. We should also put our hearts.

Galileo Galilei



Measure what can be measured, and make measurable what can not be measured.

Rita Levi Montalcini



Do not be afraid of difficulties: the best arises from them.

Margaret Mead



Children must be taught how to think, not what to think.

Louis Pasteur



Chance favours the prepared mind.

Dark Theme

Reset



Image 6: Very large layout.

2.2. Navigation styling

Small layout:

- Navigation should occupy the entire width of the page in the small layout.
- The space between the items should be 0.5rem.
- Rounded borders in navigation items.
- Bold text.
- Navigation: grey
- Navigation item: mondragon turquoise.
- Text: white

Medium layout:

- The logo should occupy 4rem height and width should adapt.
- All the navigation items should occupy the same.

Large layout:

- In large and very large layouts, the navigation should occupy 1/6 of the width of the page.
- Logo should occupy the entire width and the height will adapt.

Mouse interaction:

When the mouse passes over the navigation items, it should change from tuquese to white and the text from white to grey.

2.3. Main section styling

It should show citations in a *matrix* style:

- Small layout: 1 column.
- Medium layout: 2columns.
- Large layout: 3 columns.
- Very large layout: 4 columns.

2.4. Citations styling

- The cards should be rounded.
- The button should occupy what needed, while the author name should occupy the rest of the width of the card.
- An image should show next.
- The citation should have a semi transparent background, and should appear over the image.
- The citation should have a shadow.
- **When the mouse passes over the citation, the shadow should decrease or disappear.**

2.5. Bottom part styling

Do not use flex or grid for this part!!!

- Each element should have 1.5rem of padding.

- When the mouse passes over the 2 actions, it should change from grey to white and text from white to grey.

In medium/large/v-large layouts:

- The actions should occupy exactly 40% of the page and the logo box 20% (remember the box model).

3. Behaviour

No JS code should be seen in the HTML page. Events should be established in the JS files.

Apart from styling behaviours, you should create a JS file to create the following functionalities:

3.1 Closing citations

- If you click on a closing button, its citation should disappear.

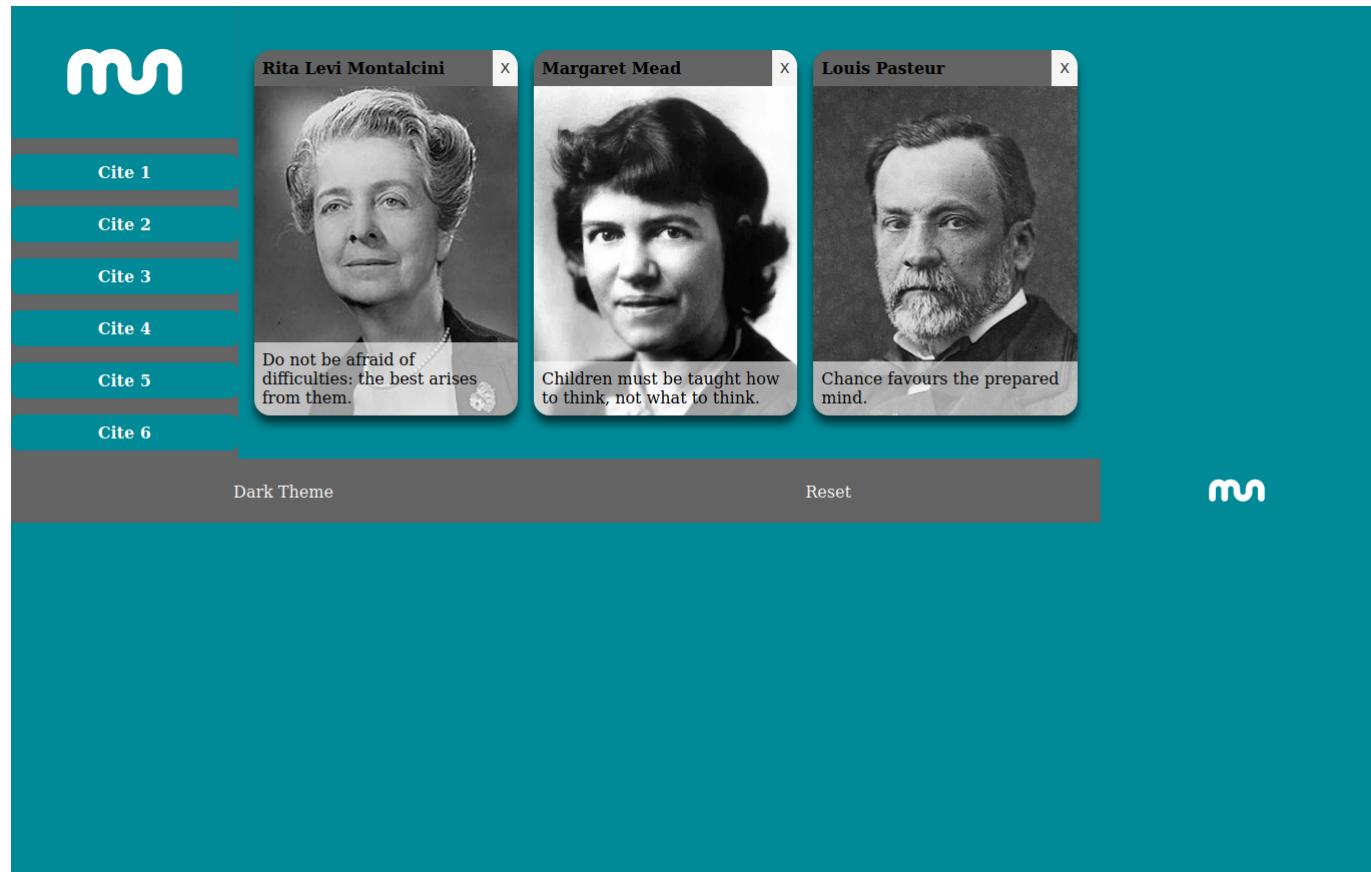


Image 7: "Close" citation.

3.2. Selecting citations

- If you click on any part of a citation (but the closing button), it will be selected.
- Selected citations's author name and citation text will have a *steelblue* background:

The interface features a sidebar on the left with a logo and buttons labeled Cite 1 through Cite 6. Below this is a grid of six cards, each containing a portrait and a quote. The cards are arranged in two rows of three. The first row contains cards for Guillermo Marconi, Jane Goodall, and Galileo Galilei. The second row contains cards for Rita Levi Montalcini, Margaret Mead, and Louis Pasteur. The selected cards (Marconi, Goodall, and Galilei) have a steelblue background for the author name and quote area, while the others have a standard white background.

Guillermo Marconi Jane Goodall Galileo Galilei Rita Levi Montalcini

Cite 1 Cite 2 Cite 3 Cite 4 Cite 5 Cite 6

Margaret Mead Louis Pasteur

Dark Theme Reset

Image 8: Selected citation.

3.3. Dark theme

- If "Dark theme" is clicked, all "selected" citations will change its author and citation text styling to white text and black background.

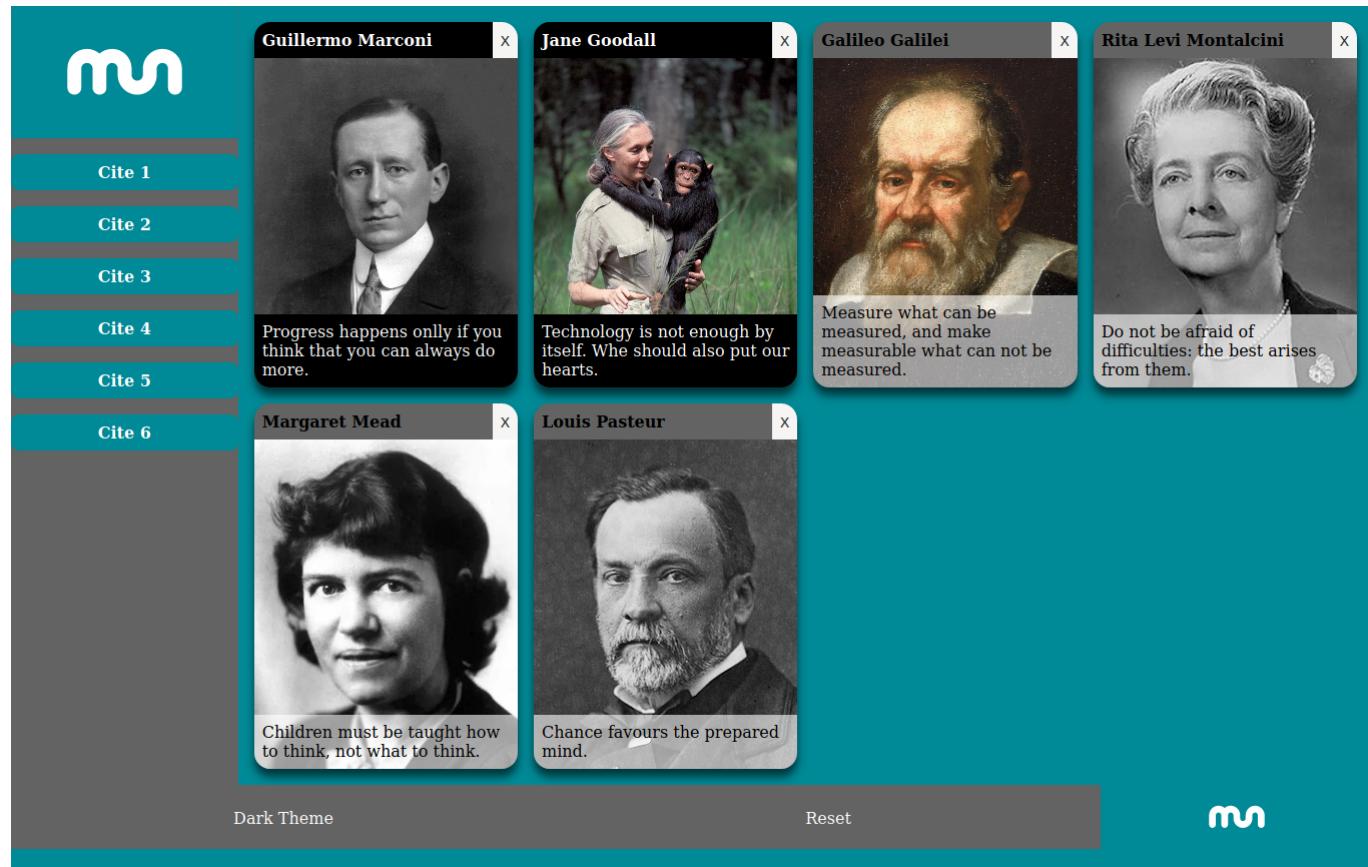


Image 9: Dark theme.

3.4. Reset

- If "reset" action is clicked, wait 2s and reset all the styling changes (**unselect** citations and remove **dark theme**).

Evaluation

- Navigation: 2p.
- Main layout: 1p.
- Citation styling: 2p.
- Bottom styling: 1p.
- Selecting citations: 1p.
- Applying the dark theme: 1p.
- Reset: 2p.

Not only functionality will be evaluated, but also simplicity, clean coding and also maintainability.

So: `it works != finished.`