

# 2021-Front-End-Exam (1h 50min)

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We will create a web page that contains a list of subjects (see images for different screen sizes).

- The number of subjects could change in the future. CSS/JavaScript should not change no matter how many subjects there are.
- Use mobile 1st design.
- Do **not** use flexbox nor grid for the bottom part (actions) for **any screen size**.
- Do **not** use absolute paths for files: e.g. `c://blablabla/example.css`
- Use relative paths for files: e.g. `img/example.png`
- Create an HTML with a title, a navigation, a list of subjects and some actions.
- Clicking on navigation items should move the screen to the related subject.
- Do **not** add JS event calls in the HTML: ~~`<button onclick='myfunction()>...`~~

Used colors:

- *whitesmoke*
- *lightgray*
- *steelblue*
- *tomato*
- Create one on your own for the semi-transparent title in subjects.

## Very Small layout (<567px)

- Do **not** use flexbox nor grid for this size.
- Most of the elements appear in new lines (see image below).
- In the navigation, there is a space between navigation items.
- Navigation items should occupy the entire width (see image below).
  - Add a shadow to navigation items, change it when the mouse hovers navigation items (e.g. make it smaller).
- Subject:
  - Subject title should appear over subject image. Title must have a semi transparent background.
  - Add a border radius to each subject (see image below).
  - Add a border to subject information (credits, semester & teachers).

Top

Bottom

# Computer Science degree, 3rd course

Human-machine interface

ICT Lab

Operating Systems

Proyect Management

Software Engineering

Web Engineering

## Human-machine interface



4.5 credits

1st semester

- Xavier Valencia
- Dani Reguera

## ICT lab



- Iñigo Aldalur
- Aitor Arrieta

## Web Engineering I



6 credits

1st semester

- Alain Perez

Unselect and show all

Hide selected

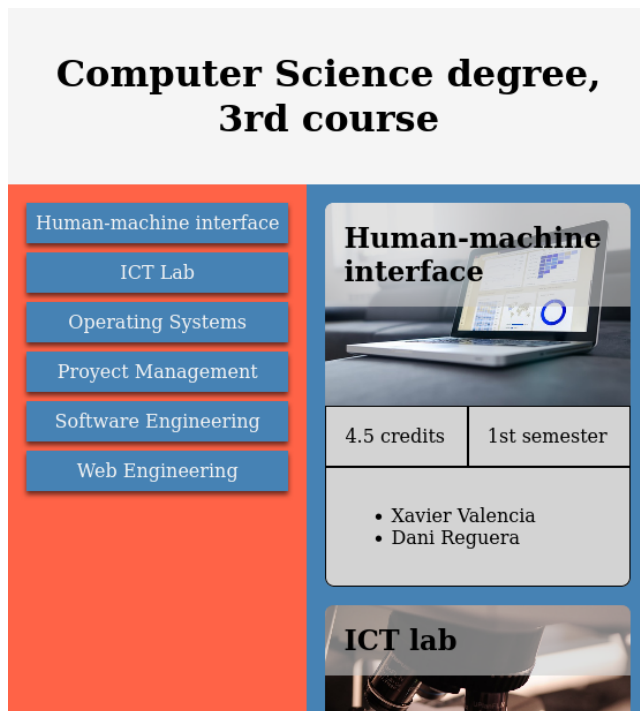
Cancel action

## Small layout ( $\geq 567$ px)

- Main layout will have 2 columns now.
  - 1st column will occupy the width of its content, the rest of the space will be for the subjects.
- Subjects will have now credits and semester in 2 columns.
  - If any height is left for the subject, "teachers" should get the extra space.
- Bottom part:
  - Actions should have a padding.
  - Actions should have a margin between them.
  - Each action should occupy exactly 1/3 of the parent, taking into consideration the entire box-model.
    - **WARNING:** buttons have some styling by default (border, box-sizing...), so you have to override them or take them into consideration.

### Top

### Bottom



## Medium layout ( $\geq 762\text{px}$ )

- The order of the columns in the main layout should change (navigation on the right, subjects on the left).
  - So now, 2nd column will occupy whatever it needs (its content), the rest of the space will be for the subjects.
- Subjects will be distributed in 2 columns now.

## Computer Science degree, 3rd course

### Human-machine interface

4.5 credits

1st semester

- Xavier Valencia
- Dani Reguera

### ICT lab

4.5 credits

1st semester

- Xavier Valencia
- Dani Reguera

### Operating Systems

6 credits

1st semester

- Txema Perez

### Project Management

4.5 credits

1st semester

- Eider Saralegui

### Software Engineering

4.5 credits

1st semester

- Iñigo Aldalur
- Altor Arrieta

### Web Engineering I

6 credits

1st semester

- Alain Perez

Human-machine interface

ICT Lab

Operating Systems

Project Management

Software Engineering

Web Engineering

Unselect and show all




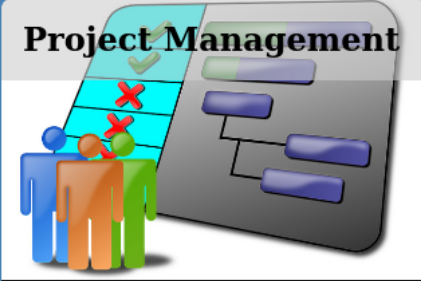
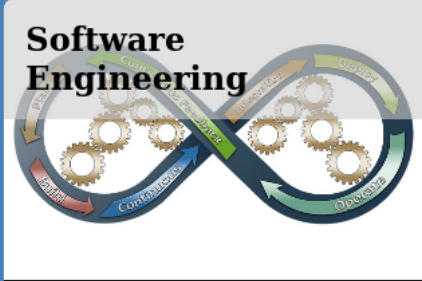
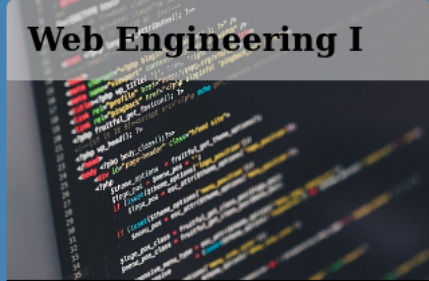
Hide selected

Cancel action

## Large layout ( $\geq 1024\text{px}$ )

- Main layout will have just one column.
- Navigation will be horizontal.
  - All navigation items should occupy the same width.
- Subjects will be distributed in 3 columns.





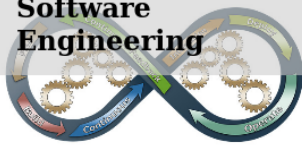

### Computer Science degree, 3rd course

Human-machine interface	ICT Lab	Operating Systems	Project Management	Software Engineering	Web Engineering
 <b>Human-machine interface</b>	 <b>ICT lab</b>	 <b>Operating Systems</b>			
4.5 credits	4.5 credits	6 credits			
1st semester	1st semester	1st semester			
<ul style="list-style-type: none"> <li>• Xavier Valencia</li> <li>• Dani Reguera</li> </ul>	<ul style="list-style-type: none"> <li>• Xavier Valencia</li> <li>• Dani Reguera</li> </ul>	<ul style="list-style-type: none"> <li>• Txema Perez</li> </ul>			
 <b>Project Management</b>	 <b>Software Engineering</b>	 <b>Web Engineering I</b>			
4.5 credits	4.5 credits	6 credits			
1st semester	1st semester	1st semester			
<ul style="list-style-type: none"> <li>• Eider Saralegui</li> </ul>	<ul style="list-style-type: none"> <li>• Iñigo Aldalur</li> <li>• Aitor Arrieta</li> </ul>	<ul style="list-style-type: none"> <li>• Alain Perez</li> </ul>			
Unselect and show all	Hide selected	Cancel action			

## Very large layout ( $\geq 1200\text{px}$ )

- Subjects will be distributed in 4 columns now.

### Computer Science degree, 3rd course

Human-machine interface		ICT Lab		Operating Systems		Project Management		Software Engineering		Web Engineering	
 <b>Human-machine interface</b>			 <b>ICT lab</b>			 <b>Operating Systems</b>			 <b>Project Management</b>		
4.5 credits		1st semester		4.5 credits		1st semester		6 credits		1st semester	
<ul style="list-style-type: none"> <li>• Xavier Valencia</li> <li>• Dani Reguera</li> </ul>			<ul style="list-style-type: none"> <li>• Xavier Valencia</li> <li>• Dani Reguera</li> </ul>			<ul style="list-style-type: none"> <li>• Txema Perez</li> </ul>			<ul style="list-style-type: none"> <li>• Eider Saralegui</li> </ul>		
 <b>Software Engineering</b>			 <b>Web Engineering I</b>			(Empty space for additional subjects)					
4.5 credits		1st semester		6 credits							
<ul style="list-style-type: none"> <li>• Iñigo Aldalur</li> <li>• Aitor Arrieta</li> </ul>			<ul style="list-style-type: none"> <li>• Alain Perez</li> </ul>								

Unselect and show all
Hide selected
Cancel action

## JavaScript

- If you click a subject, it will be selected. If you click the subject again, it should be unselected.
  - Selected cards will have a red shadow.
- If you click on "Hide selected" button, all the selected subjects will disappear and will not occupy any space.
- If you click on "Unselect and show all", all the selected subjects will be unselected and all subjects will be visible.
- Action button will have a delay of 3s:
  - "Hide selected" and "Unselect and show all" will wait 3s until their action is executed.
- "Cancel action" button will instantaneously finish any action that is being delayed.
  - If you click "Hide selected" or "Unselect and show all" buttons and in less than 3s you click "cancel action", elements won't be hidden not unselected nor shown.

## Exam scores

- HTML (structure, meta, navigation items move you to subjects, semantic divs...). (1p)
- CSS (6.5p):
  - Navigation (1p)
  - Main layout (1.5p)
  - Subject list/matrix (1p)
  - Subject "card" (1.5p)
  - Actions exactly occupies 100% of the width without flex or grid (1.5p)
- JS (2.5p):
  - Select cards (0.5p)
  - Hide selected (0.5p)
  - Unselect and show all (0.5p)
  - 3s to execute actions (0.5p)
  - Cancel action (0.5p)