

# D01 – Introduction

## Requirements

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### C-level requirements

To earn a C in this deliverable, you have to deliver the items that are described in the following sub-sections.

#### Item 1: reports María

Produce a report that provides enough evidence to prove that you've set up your working environment according to the guidelines in this lesson. We strongly recommend that you should include as many screenshots as necessary, so that your lecturers can check that you've actually carried out the work required to set your working environment up.

Produce a report that lists the tasks that you've carried out to produce your deliverable. The list must include the title of every task, the starting and ending times, the person who has worked on it, and a budget. To produce your budget, you must set a rate per work hour; please, search the web and justify the rate that you set. Note that your report will not be accepted unless you provide a few evidences to support the idea that the rate per hour makes sense in our industrial context. Do also include your hardware and software amortisation costs in your budget.

#### Item 2: project "Simple-Project" Laura

Produce a project called "Simple-Project" that shows the following piece of text in the welcoming screen: "This is a simple project by A1, A2, ..., and An", where "A1", "A2", and "An" refer to your names. For instance: "This is a simple project by John Doe, Jane Doe, and Peter Doe". Please, note that your project must build on the templates that we provide.

#### Item 3: project "Colour-Project" Miguel

Produce a new project called "Colour-Project". Customise it with a CSS style sheet that endows it with a little more colour, namely:

- Change the background colour of the pages to Floral White.
- Change the default font to Courier New.
- Change the background of the menus to Indian Red.
- Change the ink colour of the H1 headings Blue Violet and the background colour to Gold.

What follows is a screenshot that illustrates how your project's expected to look like when it's finished. Please, note that "Floral White", "Indian Red", "Blue Violet", "Gold", or "Courier New" are standard colour and font names in HTML. You must use exactly the specified colours and fonts; don't use hexadecimal equivalents or approximate colours and fonts; note, too, that your customisation must use CSS style sheets, not "font" tags and other such deprecated HTML constructs.



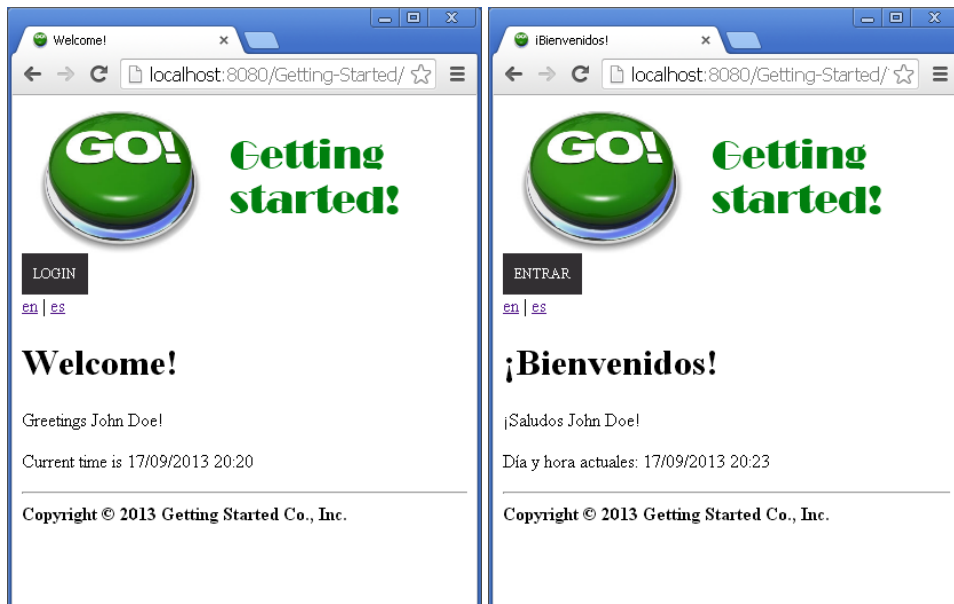
## B-level requirements

To earn a B in this deliverable, you have to fulfil the requirements regarding level C and deliver the items that are described in the following subsections.

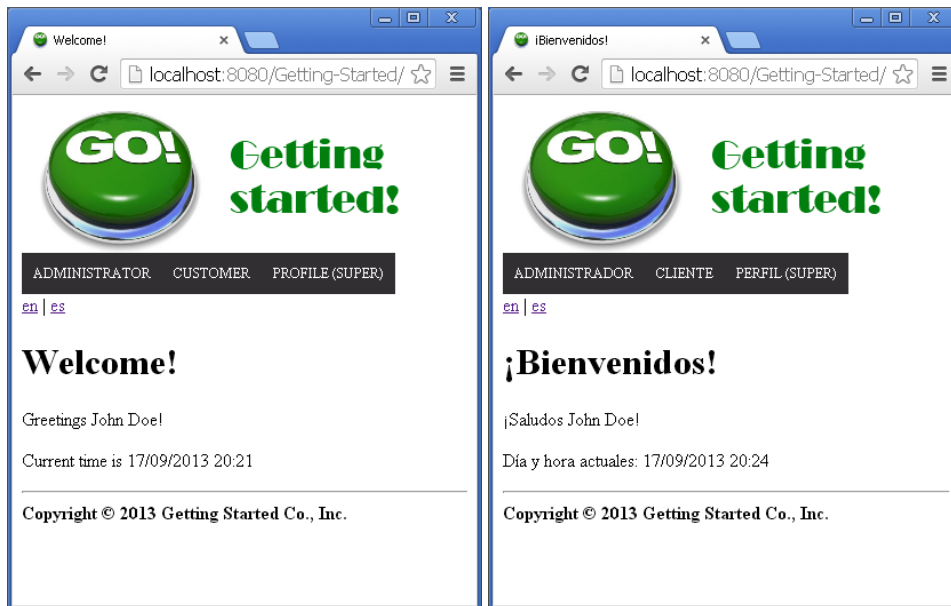
### Item 4: project “Getting-Started”

Produce a project called “Getting-Started” according to the following informal requirements:

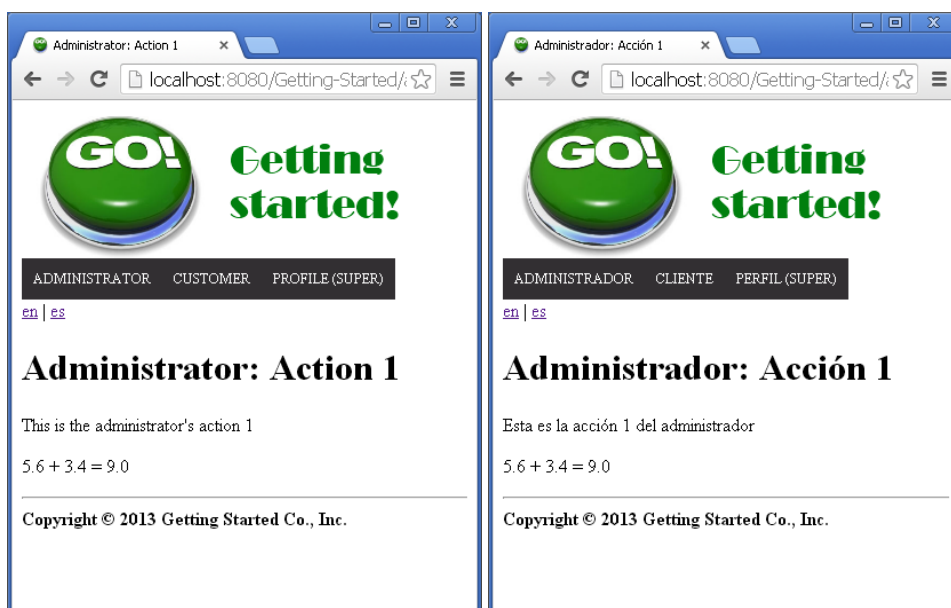
Espi **Welcome screen for an anonymous user.** The menu should provide option “Login” only. Please, note that the application adapts to English or Spanish when the user selects “en” or “es” at the language bar. Your project’s expected to work in both languages.



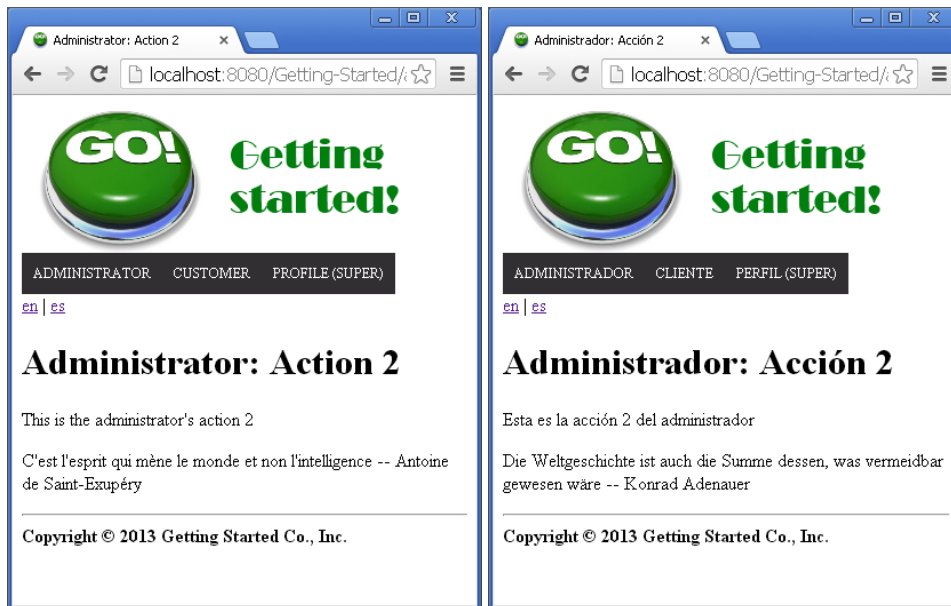
**Authenticating as a super-user.** When the user authenticates, he or she should have access to new options. In this example, we’ve authenticated as “super”/”super”, since this user can see both the administrator’s and the customer’s options.



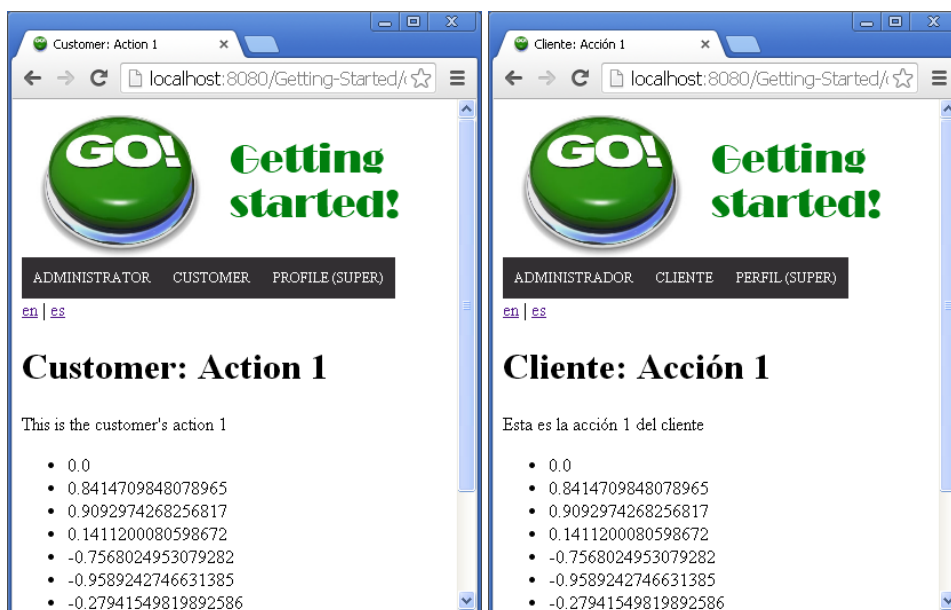
Dani **Administrator/Action 1** This action just adds a couple of doubles which are passed as URL parameters. You can't see that in the pictures below, but the URL is `http://localhost:8080/Getting-Started/administrator/action-1.do?x=5.6&y=3.4`. This is the default action, but the user should be allowed to enter `http://localhost:8080/Getting-Started/administrator/action-1.do?x=3.0&y=2.0` and the application should respond with the correct answer:  $3.0 + 2.0 = 5.0$ .



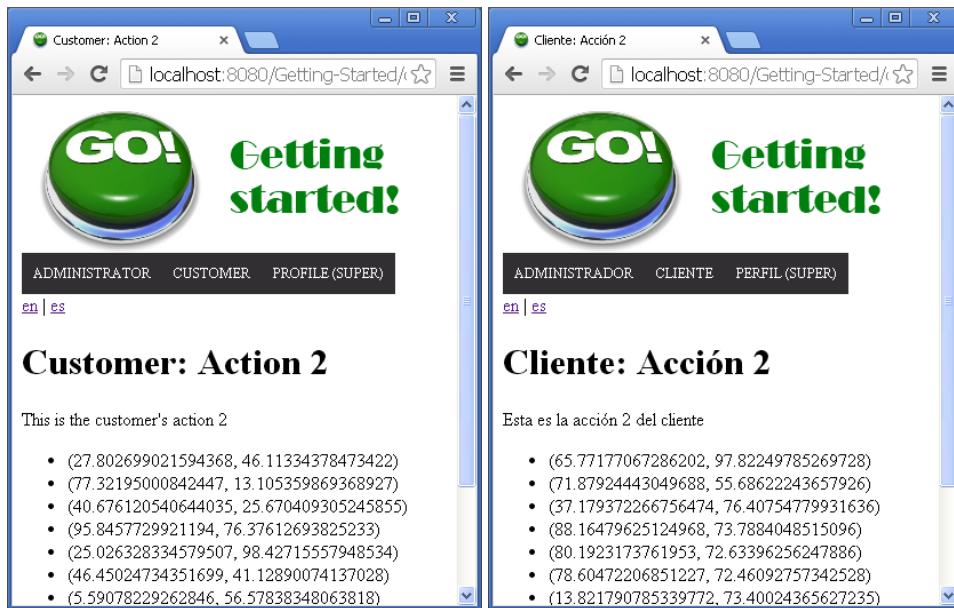
**Administrator/Action 2** This action should display a random quotation every time it is invoked. Note that the English and the Spanish screenshots differ in the quotation that was selected. Your project should provide a collection of at least 10 different quotations. Please, note that you obviously needn't translate the actions; they can be displayed in their original languages, independently from the language in which the user interface is rendered.



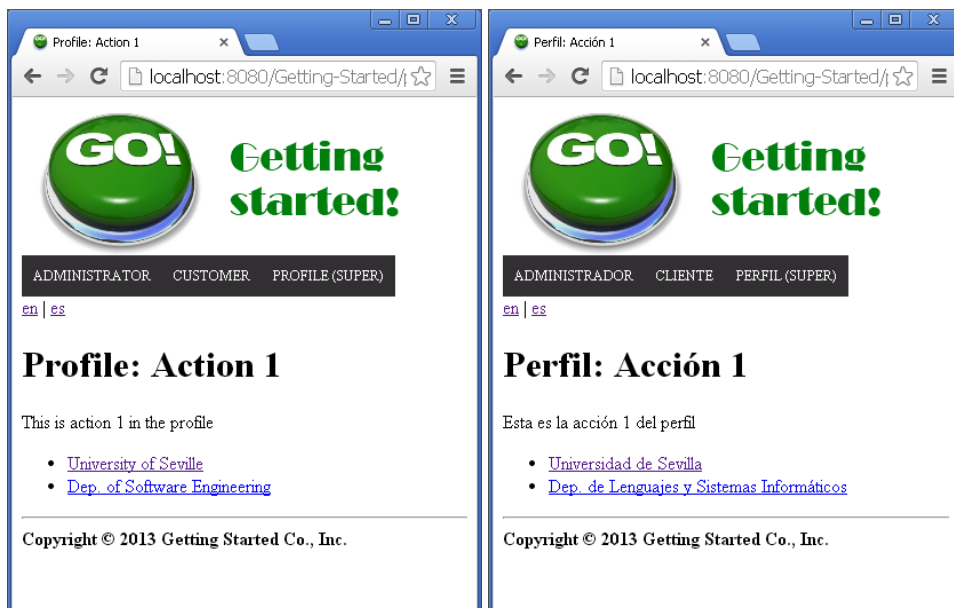
Joaquín *Customer/Action 1*. The customer's action 1 displays a list of sines for the integer angles between 0.0 and 10.0 radians. For instance,  $\sin(0.0) = 0.0$ ,  $\sin(1.0) = 0.845$ ,  $\sin(2.0) = 0.9093$ , and so on. You're not required to round the sines up to a particular number of decimal digits.



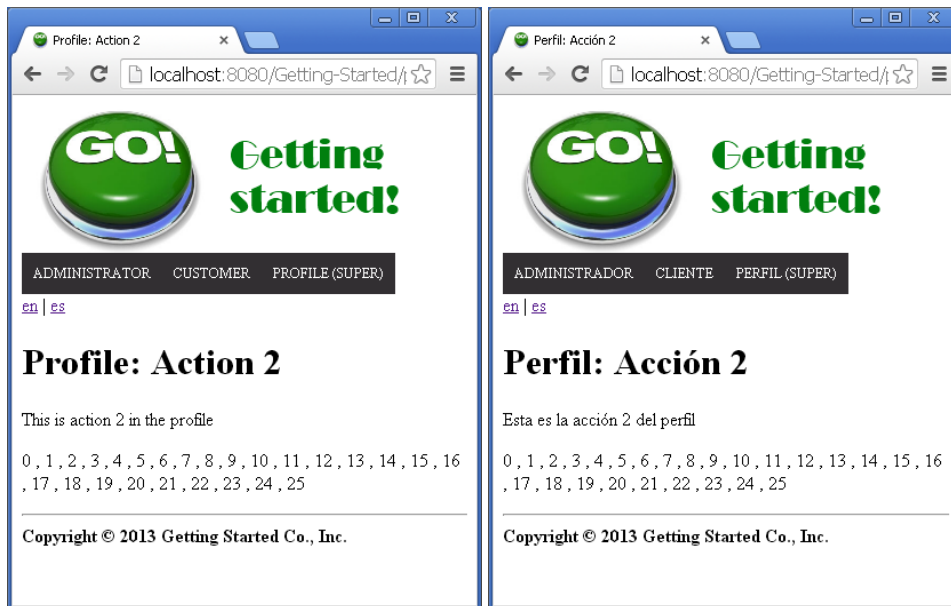
*Customer/Action 2*. This action is similar to the previous one, but the goal is to display a list of 10 random two-dimensional coordinates. Note that the screenshots below differ since every time this action is invoked the random numbers generated differ.



**Profile/Action 1.** This action should show two links: a link to the USE's portal, and another link to the LSI department. Please, note that the captions to the links are customised to the language in which the application is running, that is, English or Spanish.



**Profile/Action 2.** This action is triggered by a URL of the form: <http://localhost:8080/Getting-Started/profile/action-2.do?count=25>. You should be able to change the counter easily, and the list of numbers should be updated accordingly. Note that there's a comma to separate the numbers, but not after the last number.



**Profile/Action 3.** You don't have to change this option. By default, it throws an exception that is caught and shown on the screen.

## A-level requirements

To earn an A in this deliverable, you have to fulfil the requirements regarding level B and you have to deliver the items that are described in the following subsections.

### Item 5: replacing the jMenu component

Produce a variation of the Getting-Started project in which you've replaced the jMenu component that displays the menus of your application by another suitable component. You can use the component that you prefer. The name of your project must be "Getting-Started-Menu".

### Item 6: report on your jMenu replacement

Produce a 250-word report in which you provide details about the component you've used to replace jMenu. The report should include instructions to download it, to install it, and to use it in another project; it should also include bibliography to learn more about the component.

## A+-level requirements

To earn an A<sup>+</sup> in this deliverable, you have to deliver the items that are described in the following subsections.

### Item 7: doing some research

Produce a variation of the Getting-Started project in which you provide a simple REST interface that returns the list of usernames that are registered in the system. The list must be available at <http://localhost:8080/Getting-Started/list-usernames.do>. We recommend that the listing should be returned in JSON format, but other formats, including YAML, XML, or even HTML will be accepted.

### **Item 8: report on your research**

Produce a 1 000-word report in which you describe how you've implemented your REST interface. If you use third-party components, please, report on them, on how to download them, how to install them, and how to use them to fulfil the A<sup>+</sup> requirement.