

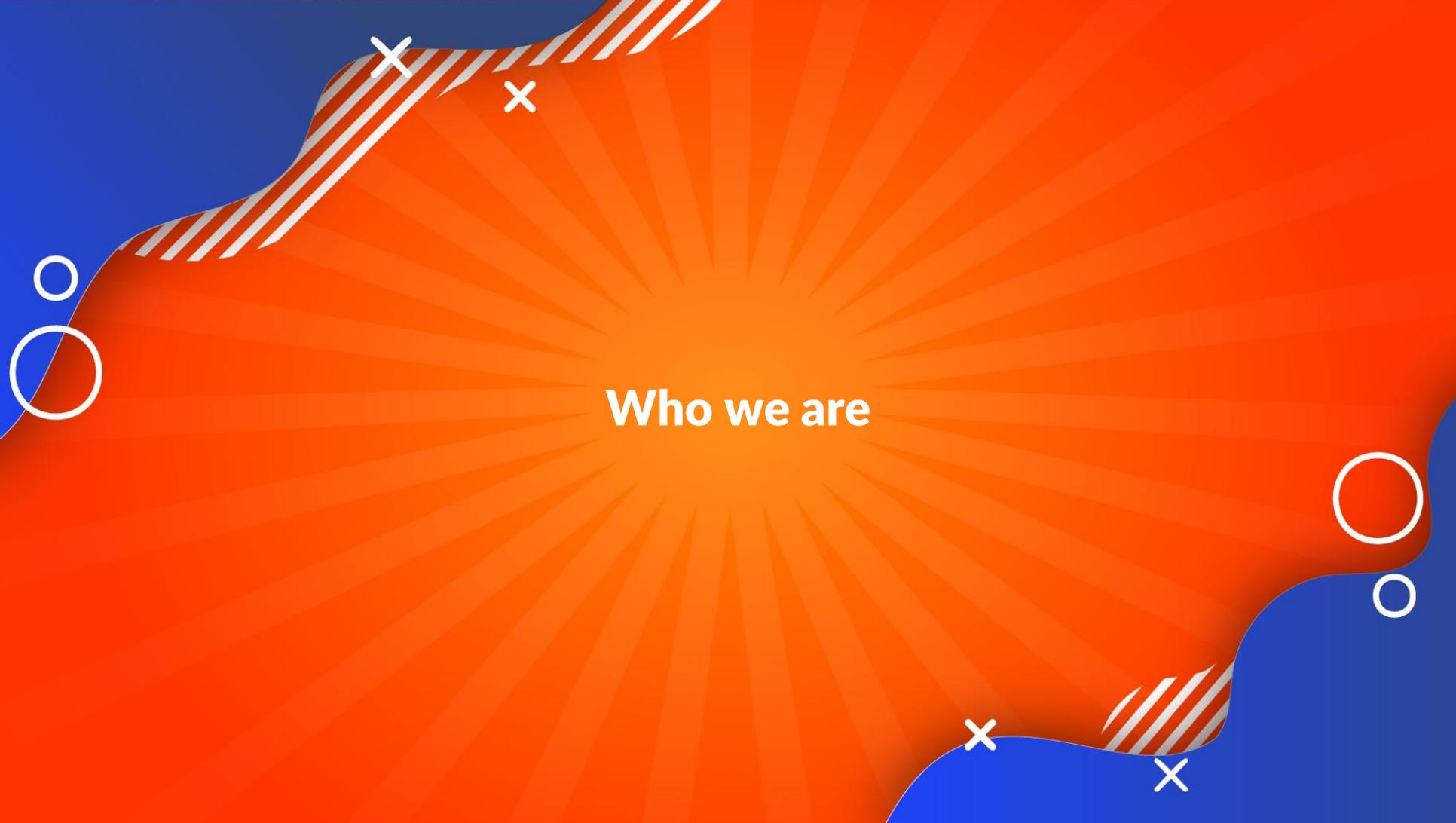
The graphic features a central sunburst with rays emanating from it. To the left of the sunburst are two speech bubbles; the top one contains the SMC logo (a red square with 'SMC' in white) and the bottom one contains a grid of small squares. To the right of the sunburst is a white crescent moon. The background is a gradient of orange and red with diagonal lines. On the far left, there are two white circles of different sizes. On the far right, there is a white circle and a striped pattern.

Liferay  
**Boot Camp**  
Summer Edition

# Citizen-friendly accessibility. AgID in the Liferay context.

**Gianpietro Benincà**  
Front End Engineer

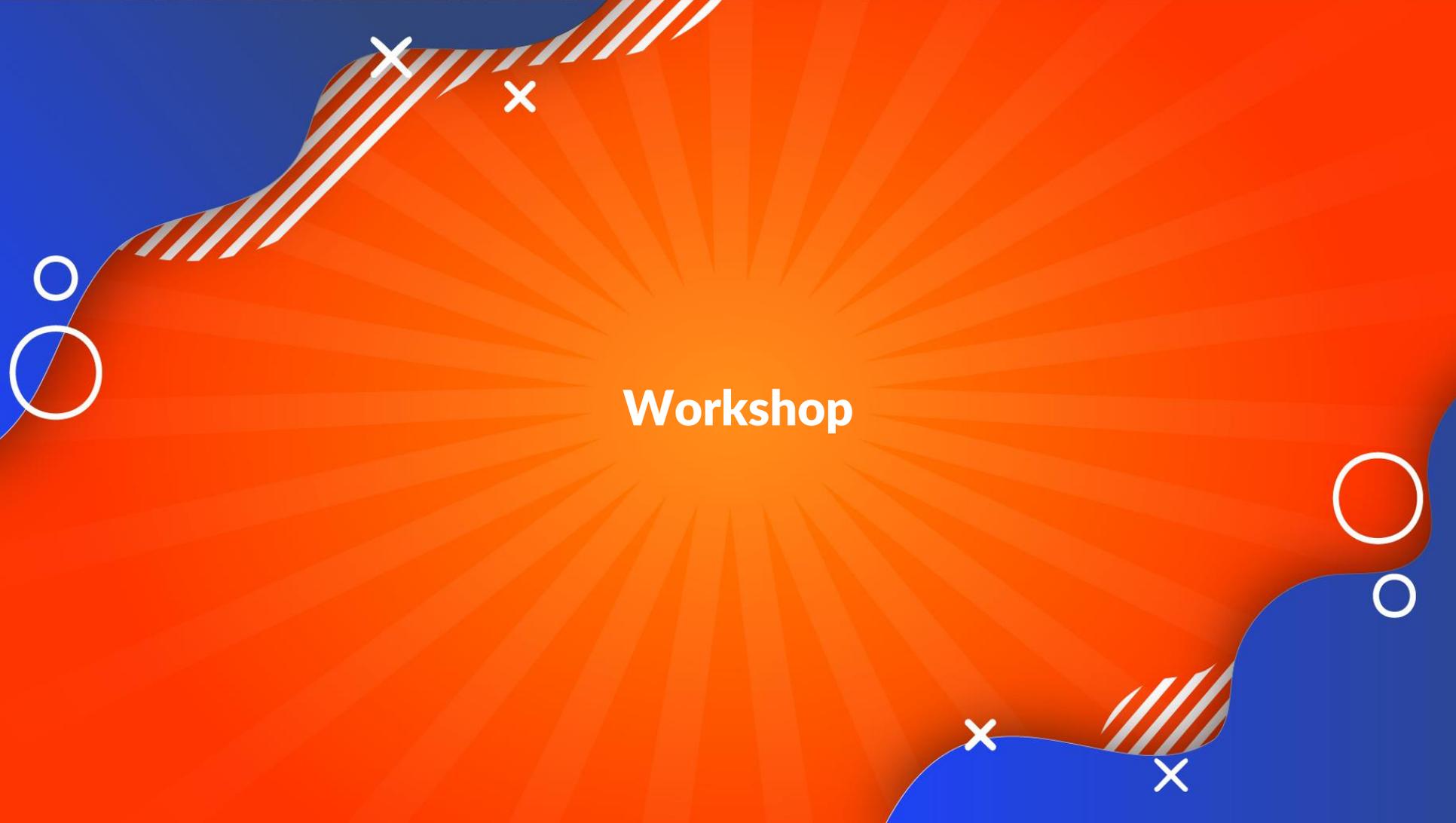
**Gianluca Dario**  
Front End Engineer



Who we are

# SMC

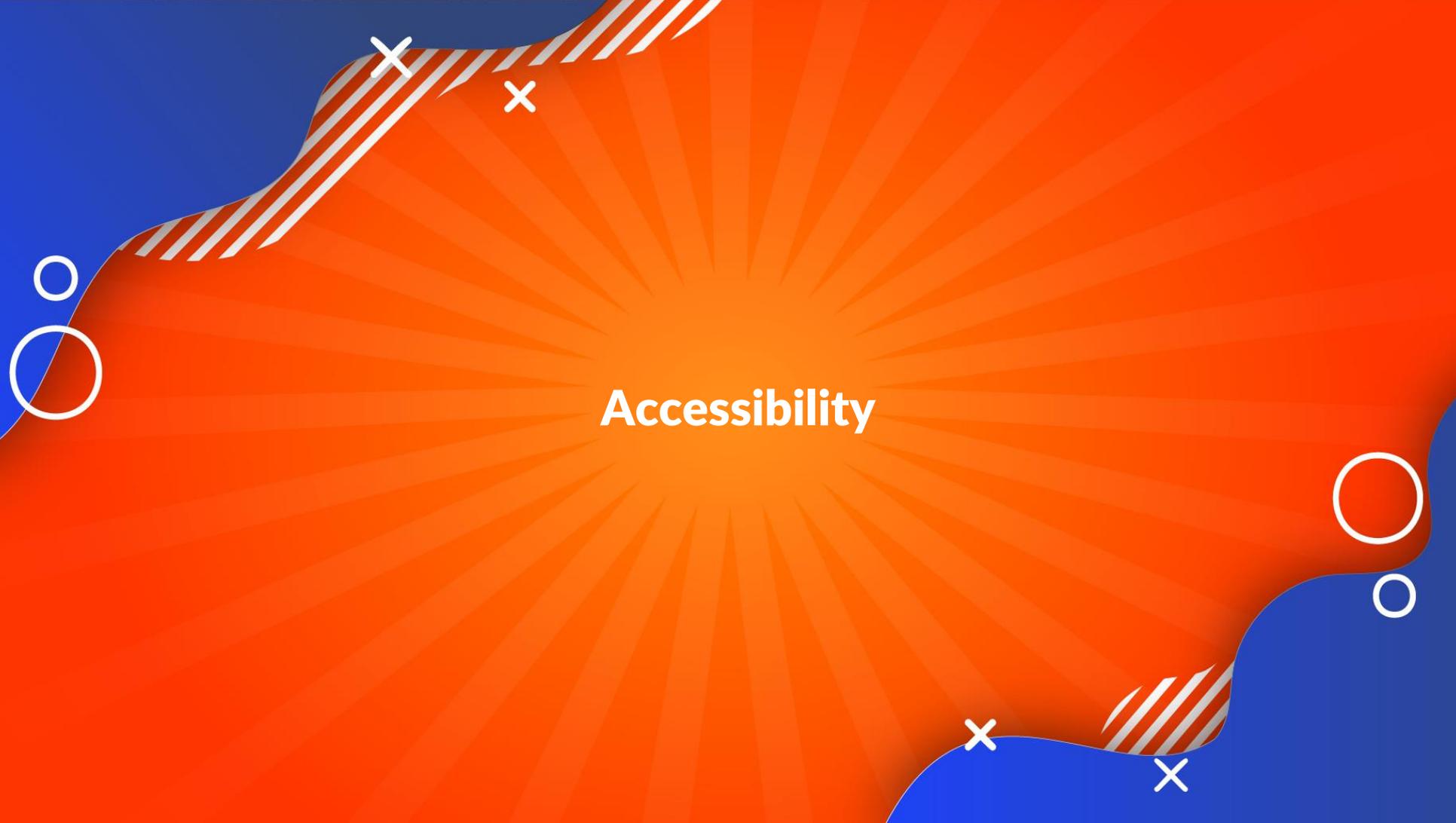
- Create **solutions**, not only software
- Attention to **user experience**
- **Digital Transformation**
- We created **Open Square Digital Lake**
- We contributed to the birth of **RIOS**
- **Liferay Platinum Partner** for over 8 years
- We are **Liferay Training Center**
- We are **Liferay Italian Partner Ecosystem**
- Cloud
- IoT
- Servizi Sistemistici
- Open Square
- E-commerce
- Big-Data
- Business Intelligence



# Workshop

# Workshop contents

- Accessibility as a concept
- Accessibility by law
- Basic approach to accessibility review
- AgID and bootstrap Italia
- Learn to add bootstrap Italia to a Liferay theme

The background features a central orange sunburst pattern radiating from the center. The sunburst is surrounded by abstract shapes in blue and orange with white diagonal stripes. White symbols, including circles and crosses, are scattered throughout the design.

# Accessibility

# What is accessibility

Accessibility is not a checklist to meet legal or project requirements.

It's about **PEOPLE** and their **USER EXPERIENCE**.

# Learning about disabilities

- Auditory (deaf, hearing disorders)
- Cognitive (dyslexia, learning disabilities)
- Neurological (nerve damages)
- Physical
- Speech
- Visual (blindness, vision loss)

# Italian law requirements

Italian law requirements:

<https://www.agid.gov.it/it/design-servizi/accessibilita/normativa>

Italian guidelines:

<https://docs.italia.it/italia/designers-italia/design-linee-guida-docs/it/stabile/doc/service-design/accessibilita.html>

Standard accessibility guidelines:

<https://www.w3.org/Translations/WCAG21-it/>

# WCAG Starting point

How to meet WCAG (Quick reference)

<https://www.w3.org/WAI/WCAG21/quickref/>

# Developing for accessibility

Question yourself:

**What is it?**

**What does it do?**

## What is it?

--Please choose an option-- ▾

## What does it do?

Click and select an option, right?

# What does it really do?

- The HTML select (<select>) element represents a control that presents a menu of options. The options within the menu are represented by <option> elements, which can be grouped by <optgroup> elements. Options can be pre-selected for the user.
- **Tab moves focus into the field.** A second Tab key selects the current item on the list, updates the field's value, closes the dropdown list, and moves focus to the next focusable item in the tab order.
- **Up and Down Arrow moves focus up and down the list.** As focus moves inside the dropdown list, the field is updated
- **Enter selects the current item on the list,** update the value, highlights the selected item in the dropdown list, closes the dropdown list and returns focus to the field.
- **Escape key closes the dropdown list,** returns focus to the field, and does not change the current selection.
- **Typing a letter key moves focus** to the next instance of a visible node whose title begins with that letter.
- **Exposes these roles to assistive technologies**
  - **MSAA:** ROLE\_SYSTEM\_COMBOBOX
  - **AT-SPI:** ROLE\_COMBO\_BOX
  - **AXRole:** AXPopUpButton
  - **AxRoleDescription:** pop up button

# Approaching a review

Mandatory tools:

- Screen reader ([NVDA](#), [Jaws](#), VoiceOver [default su mac])
- Browser
- Some level of empathy
- [WCAG Guidelines](#) and law of te target country ([Italy](#))
- Contrast checking tools ([WebAIM contrast check](#))

Other tools:

- Automatic tools ([accessibility insights](#), [AXE \(Firefox\)](#), others....)
- Some kind of color blindness simulator ([Spectrum for chrome](#))

# Review and develop

Let's try together

<https://codesandbox.io/s/workshop-2020-lyy9y>



# AgID and Bootstrap Italia

# Agid

- Agency for **Digital Italy** is the technical agency of the Presidency of the Council of Ministers
- The main purpose of the Agency is to guarantee the achievement of the Italian digital agenda objectives and contribute to the diffusion of information and communication technologies, with the aim of fostering innovation and economic growth
- AgID supports digital innovation and promotes the dissemination of digital skills, also in collaboration with international, national and local institutions and bodies
- In the web environment, for example, it offers guidelines for data access, accessibility and document management

More information: <https://www.agid.gov.it/>

# Bootstrap Italia

- The **Bootstrap Italia library** is the easiest and safest way to build modern, inclusive and simple web interfaces
- Completely open-source, built on **Bootstrap 4.5.0**, of which it inherits all the functions, components, grids and utility classes, customizing them according to the Design Guidelines for the Public Administration websites
- Uses the patterns and components defined in the **Italia Designers UI Kit** and transforms them into ready-to-use code. The **UI Kit** is a set of visual components ready to assemble the interface of a site or app, following the guidelines for the Public Administration
- UIKit: <https://github.com/italia/design-ui-kit>
- Bootstrap-Italia: <https://italia.github.io/bootstrap-italia/>

# AgID in the Liferay context

**ToDo:** Include Bootstrap Italia in a Liferay theme (e.g. in Liferay 7.2)

**(!!) Liferay7.2 use Bootstrap 4.3 – Bootstrap-Italia use Bootstrap 4.5:** <https://github.com/twbs/bootstrap/releases>

## Mandatory:

- Bootstrap italia files: <https://github.com/italia/bootstrap-italia>
- Bootstrap italia docs: <https://italia.github.io/bootstrap-italia/docs/come-iniziare/introduzione/>
- java 8
- A local installation of Liferay 7.2 ce: <https://tinyurl.com/liferay72ce>
- Node: <https://nodejs.org/it/download/> (>10)
- Blade: <https://help.liferay.com/hc/en-us/articles/360017885232-Installing-Blade-CLI>
- Gulp: <https://gulpjs.com/docs/en/getting-started/quick-start/> (npm install gulp-cli -g)
- Yeoman (npm install yo -g)
- Generator-liferay-theme (npm install generator-liferay-theme)

# Domande

## CONTATTI

Gianpietro Benincà

Email [gianpietro.beninca@smc.it](mailto:gianpietro.beninca@smc.it)

GitHub

<https://github.com/GianBe>

Twitter @BeGianp

## CONTATTI

Gianluca Dario

Email [gianluca.dario@smc.it](mailto:gianluca.dario@smc.it)



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See you on

**Liferay Italian Symposium: November 4, 2020 (online)**

**Liferay Boot Camp 2021**

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**Thank you** 😊