BootstrapLeggero
Software for lighten web page developed with Bootstrap Framework

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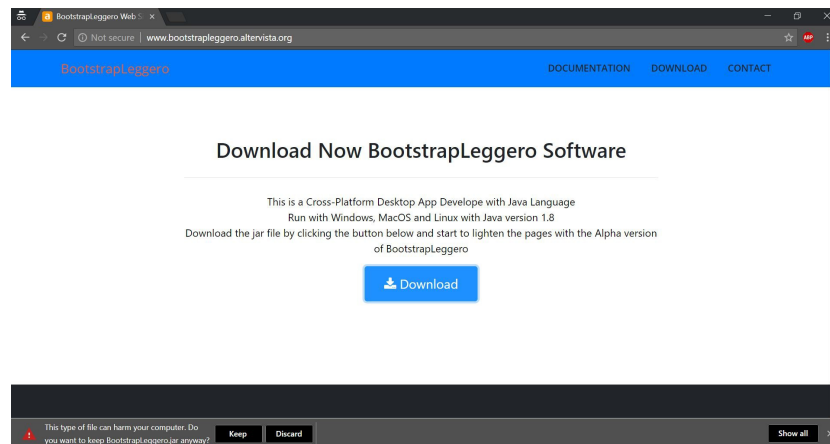Software: BootstrapLeggero 0.1 Alpha

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1. Premise

It's important know that i don't know how to use java perfectly, much less i'm not a web designer but this project has helped me to improve these skills. Therefore, if you can make constructive comments that can be used to improve the software and try not to insult me because my purpose is not to fight but just to improve BootstrapLeggero to make it a program usable for all developers who try to use the Bootstrap Framework for their projects.

It may seem contradictory to what I said earlier since I do not consider myself an expert on web design tecnology like Bootstrap but there are many reason because i choose to develope this software and i explain it in detail in point 5 of the documentation "Why BootstrapLeggero?" and if you are smart people you will undertstand all my speech.

Know that Java is not my favorite language even if I like it a little bit but I had to use it because I wanted to make the project compatible with all three major opreating systems (Windows, MacOs, Gnu/Linux) without the need to make an installer for specific OS and i choose Java for fame and the ease of use of the language for other developers. So it can't be excluded the possibility that in future developments can revolutionize the project with other languages like C#,Python and other or simply make a version on Windows with C# and the rest with Java but are not yet decided options so if you want you can also give me some suggestions that I could evaluate and/or willingly accept.

In the my personal website of project http://www.bootstrapleggero.altervista.org in the section "Download" there are a runnable jar of BootstrapLeggero. The problem that i found and that in Google Chrome and that it said me that the jar file is dangerous as in the image that I will show you:

So if this problem occurs don't worry and download the runnable jar beacuse is not a malicious software (probably Chrome dosen't like jar files).
So even Windows and MacOS in their own way are malware and very often we use them so don't worry and be happy.

Anyhow i have to apologize for my bad english but i'm italian and my personal english's tutor is the ex Premier Matteo Renzi: shish.
Joking aside i translated part of text with google translator, so if you have difficulty at understand me in my website of project BootstrapLeggero and in the point 8 of index "Conclusion" you can to find all contacts for talk with me for resolve your doubts.

Finally I wanted to remember that this documentation it's subject to future updates and therefore part of the documentation may be added, modified or removed on the basis of future project evolutions.

The curren supported version of bootstrap in this program is the 4.11.

2. Test and Development Environment

Ide and editor:
-Eclipse Jee Oxygen
-Brackets
-Notepad++

Run the project and tested jar on OS:
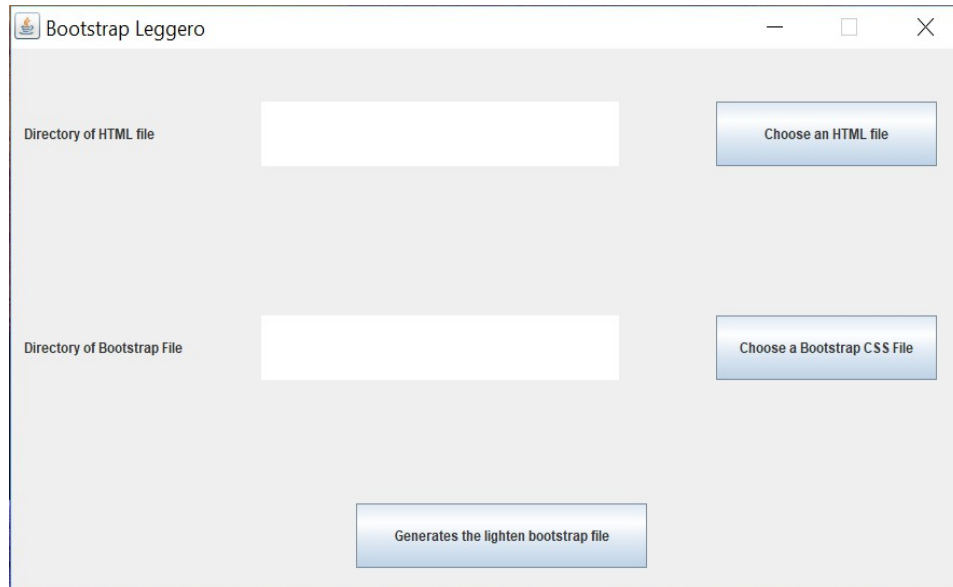-Windows 10 Home Edition + java version "1.8.0_171"

I tested the jar on OS:
-MacOS High Sierra 10.13.3 on iMac 27-inch, late 2009 (also if i think is not important the version of MacOS and the type of Mac) + java version "1.8.0_101"
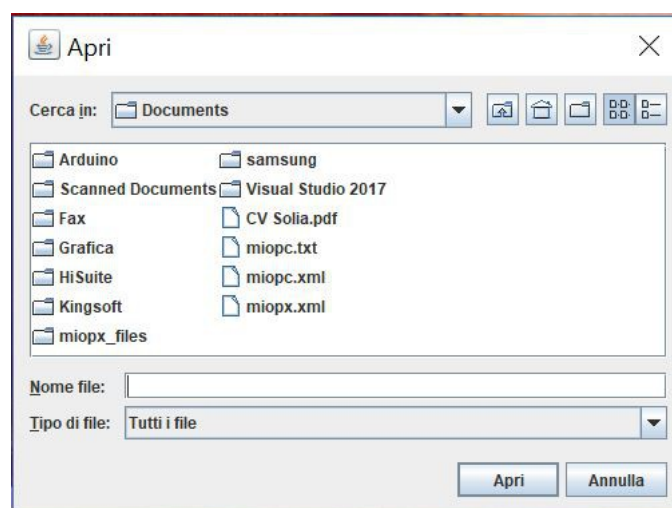-Ubuntu 16.04 Xenial Xerus LTS + java version "1.8.0_181"

3. Whats is and how to use BootstrapLeggero?

BootstrapLeggero is the GUI software for lighten your web page developed with Framework Bootstrap. In this moment BootstrapLeggero shows

up whit a simple window whit two labels, two textboxes and three buttons. The image you see below show the GUI of software.
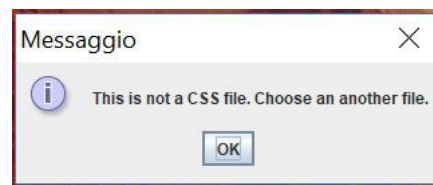

Your use is very simple. Click the button "Choose an HTML file" for choose the file that you wanna scan. In fact if click this button will be shown a GUI like the one below:

It's to be specified that there aren't a specific control of extension of file in the selection phase

because there are many web file with an extension different than at html like php, aspx, asp, jsp, py, shtml and others again and therefore it would be limiting to make a specific control only on html files. Subsequently, after having chosen the file, the absolute path of the file is written in the textbox next to the label with writing "Directory of HTML file".

A speech similar to the previous one must be done for the button "Choose a Bootstrap CSS File" which also opens a window to choose the file with the difference that compared to the operation of the first button shows a warning message if you choose a file with a different extension from the css. Below is shown the image with a window when you go to choose a file with a different extension from the css:

This button, in particular is needed for choose the Bootstrap CSS file which will be used to be processed by the "Generates the lighten bootstrap file" button.

In this case I have not deliberately chosen to put a preconfigured bootstrap css file because I want the user to dynamically choose the bootstrap file that interests him because maybe you want to use it with versions later or earlier than those for which it is currently preconfigured with the version 4.11 .

In one of the 3 sites I have tested, found in the repository of my github profile in the themes folder, there is a theme with the version 4.00 called Avilon and which I kindly took from a website,

which I will refer to in point 9 of the "Acknowledgments" index, which works but does not correctly show any elements of the footer. The other two themes instead, which one of those I used to make the personal site of this project and that I will add also in the "Acknowledgments", they can almost perfectly copy the css but the collapse effect in the menu not it works correctly because it is not called in the bootstrap.js file a feature to give it the effect because the part of javascript and jquery is something that I will do later and this will be indicated in point 7 of the index or the "Next Goals" section. My current site uses a css bootstrap file lightened that I created with my software, therefore the project site is constantly updated based on the evolution of BootstrapLeggero so as to act as a test site to verify the functionality of the software.
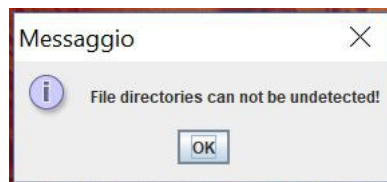
Also I wanted to remember that the program, in the choice of the bootstrap css file, does not support the minimized version (bootstrap.min.css) of the file, so use only the extended version (bootstrap.css) when choosing the bootstrap file.

Returning to the functionality of the program we had remained that therefore the two buttons in the upper right corner wrote the absolute path in their respective textboxes. Therefore we have to talk about the button "Generates the lighten bootstrap file" which performs the most important actions of the program as it takes from the respective text boxes the absolute path of the two files and the first extracts the html classes to check if they exist in the file bootstrap and therefore if they exist it memorizes and it extracts only the present classes and it goes them to insert in the lightened bootstrap

file that will create. The name of file that will be created is composed of the timestamp of the file creation + the word "-bootstrap.css" (es. if the date is Jan 01 1970 the result is1534896438-bootstrap.css). The file is generated in Windows and MacOS in the same directory where is it a runnable jar instead on linux is generated on your home (for example if you pc account is called pippo the file is generated in home/pippo/). If instead you are testing the program directly from your development ide because you have downloaded the source code of the program from github, if you run the program from your IDE and you do all the operations the file will be generated in the folder of your project.

Currently I didn't manually select the file save folder due to the short time I have available to implement the feature but this things is sure it will be done, therefore the sign in the section of the "Next Goals" index.

Finally the last button, in addition to the features already mentioned, if one or both the textboxes are empty and you click the button for generate a new Bootstrap CSS file you will be shown a messagebox like this:

It is good to remember that currently BootstrapLeggero, even with its current limitations since it is in aplha, manages to create with the themes that I have tested files lighter than 40-60kb

(even if it depends entirely on how many classes of the original bootstrap file are recalled in the html file) although I know that with future versions of BootstrapLeggero I can still improve these results satisfactorily.

4. Pratical example of using BootstrapLeggero

For ease of understanding, in this case, I refer you to one of my video tutorials on youtube that you can to find in my contact of website or on this link https://www.youtube.com/watch?v=oRSJTX67wl8.

5. Why BootstrapLeggero?

There are many reasons why I started this project. At first I hated Bootstrap but then I started using it (however little I knew how to use it) because I noticed its ease and usefulness, but despite all there is still a big problem: the heaviness of the Framework.

Obviously the heaviness of the Framework is not a fault attributable only to bootstrap, but there are others who suffer from the same type of problem like Angular and others (even if it does completely different things) and despite the problems persist many developers create frameworks that they consider valid alternatives because they are lighter, have that extra functionality and so on. Then in the end we always find ourselves with the same frameworks or libraries that do the same things creating a confusion that we can not even imagine.

We must consider that not only hobbyists but also multinationals (of all kinds) create this kind of confusion and very often even more than the same hobbyists because they often want to do the projects in the shortest possible time.
In part they are not wrong but doing so they risk putting in a lot of libraries and frameworks that sooner or later, if the developers do not know how to use the various frameworks intelligently and/or their managers ask limited development times (and this happens almost always in Italy), slow down considerably the application (web and other genres) risking to create malfunctions for internal conflicts because maybe there are functions with similar or equals names between the different frameworks or for other different reasons.

So BootstrapLeggero I developed it because I really wanted to give a valid alternative traveling on a different level than the creation of the classic Framework in order to use a famous framework by removing one of its main flaws with the help of my software.

Obviously it is not only reducing the code that speeds up everything but when you see that from almost 9000 lines of code you pass between 5000 or 6000 lines of code (as you could see in the previous point of the documentation with one of the examples of the video) there are a considerable optimization of the code (with 9000 I did not want to refer to the meme on Vegeta "it's over 9000" be clear) and this would also entail, in the case of the more experienced developers wishing to put hands on the code, to read it with greater clarity and precision (make a comparison between reading of 9000 lines of code and 6000).

And it is precisely the optimization of the code and the speed of execution of the page that I would like to talk about. In fact, when using one or more libraries or framework it is always advisable to always put the code below to the html page the javascript codes and over the various css codes to load the page quickly. This is definitely an excellent trick but it can not always work if we put a lot of these technologies at random or simply use it even just one badly and/or unconsciously. Another question obviously concerns internet connections that are becoming faster and better performing, but not in Italy. Do you think that in my country the connection I have at home is considered one of the fastest in Italy and guess what it is? 100 Mbit. We are well placed, right? Here, of course, I'm talking about a magical place where everything is possible, just think that at a friend of my systemist friend seems to go back in the 90-2000 with the connection to 54k with a modem with its classic ticking and modem apart for the connection I'm not joking because there really are those speeds and it's not the only isolated case because there are many other people in the same conditions. Even before I had a connection up to 100mbit I had the ADSL at 7mbit with speeds that touched even 120k. Obviously not for everything is so and in some central locations like in Milan or Turin, if I'm not mistaken there should be connections up to 1gbit maximum for domestic use, but it is always isolated cases.

Why this digression on connections? Is simple. I think there is a good catchment area that will read this documentation that can live in America and so maybe they do not suffer from these problems. But

the Italy is not only place that has this problem, but it is well known that the Internet is not a well distributed resource in the whole world (either for physical reasons like mountains, hills etc. or politicians like dictatorship, poverty etc. but the latter deserves a separate speech) and therefore everyone must have the possibility to have a good user experience when they visit a simple web page and if we continue this step to badly use the frameworks and libraries without support to lighten and speed them up we will (or maybe some of you already are) to have to complain about the super fast connections because the web page is slow to load. Don't you think it's so by chance? In fact for this BootstrapLeggero was born, in order to give the possibility to more and less expert programmers to have an additional aid to be able to lighten their web pages in order to make websites, apps and everything related to the web world in faster way.

Surely I do not want, even if I fear, that my program will create the fashion that there will be frameworks or libraries that will do a lot of programs of my type because this would involve the possibility of creating a new framework because there is the "program that lightens everything" when instead you could simply develope it from scratch or with existing technologies, and I do not speak because I fear the competition, on the contrary, I'm glad there is because there is more fun and they could make collaborations more advantageous for everyone, but I say this because this would imply the same situations that I have already talked about: the saturation of the frameworks or libraries.
But what I want is that my program and the like are used with intelligence by the developer and that

can give a valuable help both in terms of short production time of the product and also final satisfaction for the user who will use this service.

6.   License

This software is distribuited under the GPL-v3.0 license.

7.   Next Goals

Now i describe my next goals that I will implement in the next version of BootstrapLeggero:

-Remove or reduce code from jquery dependencies
-Scan more web pages than just one now
-Save the new lightweight Bootstrap file in a folder chosen by the user
-Created a minimized version of new generated file
-Add retrocompatibility with older version of bootstrap
-Show tree work directory on GUI (maybe)
-Make a save file with the xml extension to save the configurations of the file to be scanned (maybe)
-Fix any bugs

8.   Conclusions

Summing up what I said then BL is the software that serves to lighten the bootstrap css file (and later the whole framework) by taking the classes into consideration from the html file that you want to scan.

I hope that my documentation has been clear and

that this program can help more and more web masters to have the support of a famous Framework with the advantage of being able to be lightened to their own use and custom.

For those who want to continue to follow me I leave all my contacts below:
WebSite Project:
http://www.bootstrapleggero.altervista.org/
Github:
https://github.com/FabioSolia1995/BootstrapLeggero
Twitter:
https://twitter.com/FabioSolia
Youtube:
https://www.youtube.com/channel/UCOw05RrGZbi15ixUZAz3big?view_as=subscriber

9.   Acknowledgments

Obviously I can not miss the part of the thanks where I write the links of those who have been very helpful during this project because without them it would have been even more difficult to develop the program.
So thank you all.
https://stackoverflow.com/questions/2885173/how-do-i-create-a-file-and-write-to-it-in-java
https://java2blog.com/how-to-get-extension-of-file-in-java/
https://www.journaldev.com/842/how-to-get-file-extension-in-java
https://startbootstrap.com/
https://bootstrapmade.com/