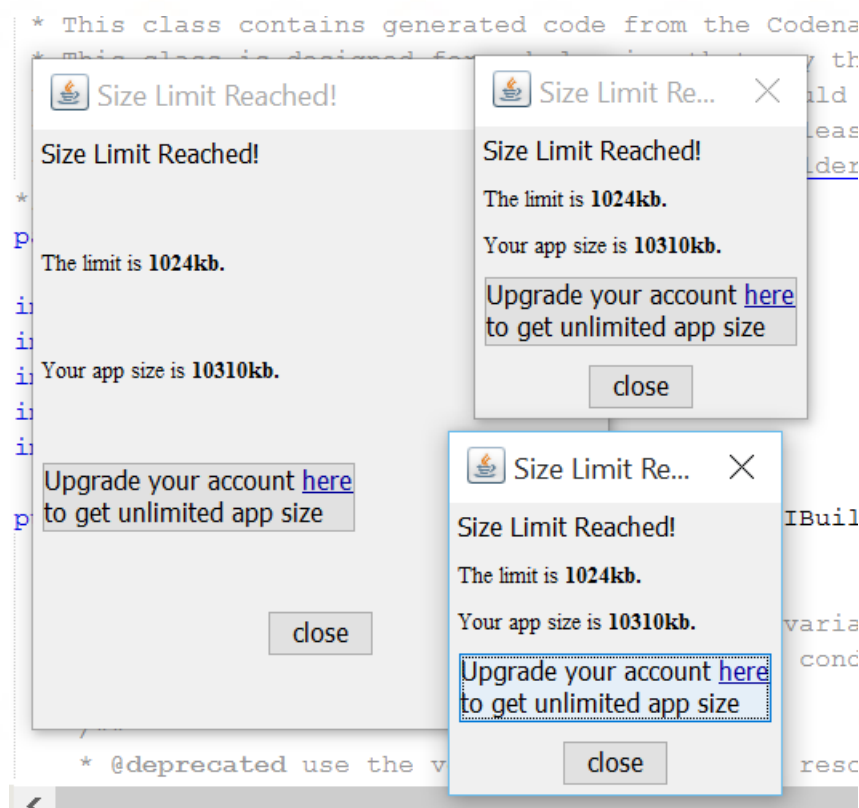


### *How to minimize the size of your app*

#### 2 good reasons to keep your app as small as possible :

- Users prefer small apps. If they don't have enough space on their phone, they will tend to keep your app and delete other apps instead.
- Codename One (the tool we use to create the apps) has a free plan for apps that have a size under 1 Mb (one megabyte). If you have a free plan and your app is above the size limit, you will get an error message like this one :

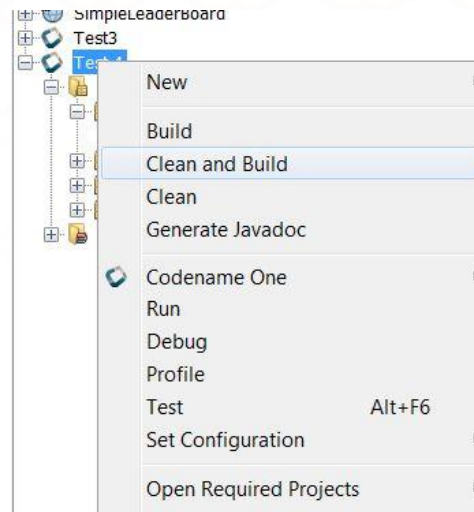


**See the next pages for how to measure and reduce the size of your app !**

### *How to minimize the size of your app*

#### How can I know the size of my app ?

- 1) Right click on the title of your project and do « Clean and Build » :



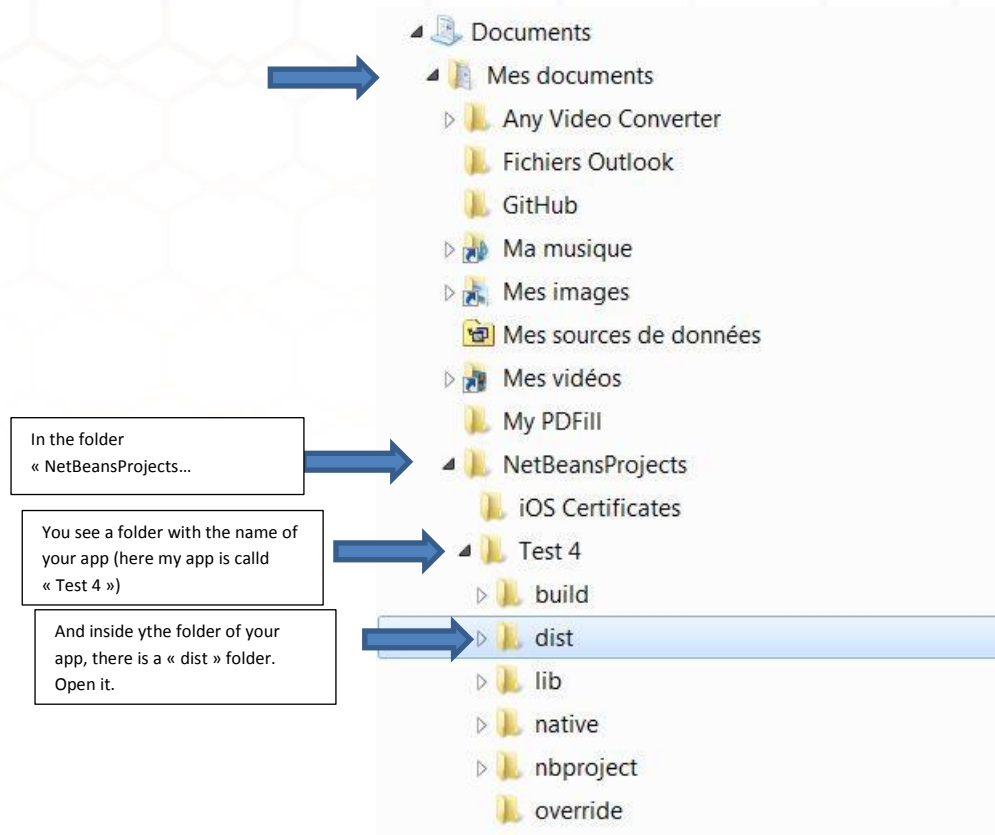
- 2) Then, on your computer :
  - a. open a file explorer (the « Finder » on Mac)
  - b. find the folder « NetBeans Projects ».
  - c. In it, you see a list of folders, one for each app you created.
  - d. Open the folder of your app.
  - e. In the folder of your app, you should see a folder call « dist ».

**See the next page for illustration (view from a PC)**

## Module 4: Testing your app on a phone and distributing it

Level of difficulty: ● ○ ○ ○  
Estimated time: 10 mn

### How to minimize the size of your app



3). Inside the « dist » folder, you should see a file with the name of your app. The size of this file is the size of your app :

dist			
Nom	Modifié le	Type	Taille
lib	02/10/2015 09:22	Dossier de fichiers	
README.TXT	02/10/2015 09:22	Document texte	2 Ko
Test 4.jar	02/10/2015 09:22	Executable Jar File	1 069 Ko

*Note : the name of the file ends with « .jar », or not, depending on the settings of your computer.*

### How to minimize the size of your app

#### How to decrease the size of your app ?:

The size of your app is mostly impacted by 2 things :

1) The theme you choose.

If you choose the « Native » theme when you create your project, you start with the smallest app possible. All other themes add by default some pictures to your app, which grow its size to 500 Kb (half the limit of 1Mb for the free plan of Codename One !)

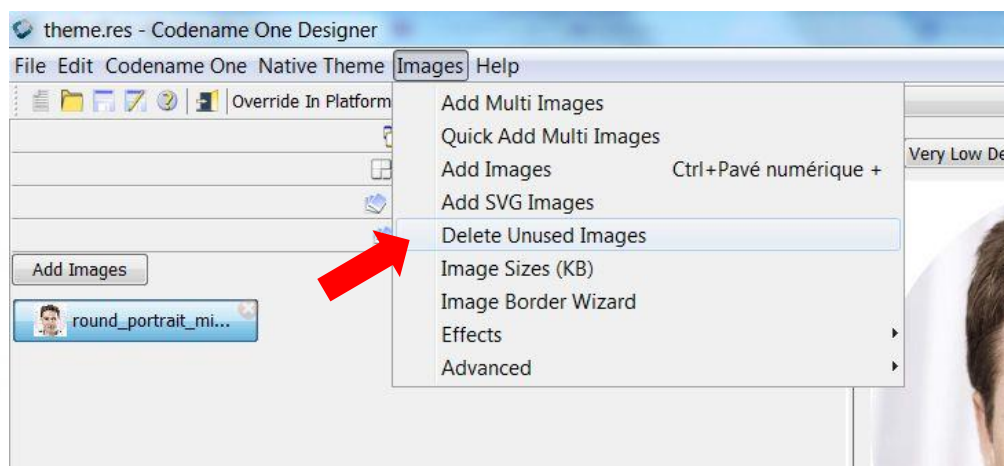
**Recommendation : choose the native theme when you create your app !**

2) the pictures you put in your app.

Pictures are the main reason why your app is big, because they can be large files.

My advice :

- **import small PNG pictures, not JPEG.** JPEG pictures are much smaller than PNG files, but Codename One converts them into big PNG, so that you end up with big pictures in your app without knowing... So, choose PNG pictures that are small, then import them.
- **Delete unused pictures.** Sometimes we import pictures and then we don't use them on the screens of our app. But they are still in it ! Do this to delete them :



- **Don't use « Multi Images » :** this is a nice feature which created multi versions of your pic, for each screen resolution of every phone. But this adds many versions of your pic to the app, so the app is much bigger !

3) Adding many screens, Labels, Buttons : does it make the app bigger ?

**No !** these things « weight » almost nothing, don't hesitate adding more of them ! The culprits are the pictures, really, this is where you should try to shrink your app !