

Note:

This is a case where the videos are easier to understand than the pdfs alone.

The videos comment the slides step by step, this helps build your understanding.

Don't read and rush. Watch the video instead!

Coding quicker (or how to code like a boss)

So far we learned that:

- We create a box, specialized in a type of object. For example:

```
Form firstScreen;
```

- We put an object in it:

```
firstScreen = new Form();
```

To save time and write less code, we can do the same in one line:

```
Form firstScreen = new Form();
```

The box specializes in
containing screens
(Form)

Name of the box

and we put a new Form
in the box

If we want to create a label:

```
Label welcomeMessage = new Label();  
welcomeMessage.setText("Welcome to this app");
```

To save time and write less code, we can already decide the text of the label when we create it:

```
Label welcomeMessage = new Label("Welcome to this app");
```

Then imagine we want to add the welcome message to the screen:

```
Form firstScreen = new Form();  
Label welcomeMessage = new Label("Welcome to my app!");  
firstScreen.addComponent(welcomeMessage);
```



« `addComponent` » is the action we need when we want to add stuff to a screen or to a container

But we can write it in an even shorter way:

```
Form firstScreen = new Form();  
firstScreen.addComponent(new Label("Welcome to my app!"));
```



Rooky mistake: forgetting to open or close all brackets!

If we want to get the height of the welcome message on the screen:

We start by getting the label and putting in in the box “welcomeMessage”:

```
Label welcomeMessage = firstScreen.getComponent(0);
```

getComponent is the action we need to select a component on the screen. The number in the bracket is to indicate which one we want. The 1st component on screen (on top) is number zero. The 2nd component is number 1, etc.

Then we write another line of code to get the height of this message:

```
Integer heightOfTheLabel = welcomeMessage.getHeight();
```

But we can write all that in an even shorter way:

```
Integer heightOfTheWelcomeMessage = firstScreen.getComponent(0).getHeight();
```

This is called « chaining » the actions because we put them in a chain, each new action comes after a new dot

Any secret tricks?

1) How do I know what code I should write to make my app do this and that?

-> Use the online documentation!

For Codename One:

<https://www.codenameone.com/manual/>

2) But how do I learn all that?

-> Start with very simple things, get the reward of seeing it work

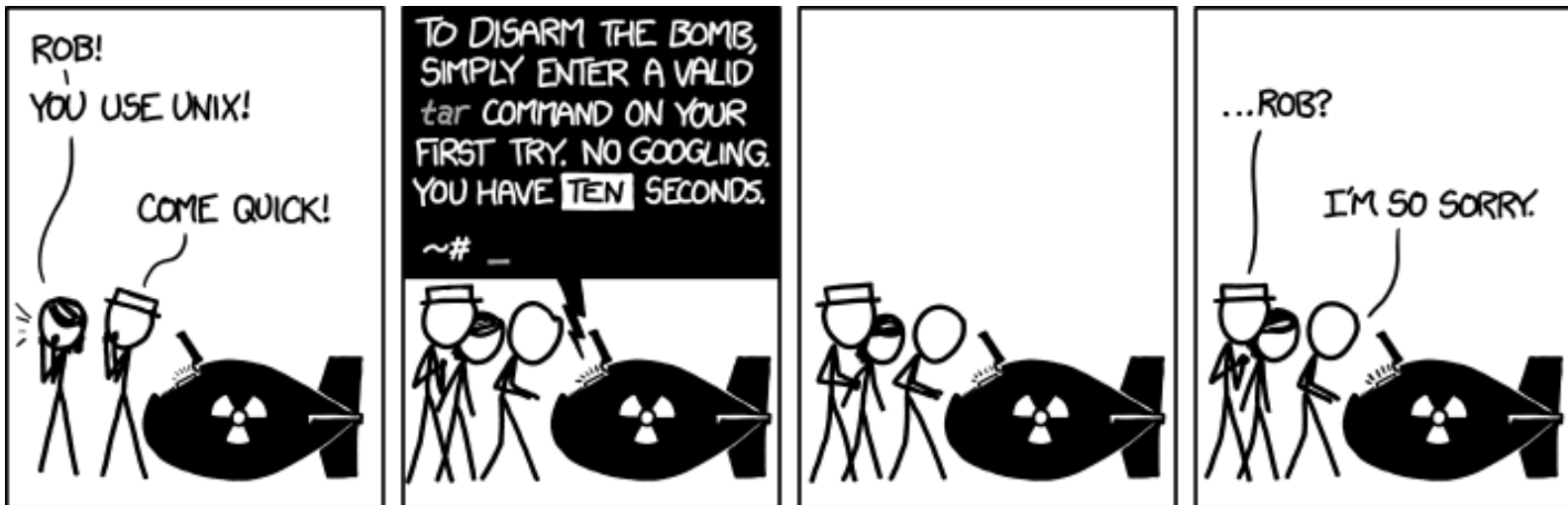
-> Then try more complex things, then Google your question when it does not work!

3) Black magic is OK

We learnt the basics of coding.

Sometimes, we will see other things (strange curly brackets, strange words like “protected” or “final”...) that we don’t understand.

In this case, **just copy-pasting these lines of code (what I call “black magic”) is OK.** Everybody does it, even the experts.



To get this joke: the « tar » command is one of the most simple lines of code in unix. Rob, who is an expert in unix, must confess he needs to Google « how to use the tar command » when he needs to use it...

So relax! Even experts keep using Google to write code!

Source: <https://xkcd.com/1168/>