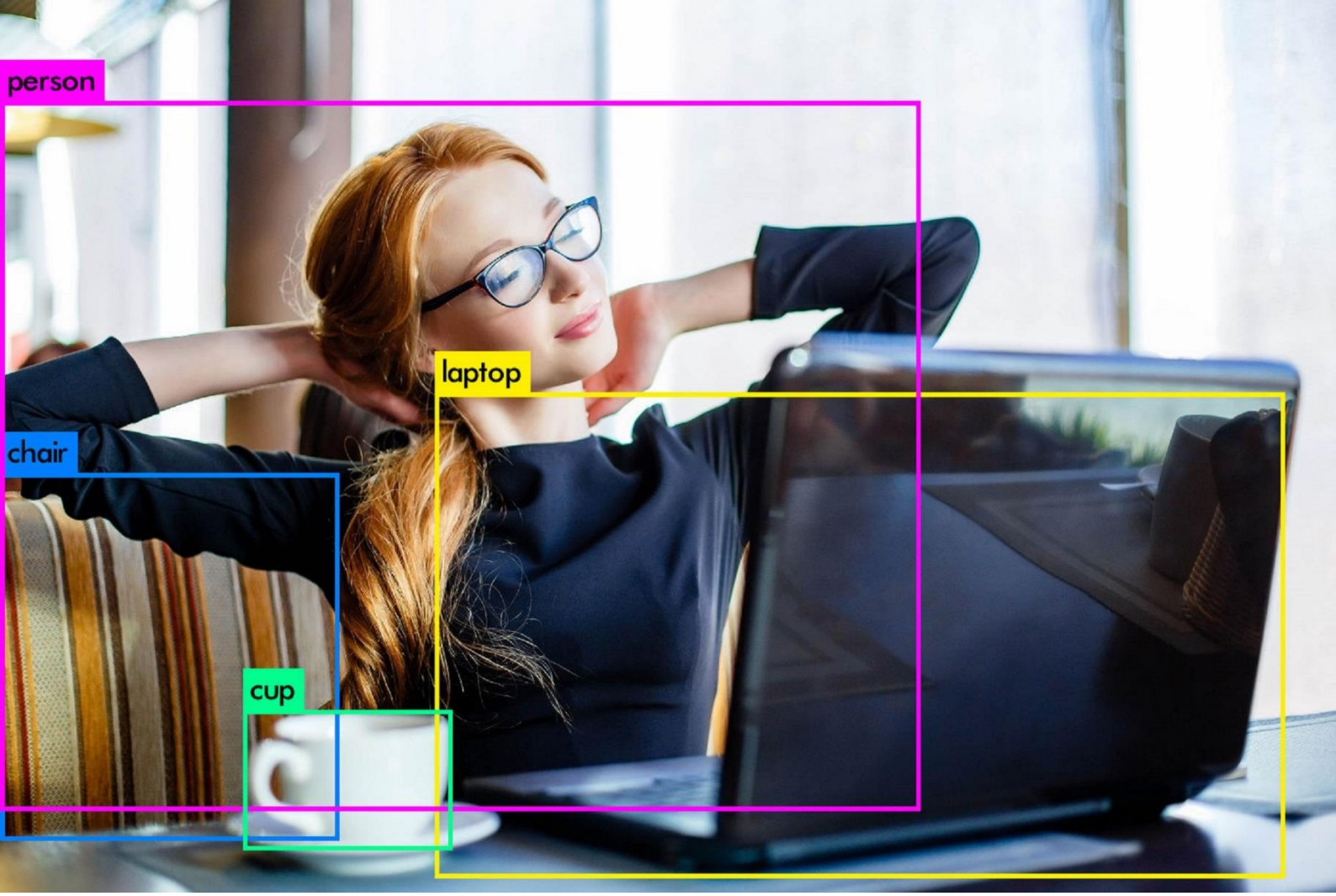

Install labelling toolkit

"Install toolkit to label objects in YOLO format.
Run and verify functionality."

Step 1: Create additional environment

Windows: open Anaconda Prompt.
Mac or **Linux**: open terminal window.
All the commands are the same for Windows, Mac and Linux.

Command	Description
`conda create --name labelenv python=3.9`	Creates additional, separate environment
`conda activate labelenv`	Activates created environment
`conda list`	Prints list of packages

Step 2: Install LabelImg toolkit

Windows: open Anaconda Prompt.
Mac or **Linux**: open terminal window.
All the commands are the same for Windows, Mac and Linux.

Command	Description
`conda activate labelenv`	Activates created environment
`conda install -c conda-forge labelimg`	Installs LabelImg toolkit
`conda list`	Prints list of packages

Step 3: Run LabelImg

Windows: open Anaconda Prompt.
Mac or **Linux**: open terminal window.
All the commands are the same for Windows, Mac and Linux.

Command	Description
`conda activate labelenv`	Activates created environment
`labelImg`	Runs LabelImg toolkit

Links

Check out additional links with extra information for further readings:

- ✓ LabelImg official repository on GitHub
- ✓ Install LabelImg by conda
- ✓ Install LabelImg by pip

Hot-keys

Ctrl + u	Load all of the images from a directory
Ctrl + r	Change the default annotation target directory
Ctrl + s	Save
Ctrl + d	Copy the current label and rectangle box
Space	Flag the current image as verified
w	Create a rectangle box
d	Next image
a	Previous image
del	Delete the selected rectangle box
Ctrl++	Zoom in
Ctrl--	Zoom out
↑→↓←	Keyboard arrows to move selected rectangle box

Other installation option for Windows

- Download and extract ZIP file with *LabelImg* toolkit from official repository into new folder with name *labelimg* into the disc (C:)
- Open Anaconda Prompt and go to the labelimg directory
- Run the commands as below

Command	Description
`pyrcc5 -o libs/resources.py resources.qrc`	Installs LabelImg toolkit
`python3 labelImg.py`	Runs LabelImg toolkit (option 1)
`python labelImg.py`	Runs LabelImg toolkit (option 2)

Other installation option for Mac

- Open terminal window
- Run the commands as below

Command	Description
`brew install qt`	Installs LabelImg toolkit
`brew install libxml2`	
`make qt5py3`	
`python3 labelImg.py`	Runs LabelImg toolkit (option 1)
`python labelImg.py`	Runs LabelImg toolkit (option 2)

(*) Homebrew. If you don't have Homebrew installed, use following command firstly:

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

Other installation option for Linux

- Open terminal window
- Activate your Python v3 environment
- Run the commands as below

Command	Description
`sudo apt-get install pyqt5-dev-tools`	Installs LabelImg toolkit
`sudo pip install pyqt5==5.10.1`	
`sudo pip install lxml==4.2.4`	
`make qt5py3`	
`python3 labelImg.py`	Runs LabelImg toolkit (option 1)
`python labelImg.py`	Runs LabelImg toolkit (option 2)