

MIT AITI

Software Development

Lab: Collaboration

In this lab, we will explore some basic tools for collaborative software design, so that you all will be prepared to work on your app. Please find your teammates and finish this lab together.

Dropbox set-up

1. If you have not done so, go to <http://dropbox.com> and register an account.
2. Find out whether your computer is 32-bit or 64-bit by clicking "About This Computer" located under the system icon at the top-right corner of your computer/VM.

3. To download dropbox app on your computer or virtual machine:

Open your terminal. For 32-bit systems, type in (all on one line)

```
$ cd ~ && wget -O -  
"https://www.dropbox.com/download?plat=lnx.x86" | tar xzf -
```

For 64-bit systems, type in

```
$ cd ~ && wget -O -  
"https://www.dropbox.com/download?plat=lnx.x86_64" | tar xzf -
```

4. Next, run the Dropbox daemon from the newly created .dropbox-dist folder. To do this, just type in

```
~/ .dropbox-dist/dropboxd
```

Note you may be asked to enter your Dropbox account information.

If there is no Internet connection, find the instructors and they'll give you installation files. Just click on the one fit to your system (32-bit or 64-bit) and start installing.

After you're done, you can see a Dropbox folder in your /home folder.

Now Dropbox has been installed in your system, you can start using it.

Uploading a file or a folder: there are two ways of doing this.

1) Dragging the file/folder into your Dropbox folder within your /home folder. This is the only option if you want to upload a huge file/folder.

2) In your browser, open <http://dropbox.com>, log in, and use the “upload” icon to upload your file/folder. This method of using online interface is usually easier.

Sharing a file/folder: go to your online interface, right click on a file/folder that you want to share, and click “invite to folder”. Then you'll be asked to enter the emails of the people with whom you want to share the file/folder, and an optional field of message. After they receive your invitation, they will have access to the file/folder. If you share a folder with them, they can also upload materials there, which will automatically be shared to everyone.

Deleting a file/folder: Similarly, you can delete a file or folder from your /home/Dropbox folder, or from your online interface.

An important caveat: it usually takes a while for your online Dropbox account to sync with your local /home/Dropbox folder, depending on the Internet connection you have at the time. Beware of this.

Task for today (everyone): share your ~/Desktop/myblog folder with your teammates and make sure they can download it and run it on their machine. If not, let them help you debug!

(Advanced and Optional) If you prefer the command-line environment, go to

<http://www.dropboxwiki.com/tips-and-tricks/using-the-official-dropbox-command-line-interface-cli>

and find out command line tricks to use your Dropbox.

Real-Time Collaboration Tools

Dropbox is awesome, but it doesn't support real-time collaboration, and if many of you work on the same file, only the version uploaded last will be kept (previous ones will be overwritten unless you specify another name, which will be a disaster since Django will look for exact matching of file names.) Next we'll explore some real-time tools.

4. Google doc: If you haven't used this before, go to <http://docs.google.com>, log in your Google account, create a new file (of any kind) and share it with your teammates. Note currently Google doc doesn't support python environment, so whatever python keyword you type in will not change color. This can be bad for coding, but if you're writing a business proposal or preparing for a presentation, and you want your teammates to see what you are doing real-time, Google doc is good enough.

5. Stypi: go to www.stypi.com, create an account and a python document, and invite your teammates to edit that document with you. Note you can set the document type to

Python using the “</>” icon located at the top-left of your application interface. Try editing the same file simultaneously with your teammates.

6. Cloud9IDF: If this all have been too simple for you, try <https://c9.io/>, create an account (choose the free tier), and try the demo-project. If you're comfortable with this project-oriented environment, create a new project and invite your teammates to join.

These are just a few of the tools to get you started.

Remember, COMMUNICATION is crucial in developing your app.

GOOD LUCK!