

# Sony DPT-RP1 Lab Notebook

Daniel Eaton

Updated:8/26/2018

## 1 Introduction

This is documentation for a small lab notebook management program based on the Sony DPT-RP1 "Digital Paper" tablet. The program currently supports the following features:

- Combining multiple pdfs into larger pdf files (Journals).
- Associating metadata with entries for easy search.
- Autodetection of handwritten rectangles and image placement.
- Autodetection of pdf additions/deletions from Journals.
- Table of contents (with entry titles).
- Index section for keywords.

In the future, I wish to add the following features to the program:

- Fix note deletion.
- Making the user input more error robust.
- GUI for notebook management.

## 2 Installation

The python file **labnotebook.py** and the latex file **template.tex** provide the basis of this program. Installation of the program, simply consists of moving these files to the right locations and setting up a home directory for your lab notebook. For now, the program may be installed by running **labnotebook\_installer.py**. Note that the installer will query you for a directory in which to place your lab notebook. This **Lab\_Notebook** directory may be moved at any time to a new filepath.

The installer will create a folder called **Lab\_Notebook** within the path that you specified. Within this folder will be the following files:

**labnotebook.py**: Contains the core of the software. Be careful if you try to modify this file. **template.tex**: A latex template that is used by **labnotebook.py** when generating journal pdfs. **labnotebook.bat/sh**: A batch or bash file which can be run activate the library manager.

### 3 Usage

Using this software revolves around manipulating the **Lab\_Notebook** directory while the library manager (**labnotebook.py**) is running in the background. To activate the library manager run **labnotebook.bat/sh** or simply run `python labnotebook.py` from the terminal. While the library manager is active you may perform any of the following actions to edit your journals:

**New Journal**: To make a new journal, simply add a new folder within your **Lab\_Notebook** directory. This will automatically create a new journal whose name will correspond to the directory's name.

**New Imagenote**: To add a new pdf from the DPT-RP1, add the new pdf to the **New\_Imagenotes** subdirectory within a journal directory of your choice. You will be queried for image files to insert at all detected rectangles.

**New Note**: To add a new pdf which does not come from the DPT-RP1, add the new pdf to the **New\_Note** subdirectory within a journal directory of your choice.

**Delete Note**: To delete a pdf from your journal, find the note in the **Notes** subdirectory and delete it. You can delete more than one note at a time in this manner.

Note: I recommend that you do not make any but the above alterations to the **Lab\_Notebook** directory or its subdirectories while the library manager is running. Doing so may result in corruption of the library filesystem.