# Project Portfolio - Lau Wei Tang 🗘

## **Introduction**

Welcome to my Project Portfolio. This document provides you with an overview

PDF++

## **About PDF++**

### Why PDF++?

Most university students have one thing in common, messy desktop. As a student, I have to manage multiple new documents weekly. Furthermore, each file is categorised differently or has different unique purpose. For instance, I would look for files from my programming modules on certain algorithm concepts or look from my language module for files with writing tips. However, current File Management System (FMS), such as File Explorer in Windows, has its limitations in the categorisation of files. Even for organised users, it is ineffective to make a constant effort maintaining the documents in an orderly manner, and inefficient switching between folders to look for the files of their interest. My team and I recognised this limitation and decided to work on building an elaborated FMS, PDF++.

## **Project Scope**

For the team project, we were provided with an existing AddressBook application. We decided to morph the application into PDF++, a sophisticated FMS targeting students who prefer working with command line interface (CLI). However, given the limitation of the project, our application currently supports PDF files only, and thus the name.

### Main role and contributions

I am one of the developers for PDF++ that in charge of implementing **File Protection** feature and most of the test cases for the Logic component.

For File Protection feature, I have incorporated both encrypt and decrypt features

## Legend

Please refer to the table below for the icons and formatting used in this document:

icon	description
[tags]	Tag

[file]	file
[comment]	comment
- <del>`</del> \	Tip
TIP	tip
NOTE	note
WARNING	warning
CAUTION	caution
IMPORTANT	important

### 2. Summary of contributions

This section highlights my key contributions to the documentation, coding and technical aspects for the PDF++ project.

### **Robust File Protection System**

PDF++ not only supports several essential features, such as add and open features, it also has a built-in sophisticated File Protection System (FPS).

For File Protection System, I have incorporated both encrypt and decrypt features and other improvements that enforces the security of the application.

• Encrypt command allows users to protect their PDF files that is in the application.

Format: Encrypt INDEX password/PASSWORD

#### Examples:

- Valid Examples:
  - Encrypt 1 password/anyValidPassword
- Invalid Examples:
  - Encrypt -1 password/anyValidPassword (invalid password)
  - Encrypt 1 password/ (no password specified)
- Decrypt command allows users to remove the password of their protected PDF files

Credit to Java Mitra for the tutorial guide in implementing the encrypt feature

### **Test Cases for Logic Component**

The challenges faced and how I contributed in reviewing the code and suggested fixes to bugs found in code

• Code contributed: Project Code Dashboard



[comment]

### <u>Technical Leadership</u>

Refactored Pdf class

Enhancements

code contributed

other contributions

## 3. Contributions to the User Guide

This section includes my contributions to the documentation of the User Guide

### **File Protection System**

In order to ensure that our users' interest is not compromised, I have to

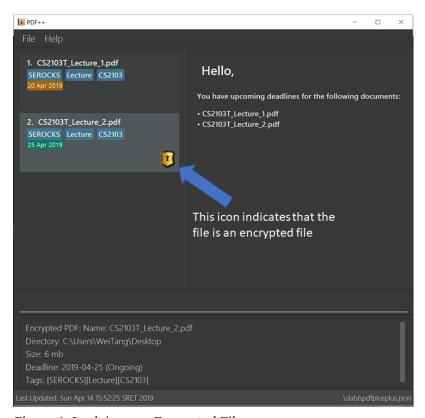


Figure 1. Lock icon on Encrypted Files



Figure 2. File has been encrypted

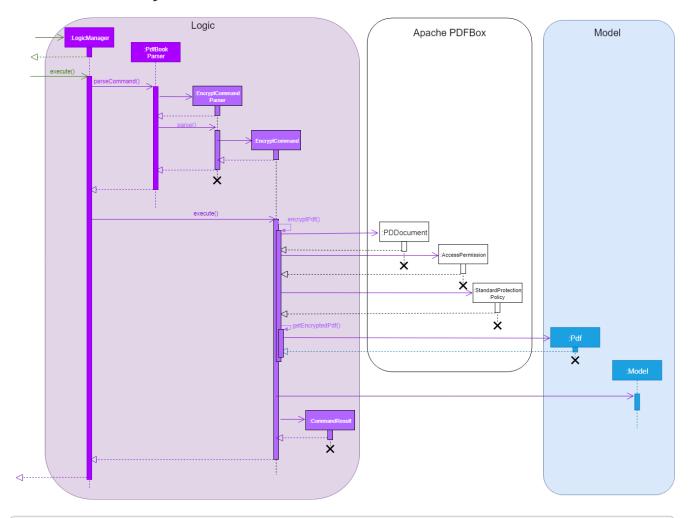
Include some enhancement made using abstract from the Developer Guide

Proposed enhancement for v2.0

## 4. Contributions to the Developer Guide

Insert description as well as abstract from the Developer Guide

### **File Protection System**



Include some enhancement made using abstract from the Developer Guide

Proposed enhancement for v2.0

#### Main things to include:

- 1. Links to collated code
- 2. features I purpose to implement in the future (from DG and UG if possible)
- 3. Other significant contributions