

CS3249 Project Proposal:

PDF Factory

Team QWERTY

1. Members

- Bui Phuc Duyet
- Huynh Van Quang
- Ngo The Trung

2. Main Objective

- To provide users a user-friendly interface for PDF editing.
- To make a competitive, distinguishable product comparing to Adobe Acrobat
- All features should be useful in one use case or another, please refer to suggested features for details

3. Suggested Features

- **Single PDF**
 - Rotate page: a landscape page can be rotated for easy printing, but is not readable on electronic device, user may want to fix this.
 - Convert page to image: User can upload some pdf pages on their blogs.
 - Crop page: User wants to save some space for n-up printing.
 - n-up: to create a multiple pages per sheet version.
 - Offset/Margin page: User, as a student, needs to set offset for ring-binding/take notes etc.
 - Copy/paste/delete page: to provide a faster way to manipulate pages of PDF file.
 - Thumbnails of pdf pages.
- **Multiple PDFs**
 - Move/rearrange pages between PDF files
 - Batch processing (convert, resize, making n-up version etc.)

4. Challenges of GUI

- Custom Widget to generate thumbnails for each page in a pdf file.
- Drag-and-drop pages
- Custom Widget to combine menu and toolbar (ribbon-like)
- Promote a seamless mouse movement (usability)

- Minimize shifting hand between keyboard and mouse

5. GUI Sketch

- **Main working area**

Main working area includes the **ribbon toolbar** on top, the **preview panel** on the right hand side and all **opened pdf files**.

- **Ribbon bar**

The ribbon bar is inspired by MS Ribbon bar and is implemented manually without using another 3rd party pre-made widget.

- **Preview panel**

This panel displays the full-size page of a thumbnail image when user click on a thumbnail. It can be resized or even hidden.

- **Opened pdf files**

We create a custom widget for each opened pdf file. A list of thumbnails are generated for all pages.

- Page thumbnails

Drag and droppable across different files to move pages. Multiple pages can be selected at the same time. Hover on a thumbnail to access to page-specific actions (such as rotate, crop, ...).

- File name

Clicking on the file name acts as selecting all pages in that file, used for actions such as concatenating files together.

You may need to zoom in to read the text.

