



EasyDraft

Team 37 - Product Backlog

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Problem Statement

Businesses, like law firms and medical offices, have to create the same document for multiple people. They have to change, usually by hand, some parts of each document like client names, employee numbers, etc. Our solution is to create a template processor where there are placeholders in a document and the user has a set of information (client names, employee numbers, etc.) ready to fill those placeholders; after having the information for the placeholders ready, with the press of a few buttons they have all their documents filled out.

Targeted Users

We intend to target this application to users that need to send the same document to multiple different clients. These include people from various businesses such as law/accounting firms, medical offices, etc. These users require an efficient tool to manage large amounts of documents without the need for repetitive and manual updates. With this application, users can reduce manual input, minimize errors and increase the document processing efficiency.

Similar Platforms

Applications that are similar to ours include the find and replace tool from Microsoft Word, the Docusign and the PDF forms. This find and replace tools in Microsoft Word allows users to find specific words and be able to replace them with an inputted word. It's an essential feature of Microsoft Word that saves users plenty of time of manual searching and replacement when working with their documents. Docusign facilitates digital signatures, streamlining the signing process in various documents and the PDF forms allow users to input text into various fields.

Limitations

Although features such as Microsoft's find and replace are incredibly useful. They are quality of life limitations such as:

- Can't be edited online in bulk
- Not optimized for bulk processing
- Being messy and error-prone

In addition, Docusign and the PDF forms also have their limitation:

- Lack of comprehensive online interface for form completion
- Limited to signing functionalities
- Not specifically designed as forms, may lead to potential user confusion.

Our application will address these limitations and build a more complete product.

Functional Requirements

1. As a professional, I would like to save and reuse templates.
2. As a user, I would like to have a visually guided instruction to teach me how to use the software.
3. As a client, I'd like to open a template and get my own version to fill out; the first time I open the template, the server will create this for me, subsequent times it will reuse it.
4. As a user, I would like to be able to specify a list of users for personalized bulk output (many PDFs, for example) from a text box within the program itself.
5. As a client, I would like to export the documents created in a PDF format.
6. As a user, I would like to be able to see the top three templates I use most often at the top of a list when selecting a template.
7. As a client, I would like to bold, italicize, or underline the text I input.
8. As a client, I would like to have more customization with the text I input, such as changing font style and size (if time allows).
9. As a user, I would like to save the information for placeholders I've used before to complete other documents.
10. As a user, I would like to preview documents before finalizing to ensure that all information is correctly placed.
11. As a user, I would like to choose from multiple export formats for my documents to meet different submission standards.
12. As a user, I would like to tag and categorize my documents and templates for easier organization.
13. As a user, I would like the software to support multiple languages for the interface.
14. As a user, I would like to have a feedback button on the software to give developers suggestions or report bugs.
15. As a user, I would like my work to be auto-saved so that I don't lose progress when there is a system or software crash.
16. As a user, I would like to use already created or automated placeholders like dates and time.

17. As a user, I would like to be able to input where in the template should have placeholders.
18. As a user, I would like to select pre-filled inputs from a list that I have created to fill the template fields with.
19. As a user, I would like to send emails to each client when bulk outputting multiple documents. It could be a pdf document attached to an email or in the email itself. (if time allows).
20. As a user, I would like to be able to have a signature input box (if time allows).
21. As a user, I would like the application to be usable with a visual disability like including a high contrast mode.
22. As a user, I would like to create my own template document from scratch in the application without using Microsoft Word (if time allows).
23. As a user, I would like to name the templates.
24. As a user, I would like the application to have a search feature that I can easily find templates and documents within my library.
25. As a user, I would like to have a dark mode.
26. As a user, I would like to have access to different language settings in the application.
27. As a user, I would like the option to print the finished document.
28. As a user, I would like the ability to organize and sort my templates into folders.
29. As a user, I would like the ability to see what kind of templates and how many I have created for a specific client.
30. As a user, I would like to be warned if I'm creating a template that is not completely filled.
31. As a user, I would like to receive regular updates for security and feature upgrades.
32. As a user, I should be able to use the application on different screen sizes and resolutions.
33. As a user, I would like to be able to preview a saved template before selecting it.
34. As a user, I would like to be able to connect to pre-existing cloud services to access my template
35. As a user, I would like to delete templates that I no longer need.
36. As a user, I would like to be able to set up my organization/company account.
37. As a user, I would like to be able to login with organization/company credentials (one login per group).
38. As a user, I would like to go through a visually-guided onboarding tutorial when the program first boots up to teach me how to use the program.
39. As a user, I would like to be able to launch the onboarding from some menu at any time so that I can refresh on my EasyDraft skills.
40. As a user, I would like to specify the way the input text for replacement should be split (with newline characters, commas, spaces, or otherwise) when working with the input module.
41. As a user, I would like to have the option to watermark the output documents for added branding and security.
42. As a user, I would like the ability to schedule automated template processing at specific times.

43. As a user, I would like the option to upload a document from Google Drive which is not contained in the commonly-used or recently-used sections of the EasyDraft Google Drive Folder.
44. As a user, I would like to bring a template file into EasyDraft directly from Google Docs through an EasyDraft Google Docs extension.
45. As a user, I would like to track the history of changes made to a template, including who made the changes and when.
46. As a user, I would like to be able to see the character count for each text field to ensure that I stay within specified limits and avoid the document looking improperly formatted.
47. As a user, I would like to be able to set and change the default values for template fields from within the application's GUI.
48. As a user, I would like to have keyboard shortcuts for the application's common actions.
49. As a user, I would like to be able to set default file path and filename upon exporting for each template.
50. As a user, I would like to see analytic information on how often each template is used and other numerical information about the exports for each template.

Main Function

Clients will create will have their own document created in Word with placeholders possibly with special language(eg. \$firstName, \$Date, \$Employee_pay or something similar). They import their docx document in our application, they input information for the placeholders related to each receiver of the document, and then bulk output multiple documents each related to a receiver.

Architecture

A main goal is to make the application cross-platform for Windows, MacOS, and Linux. The plan is to develop the application with C++ as both the frontend and backend language. When developing the application, we will utilize frameworks that are designed for cross-platform development, like Qt.

Performance

The application will be designed with optimized code to ensure high performance in processing large amounts of documents. The response time when filling the template will be under 500 ms for smooth user interaction. The goal is to use less than 300 MB of memory. The software should be able to handle the generation of thousands of documents simultaneously. It is capable of processing and exporting up to 100 pages per document within seconds.

Security

The application will have modern security features and protections. Companies that use our software will have a secure login page with password authentication using their own company login. Passwords will be authenticated using modern standards for a "good and secure password."

Usability

The application will have an easy to navigate UI. Since our application is more experimental and not so similar to other products on the market, the organization should be simple. The application will be faster than using find and replace in a word processor to justify its use. It would support a template up to 100 pages.