Software Requirements Specification
Text to Excel convertor

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1.Introduction

1.1 Purpose

This document is addressed to users and evaluators of the “Text to Excel converter” application, version 1.0. The main purpose of this document is to provide a detailed overview for the Text to Converter application, it’s parameters and goals. This document also describes the project’s target audience, it’s user interface and its implementation.

2. Overall Description

2.1 Product Perspective

This application was developed at the request of “Preh Romania” and it implements a system that can convert a text file into an excel file, given that the text file follows a certain format.

2.2 Product Functions

This application allows a user to select a text file in different ways and either by clicking a button or automatically, depending on the way the user decided to use the application, get the contents of the text file put into an excel file. The product guarantees that only text files using the format “KL30;12.3;1;volts;power supply value;” will be converted correctly.

2.3 User Classes and Characteristics

The application can be used by anyone, but the main target for this application is the recruitment department at “Preh Romania”.

2.4 Operating Environment

This application can be run on any operating system. The user doesn’t have to install any extra software or libraries for the script to run correctly.

2.5 Design and Implementation Constraints

The script was written in Python version 3.10.4, using the libraries Pandas version 1.1.3, Pillow 8.0.1, Tkinter 8.6.10. All other libraries used come packaged with python.

2.6 User documentation

This document servers as user documentation.

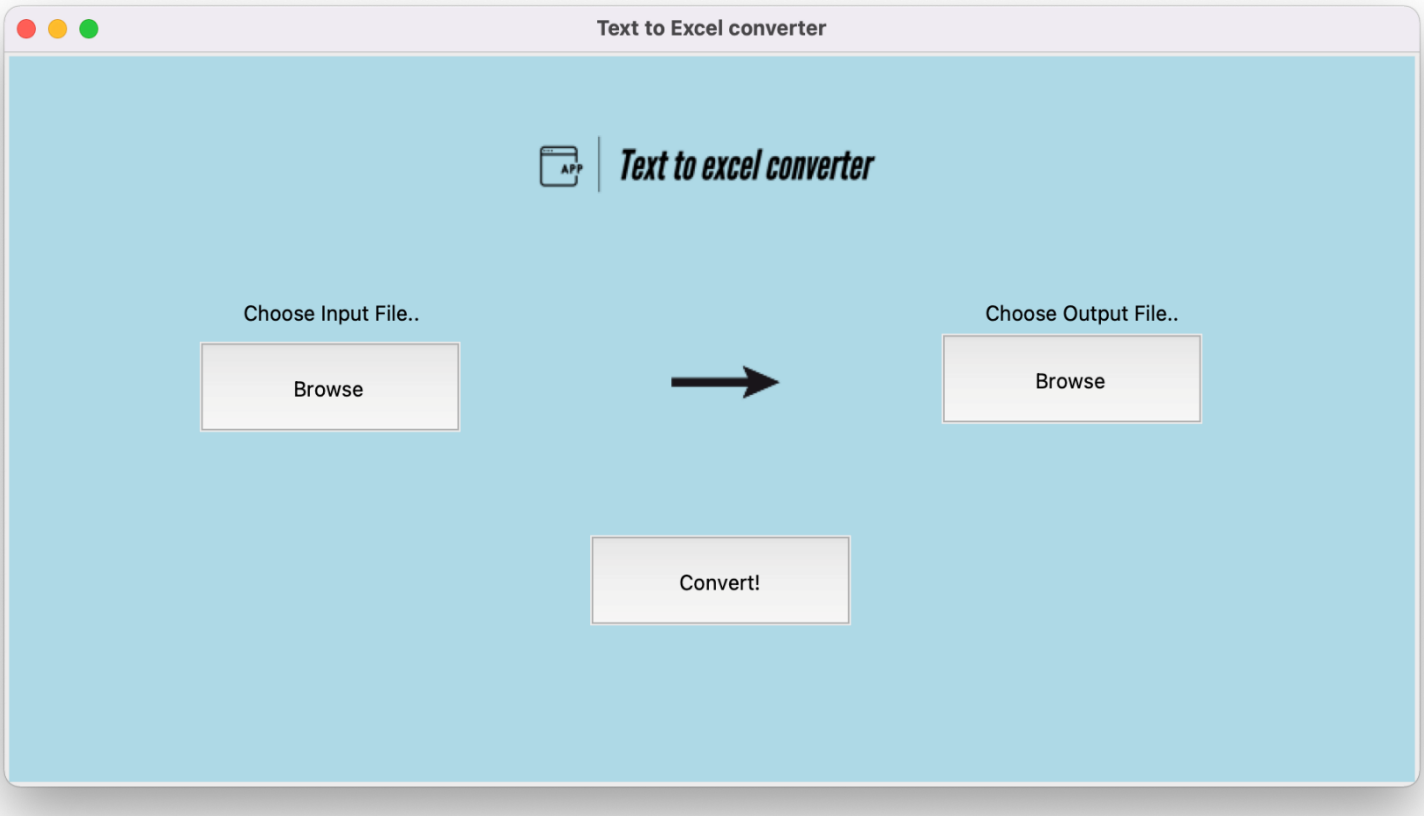
3. **External Interface Requirements**

3.1 User Interface

For the user to be able to use the functionalities of this application he has to provide the path to a text (*.txt) input file and one for an excel(*.xlsx) output file. That can be achieved in three different ways:

1. He can pass the name of the input and output files as command line arguments when running the script using the following format “main %input_file.txt% %output_file.txt%” while replacing the “%input_file.txt%” with the name of the input file and “%output_file.txt%” with the name of the output file.
2. He can change the parameters in a configuration file called “config.json” that comes bundled with the script. He must enter the path to the input file inside the quotes after “inputfile:” and the path to the output file inside the quotes after the “outputfile:”. If command line arguments are provided they will override the instructions given in the config file. After correctly setting up the config file the script can be run from command line without any arguments, or just by double clicking it.

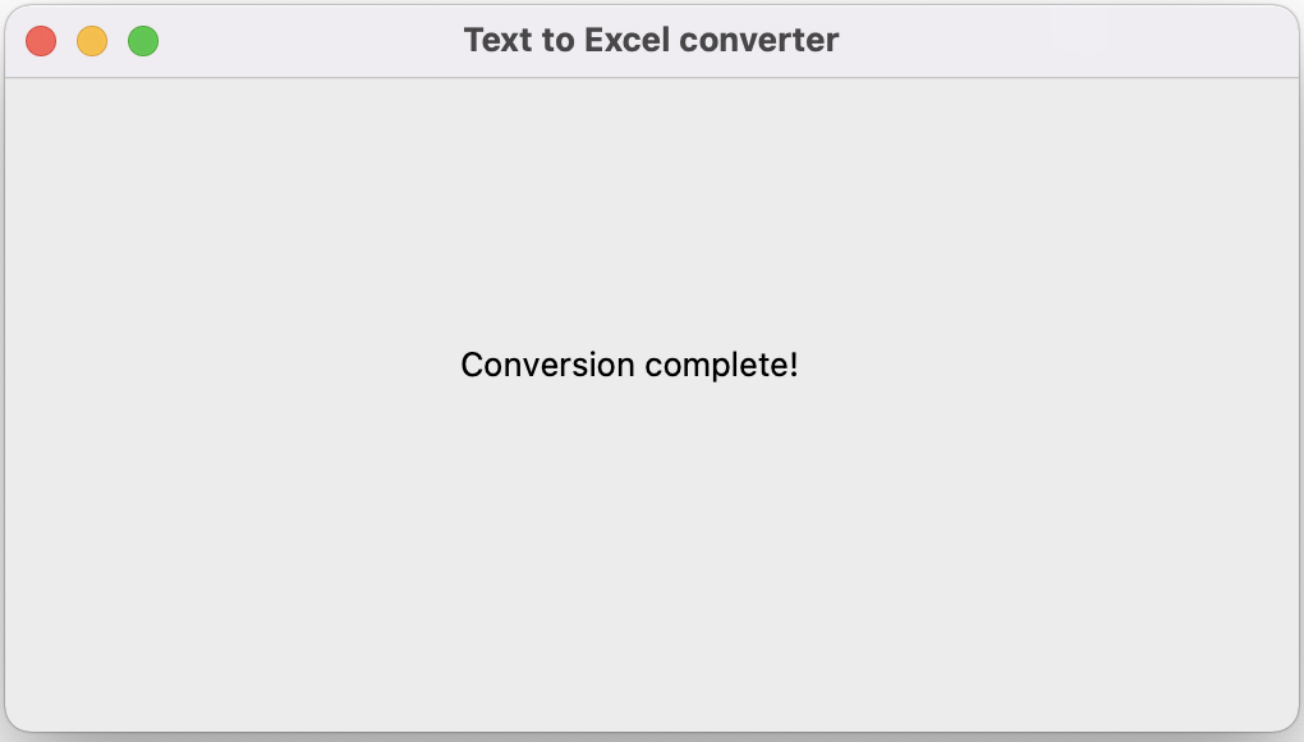
3. If there are no command line arguments being passed and if the config file doesn't have the information necessary to perform a conversion (input file missing, output file missing or both files missing) the user will be prompted to use a GUI when running the script.



3.1 Main Meniu

To use this GUI the user has to click the "Browse" button under the "Choose input file…" and pick the text file he desires to use as input. To choose the output file he has click on the "Browse" button under "Choose output file…" to pick the excel output file. The choosing of the files can be done in what order the user wants to do it in, and he can also choose another file for both, the input and the output, if he changes his mind. To perform the conversion the user has to click the "Convert!" button located at the bottom of the screen. If both, the input and the output file have been selected and

the conversion is successful the user will be prompted the message “Conversion complete!”.



3.2 Conversion completed message

If one of the files or both files have not been selected before pressing the “Convert!” button the user will receive a warning that tells him what he did wrong . He will then have the ability to continue where he was before clicking the button.

3.3 Output file not selected warning

3.4 Input file not selected warning

3.5 Both files not selected warning