**Barcode Generation and Labeling Guide**

**Part 1: Barcode Generation**

1. **\*\*Launch the program:\*\*** Start by launching the Barcode Generation program. You should see a graphical user interface (GUI) with a grid of input boxes.

2. **\*\*Enter the data:\*\*** You can manually type the barcode data into the input boxes. Each input box corresponds to one barcode. The GUI has a grid of 10 rows and 3 columns, which allows you to generate up to 30 barcodes at a time. The boxes are numbered from 1 to 30, starting from the top left and moving left to right, top to bottom.

3. **\*\*Import from Excel:\*\*** If you have an Excel file with the barcode data, you can also import it directly into the program. The Excel file should contain a single row of numbers (up to 30), each in a different column. Click on the "Import" button at the top of the GUI and select your Excel file to automatically fill the input boxes.

4. **\*\*Generate barcodes:\*\*** Once you've filled the input boxes, click on the "Submit" button at the bottom of the GUI to generate the barcodes. The program will create an image for each barcode and save it in the "barcodes" subdirectory within the program's directory. The images will be named according to the corresponding input box number: 'barcode1.png', 'barcode2.png', 'barcode3.png', and so on.

5. **\*\*Generate Excel report:\*\*** In addition to the barcode images, the program will also create an Excel file named "barcode\_directories.xlsx". This file contains two rows: the first row is the file names of the barcodes and the second row is the file paths to the corresponding barcode images.

**Part 2: Labeling in Word**

1. **\*\*Open the Word document:\*\*** In the same directory as the Barcode Generation program, there is a Word document named "barcodeTemplate.docx". This document is set up to display the barcode images on labels. Open this document. The following image will appear, select the “**Yes**” Option

A screenshot of a computer error

Description automatically generated with low confidence

2. **\*\*Refresh the labels:\*\*** To update the labels with the newly generated barcode images, you need to refresh the document. Do this by selecting all the images (press `Ctrl+A` to select all) and then pressing `F9` to refresh. A Microsoft word security notice will appear, again select ‘**YES’**

A picture containing text, screenshot, design

Description automatically generated

3. **\*\*Check the result:\*\*** After refreshing, each label should display a barcode image. Check to make sure the barcodes are displayed correctly.

4. **\*\*Print or save:\*\*** You can now print the labels directly from Word, or save the document for later use.