Introduction to QR Codes (1.5 hours)

The session will be organised in two parts (non-technical and technical):

**Part 1 (30 - 45 minutes) for all abilities –**

I will focus on explaining what the tools are doing and how computers can help automate the creation of hundreds, thousands or even tens of thousands of QR codes in plain English. We’ll look at the [gubbins](https://www.google.com/search?sca_esv=040257bbd66c8725&sca_upv=1&rlz=1C1GCEA_enGB1085GB1086&q=define+gubbins&sa=X&ved=2ahUKEwj8vbGCjZeHAxVlUkEAHaS1A9gQ7xYoAHoECAcQAQ&biw=1242&bih=547&dpr=1.55) behind this tool: <https://sheldonsworktools.streamlit.app/qr_code_generator> and we will have time for questions/suggestions

***Break – 10 minutes***

*People not wanting to code leave here please*

**Part 2 (60 minutes) for those who want to code –**

We will re-create the scripts, talk about the technical stuff, play with custom colours, mass generate, animate etc.

**If you want to code, you will need to do the following:**

* Understand the basics of [what a variable](https://www.perplexity.ai/search/explain-variables-and-data-typ-kHLRu23fR0mS0IAGLH.lwQ) is (name = “Sheldon” age = 33), basics of how to [import libraries](https://www.perplexity.ai/search/how-do-i-import-a-library-in-t-JZzjTLBQRwyhCPHS1nfjkg) and that it is possible to [read csv files in to a .py file](https://www.perplexity.ai/search/how-do-i-reada-csv-file-in-to-uYPh.Z._Sxy8k8bxrA5YAw)
* Have a way to code (either a replit account: <https://replit.com/signup> **OR** if you have a code editor, install both of the followinglibraries: *segno, qr-artistic* (instructions here: <https://www.perplexity.ai/search/write-some-step-by-step-instru-HzNSnsEsRZaiOO6KFZrHzA>)

**Scripts for session:**

1. Repl for single QR codes <https://replit.com/@skorpet/singleqrcode>
   1. QR Code Tool <https://sheldonsworktools.streamlit.app/qr_code_generator>
2. Repl for creating an unlimited\* amount of QR Codes automatically <https://replit.com/@skorpet/multipleqrcodes>
3. Github repo for creating animated QRs with gifs <https://github.com/sheldonmmu/qr_code_gen/blob/main/animated_qr_code_gen.py>

**Resources:**

* Segno <https://pypi.org/project/segno/>
* qr-artistic <https://segno.readthedocs.io/en/latest/artistic-qrcodes.html#>
* Fetching internet resources with urllib <https://docs.python.org/3/howto/urllib2.html>
* Find GIFs <https://giphy.com/>

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