u3a Computing Group

Alan Hopwood, 6 July 2023

Agenda

Welcome
Current News, Issues and Questions
Spreadsheet Refresher
Example: A graphical representation of medical records
Example: An analysis of (a huge amount of) tidal data for Weymouth flooding predictions
Example: An accounting programme allowing classification of transactions
Example: A domestic gas consumption and costing spreadshee
AOB and Follow up

Future Topics

Topic	Votes
Artificial intelligence /neural networks	4
Streaming - the best way to go	4
Computer languages - functionality vs ease of use	4
Laptop vs Tablet	4
Microchip design	2
Being safe on the internet	2
History of computer development	2
Bluetooth	1
Digital communications / information encoding	1
Chromebook	1
Mac vs Windows vs Linux	1
Printing from an Android tablet	1

Presentation
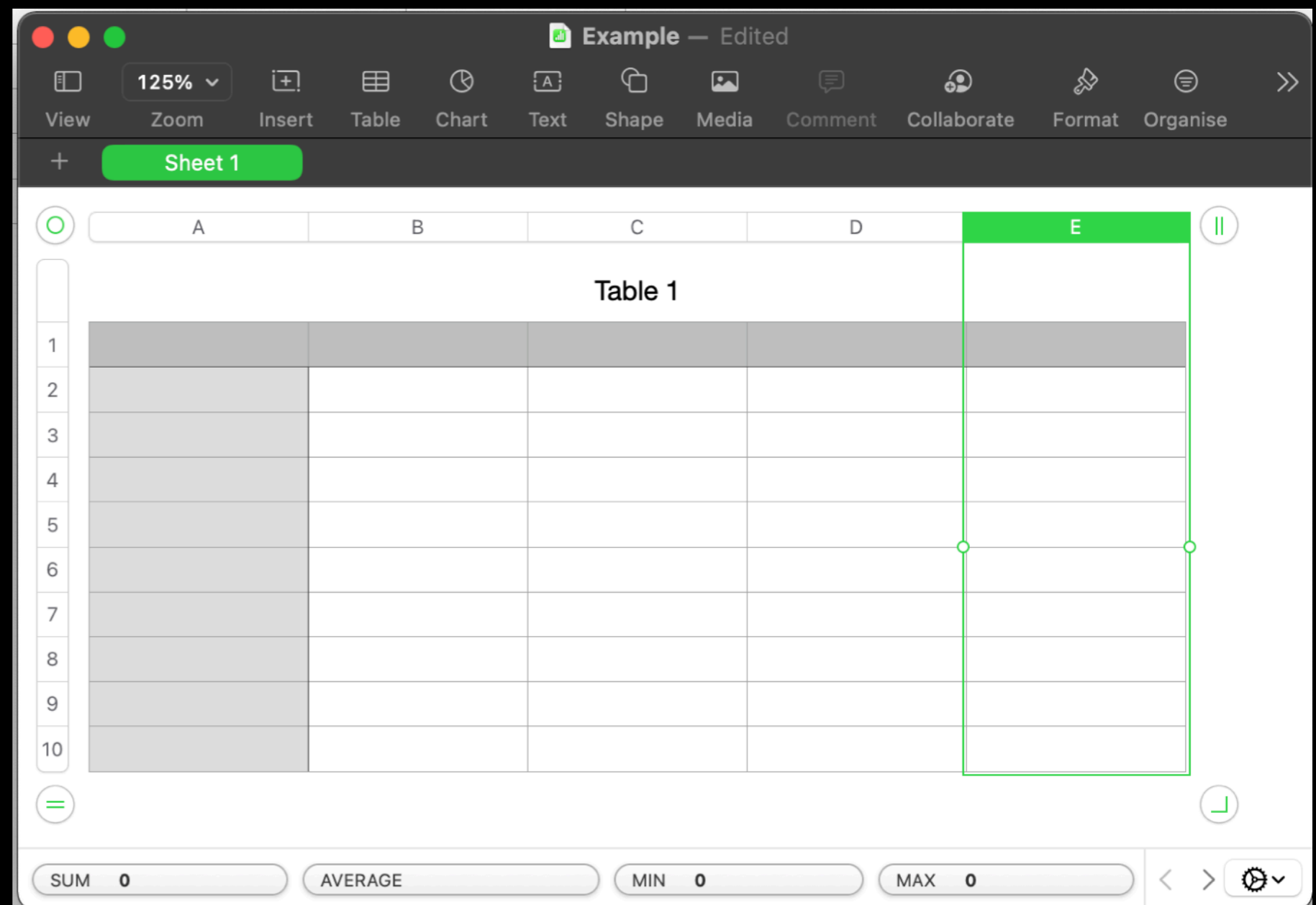# Spreadsheet Refresher

Spreadsheet History

Spreadsheet refresher

- We have organised data into tables, grids of columns and rows since at least 1800 BC (Babylonian clay tablets)

- A number of mainframe based spreadsheet type programs.

- The first widely known spreadsheet program was VisiCalc for the Apple II (1979)

  - "If VisiCalc had been written for some other computer [than the Apple II] you would be interviewing someone else right now."
    — Steve Jobs,

- Then came SuperCalc, Lotus 1-2-3 ….

- Microsoft released Excel in 1985 and gradually dominated

- Currently available: Excel, Google Sheets, LibreOffice Calc, Apple Numbers, OpenOffice ……

Tables, Cells, Rows and Columns
Spreadsheet refresher

- A spreadsheet is a table of cells laid out in rows and columns:

Information in Cells

Spreadsheet refresher

- Each cell can contain information

- The type of information is defined either by you or automatically

- E.g.:
  - Number
  - Currency
  - Text
  - Date & Time
  - Duration

formula & Functions

Spreadsheet refresher

Cells can also contain a formula and display the formula results

- All the normal numeric functions

- logic statements

- Look up and reference

- manipulate text, dates and time.

…hundreds

Wrap up
Spreadsheet refresher

- All spreadsheet programs are quite similar

- All the normal cut and past, formatting type capability.

- Can be kept simple or built up into very complex systems (an Excel Workbook can contain multiple spreadsheets as tabs, with cross referencing.)

And now the Examples

The examples were shown on screen directly from Excel and are not available as part of the presentation.