Automating Excel with Office Scripts

CONTRASTING OFFICE SCRIPTS TO OTHER OFFICE AUTOMATION TECHNOLOGY

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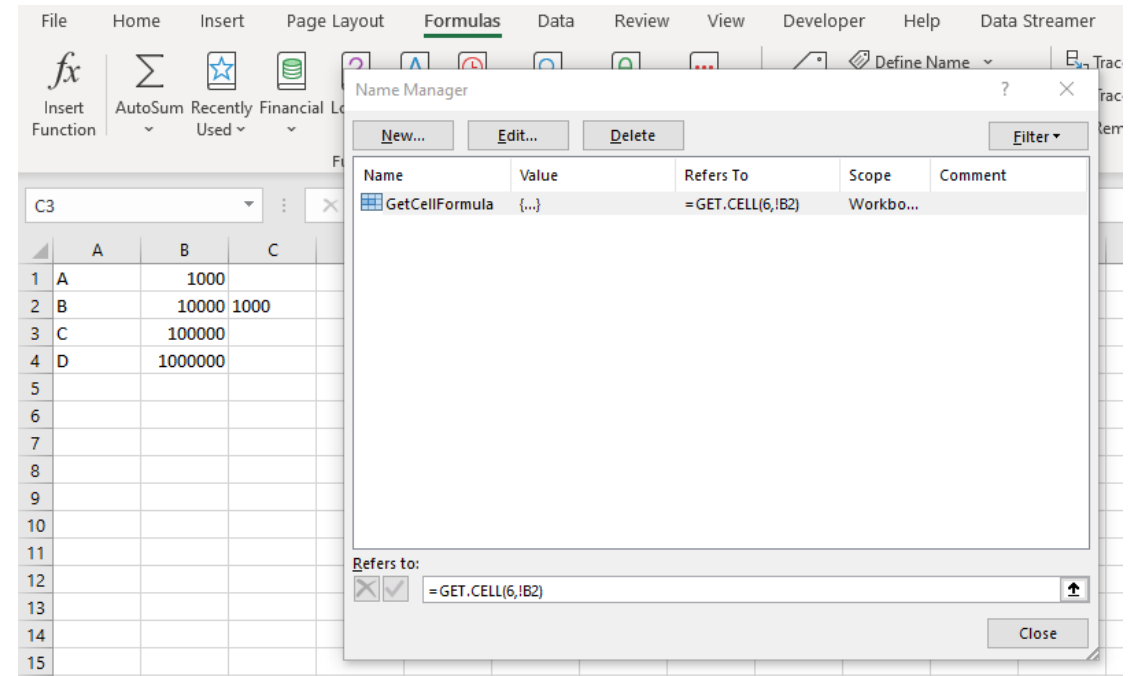@Macrordinary_CA http://macrordinary.ca

In the Beginning...

Excel 1 (Macintosh)
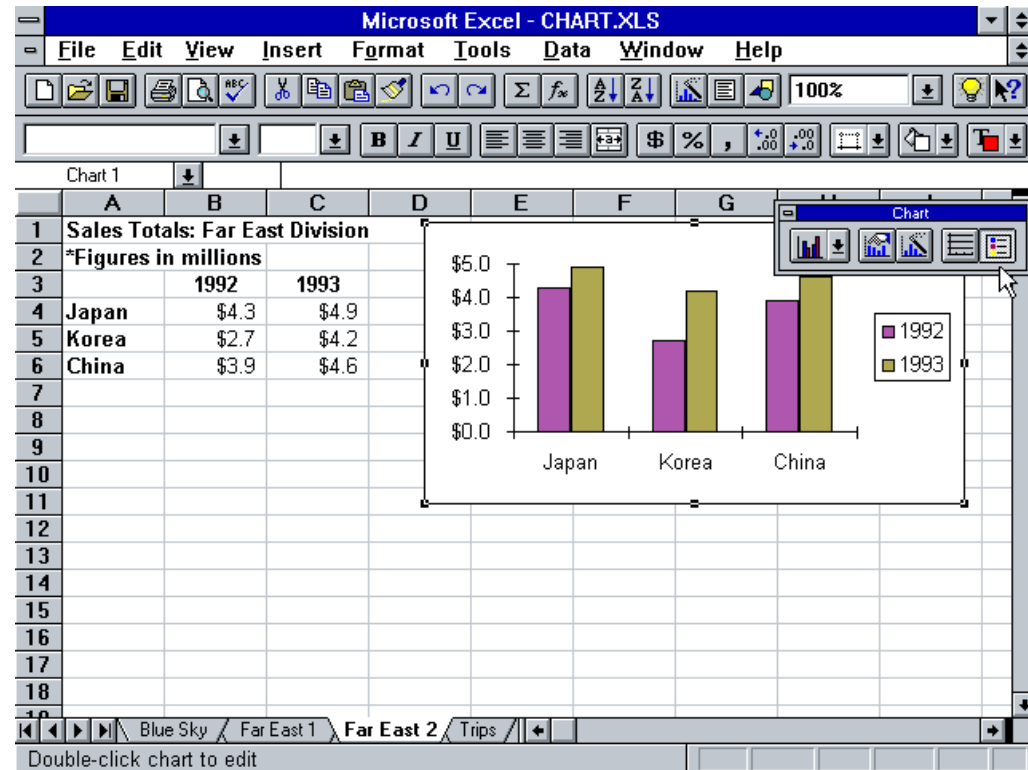
Released in 1985

Custom macro language

Excel 4 Macros (*.xlm)
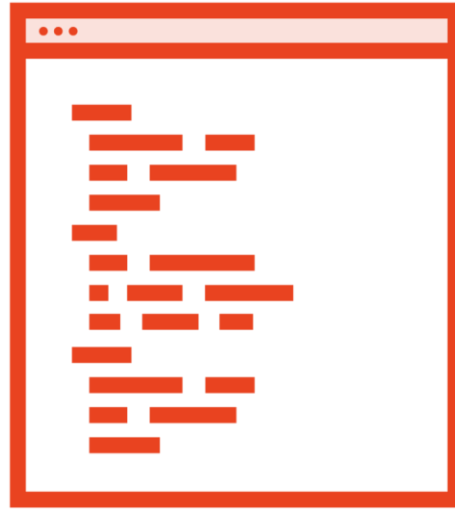
Excel v5.0

Released in 1993

Visual Basic for Applications

VBA = Excel Macros

Easy to record

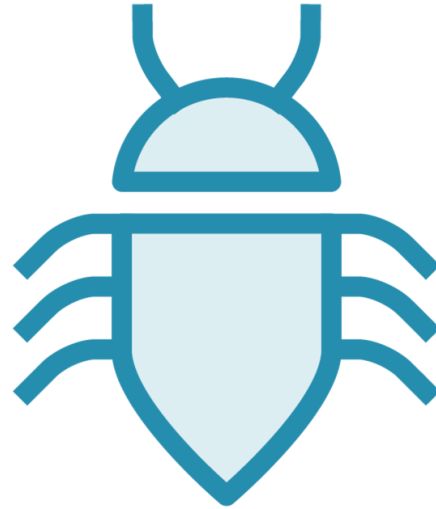**Able to create code**

Not standalone applications

VBA is the most dreaded programming language by developers.

Why Is VBA Hated?

Poorly written code

Easy to add malicious code

Only in desktop client

What Other Options Exist?

COM / VSTO Add-Ins

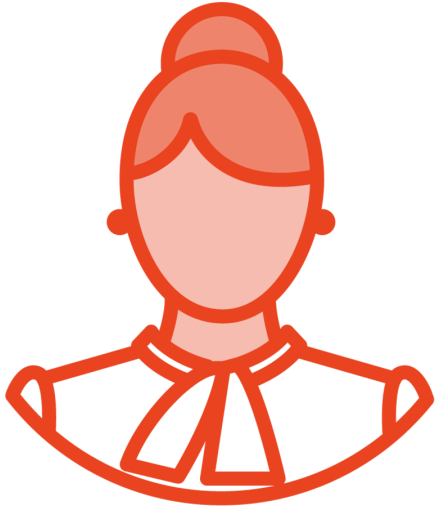Office Add-ins

Power Query / M

Power Pivot / DAX

Gaps in Existing Framework
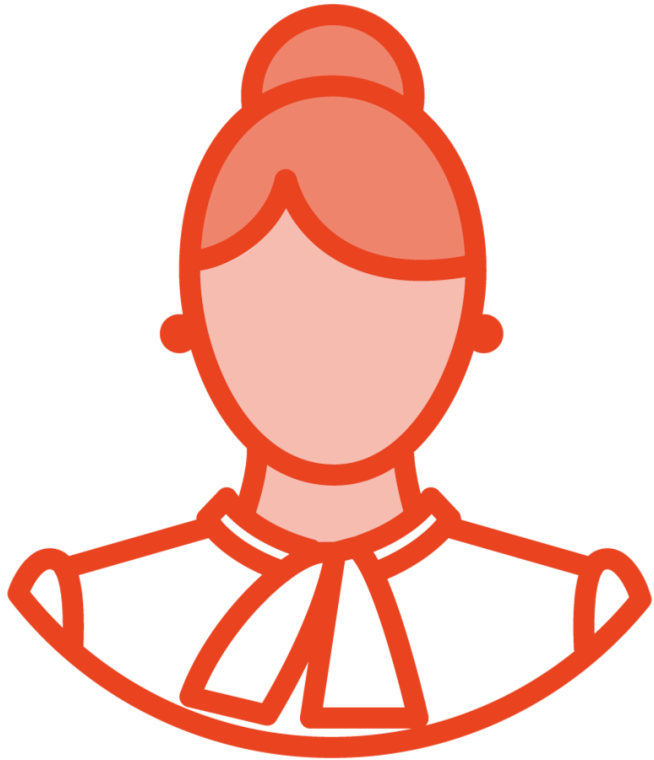
Two Types of People Who Automate

Business Users / Citizen Developers

IT Department / Professional Developers

What Business Users Want

Easy to Develop

Availability of All Functionality

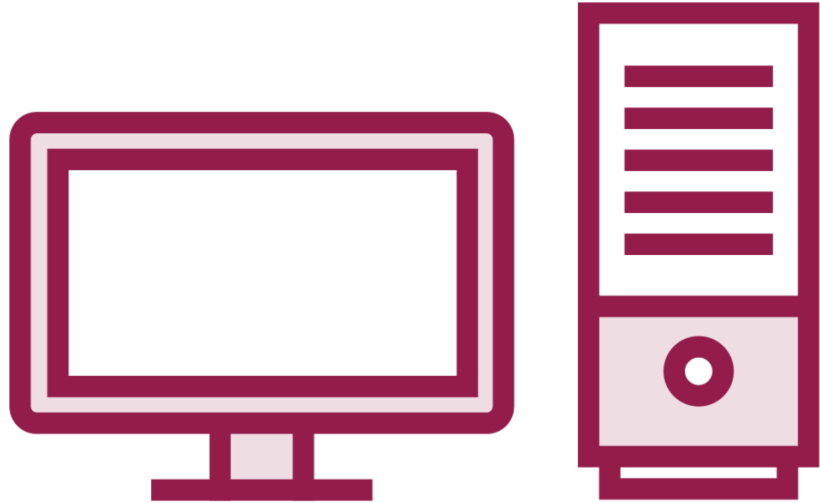Easy to Deploy

What IT Users Want

Developing vs. Debugging

Open Source

Straightforward Syntax

Low Security Risk

Two Possible Environments

Installed on Workstation
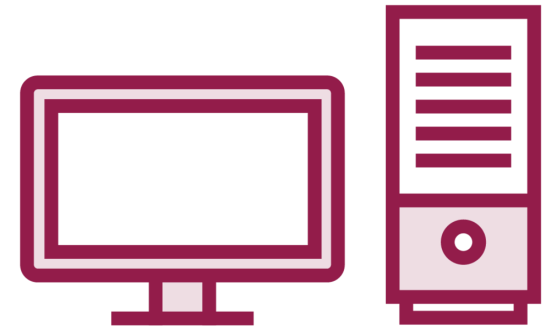
Browser / Mobile Application

Visual Basic for Applications

Macro programming

Designed for business users
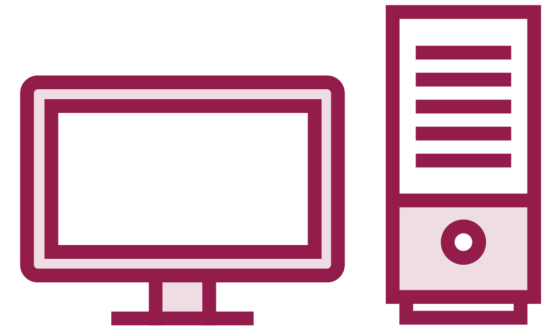
Only on desktop

COM / VSTO Add-ins
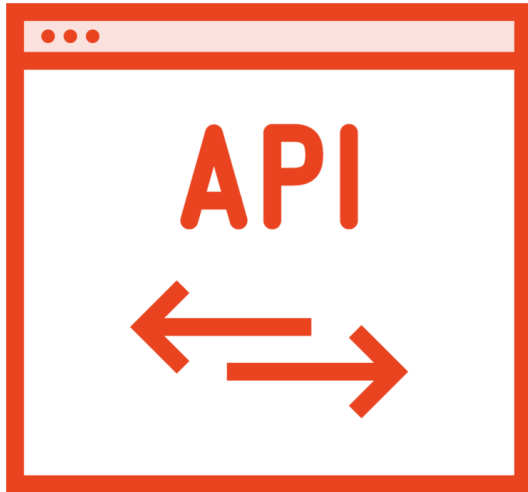
Enterprise level Office extensions

Designed for professional developers

Only on desktop

Office Add-ins

Embedded web applications

Designed for professional developers

Available on non-desktop devices

Gaps in Existing Framework
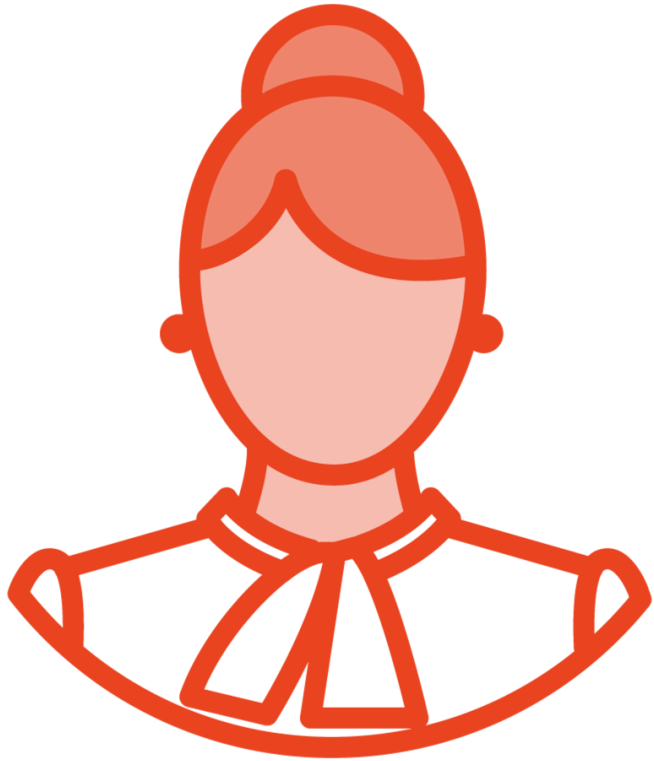
VBA

COM / VSTO Add-ins

Office Add-ins

?????

Introducing Office Scripts

Who Are Office Scripts For?

Designed for business users

Easy to record

No IDE
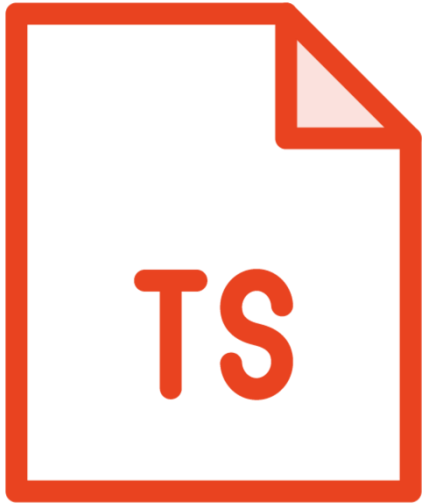
No installation

Where Can Office Scripts Be Found?

No need for Office install

Runs on Excel Online

Uses most modern browsers

What Are Office Scripts?

Written in TypeScript
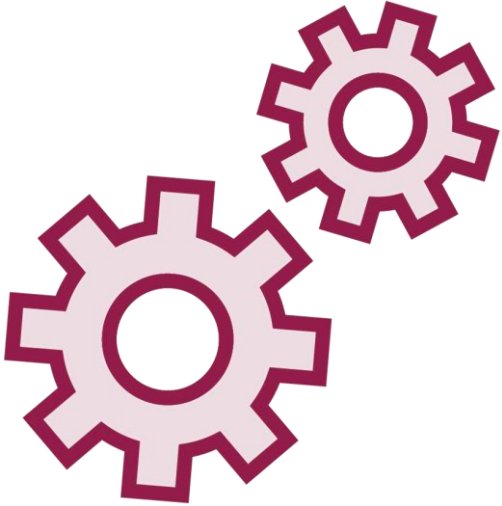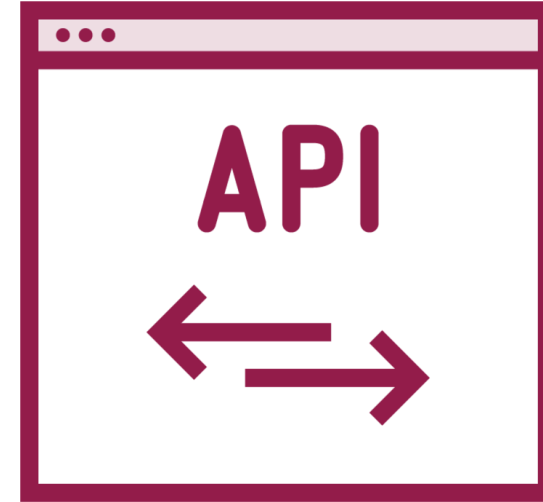
Macro Recorder

EASY

Single Main Method
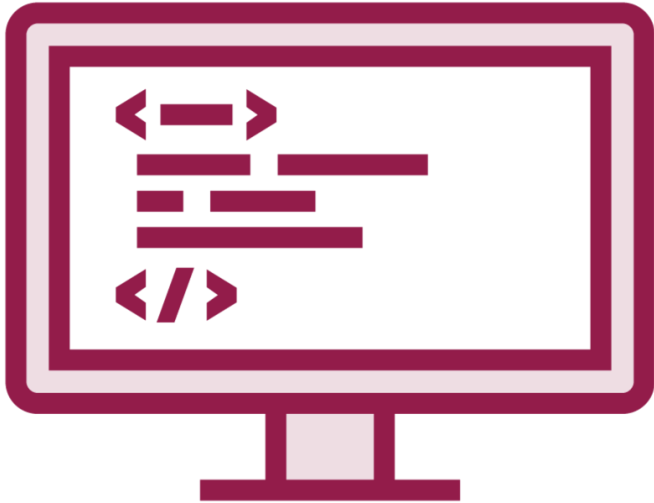
When Do I Need an Office Add-in?

Need to Respond to Events

Need Common APIs

When Do I Need VBA?

Function Not Available

No Enterprise License

Summary

History of Excel Automation

Audiences for Automation
- Developer vs. Business User
- Desktop vs. Web

Introduction to Office Scripts