

# **Proof in Practice: Building Trustworthy Data Systems with Google Tools**

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May 14, 2026

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# Session objectives

1

Expose participants to examples of tools built in the Google Suite that automate processes and streamline data collection.

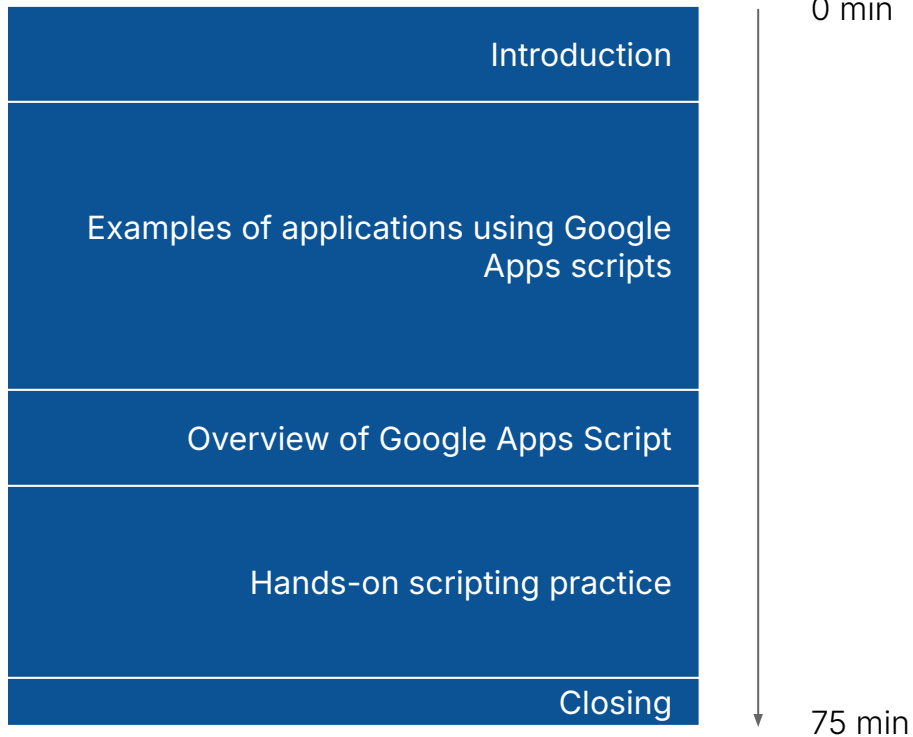
2

Participants will articulate how tools built in the Google Suite can help their organization improve data collection.

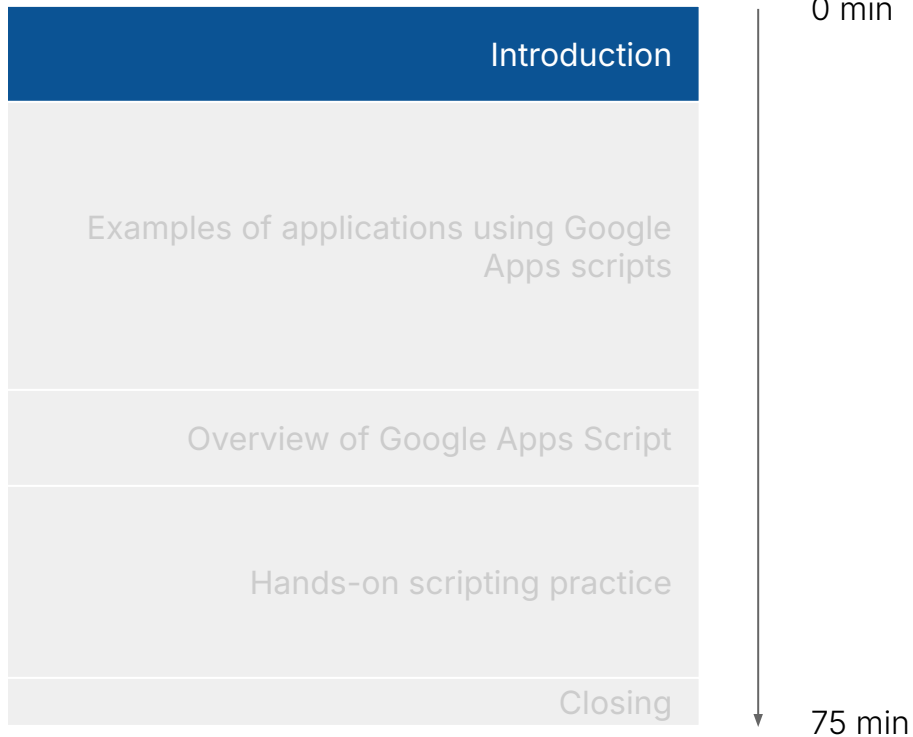
3

Participants will have a basic understanding of Google Apps Script.

# Agenda



# Agenda



## Quick 2-question survey

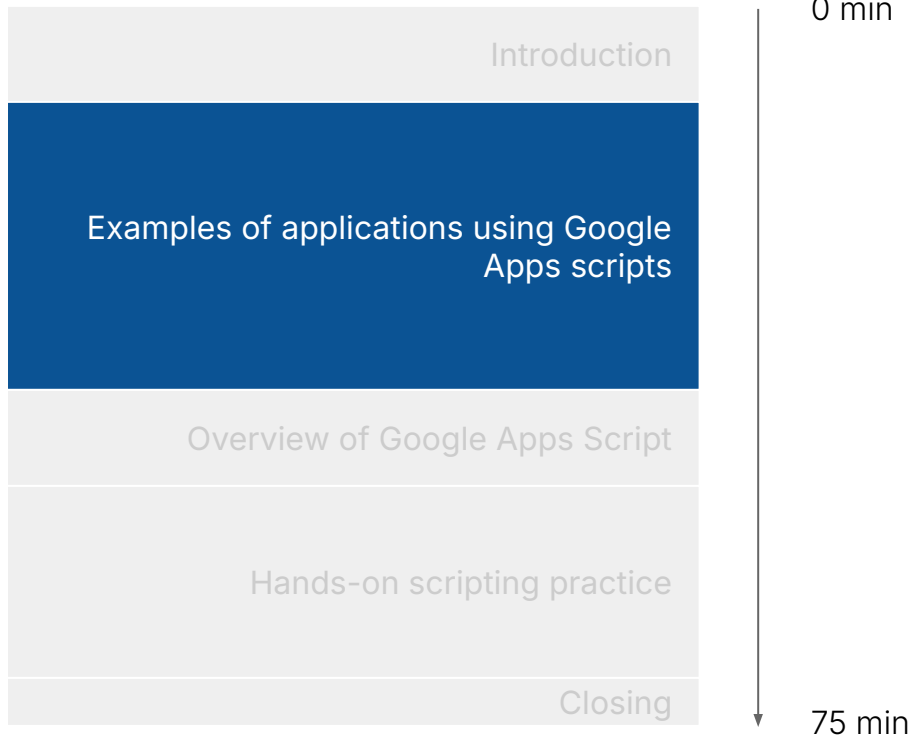


<https://bit.ly/3O87YXy>

Prompting question

How does your organization currently use the Google Suite (including Docs, Sheets, Forms, and Drive)?

# Agenda



# Example 1 - Instructional Coaching

## The Context

An instructional coaching organization (Diane Sweeney Consulting) helps school districts implement student-centered coaching. They provide the training (e.g., on-site training) and resources (e.g., books, frameworks, etc).

## The Problem

Most coaches were using paper and pencil to track their work and the districts did not have a way to summarize the work of coaches at a school or across many schools.



## The Solution

A system that allows coaches to enter their coaching cycles via a Google Form and the data is tracked visually on a Google Sheet dashboard.

This also allows a district leader to summarize coaching data across schools.

# Example 2 - Teacher Observations

## The Context

ReNEW Charter schools used a 4-domain rubric called the "Assessment of Instructional Mastery" when conducting classroom observations of their teachers.

## The Problem

The ReNEW team did not have a great process for collecting observation data nor summarizing these data across meaningful dimensions.



## The Solution

A system that allows ReNEW leadership to easily enter classroom observation data via a Google Form and visualize these data on a dashboard.

This provides insights for the observers, school leaders, and CMO leadership.

# Example 3 - Student Data Tracker

## The Context

A literacy coaching organization, Lit, supports dozens of clients and provides Google spreadsheet trackers aligned to Amplify Core Knowledge Language Arts (CKLA).

## The Problem

The spreadsheet is great for data entry, but is “locked down” so clients don’t mess up any formulas. This makes it difficult for teachers to use the data to make instructional decisions (e.g., identifying small groups).



## The Solution

Adding custom functionality via Google sidebars to the tracker so teachers can make better instructional decisions.

Prompting question

What data collection processes does your organization need to improve? What ideas do you have for something that could be built using Apps Script?

**5 min**

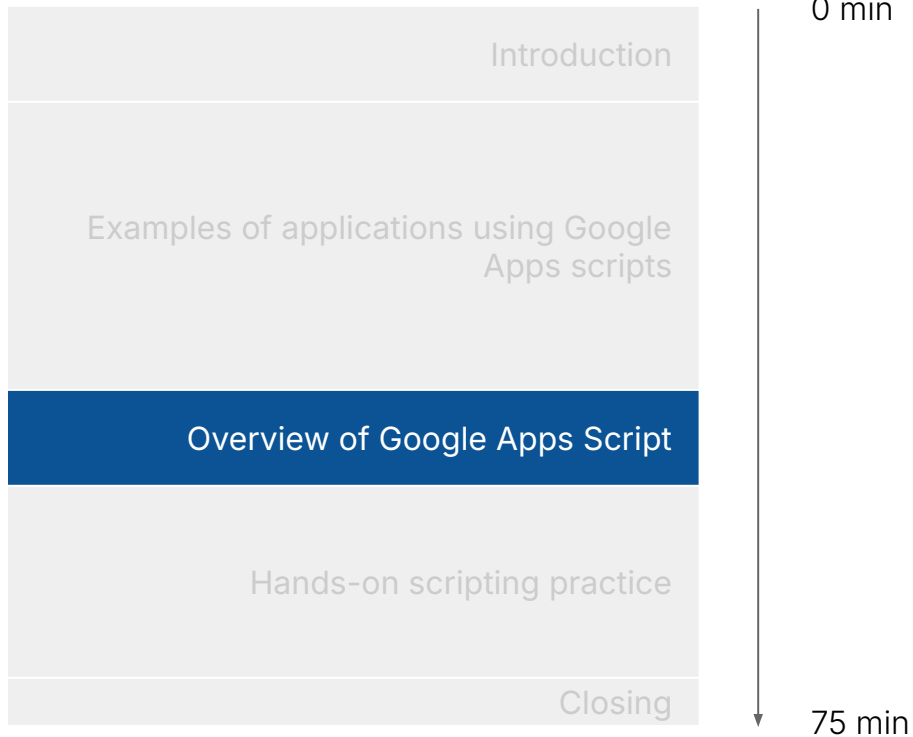
Discuss at your table

+

**5 min**

Share with group

# Agenda



# Introduction to Google Apps Script

Thinking  
programmatically...

...anything that you can do with the click of a mouse, you can do programmatically!

Key terms

**Classes** - templates for creating objects

**Methods** - procedures associated with objects

Documentation

[Google Apps Script](#) - technical documentation about how Google Apps Script works

# Types of Scripts and Triggers

## Types of Scripts

- Bound to Google Suite Documents
- Standalone

## Types of Triggers

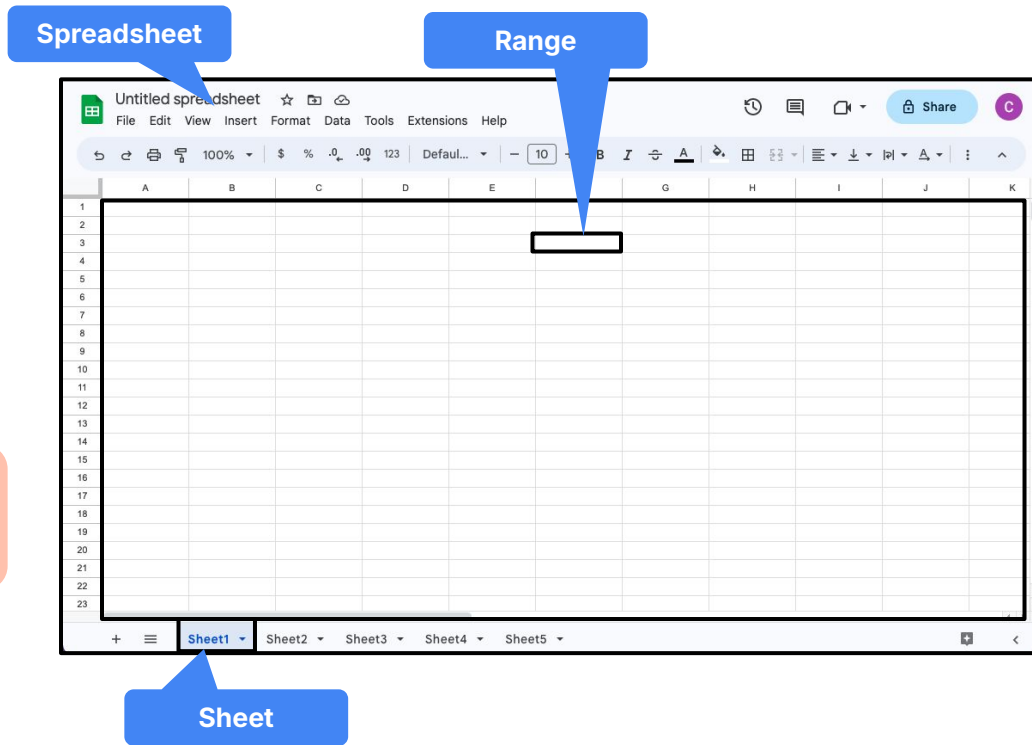
- Event-driven
  - Form submission
  - Opening a doc
- Time-driven
  - Hourly / daily / weekly

# Spreadsheet Services

## A Few Important Classes

- Spreadsheet
- Sheet
- Range

*What are a few methods you can call on each class?*



# Spreadsheet Services

## Examples of methods

### Spreadsheet methods

- `addEditor(user)`
- `copy(name)`
- `insertSheet()`
- `getUrl()`
- `rename(newName)`

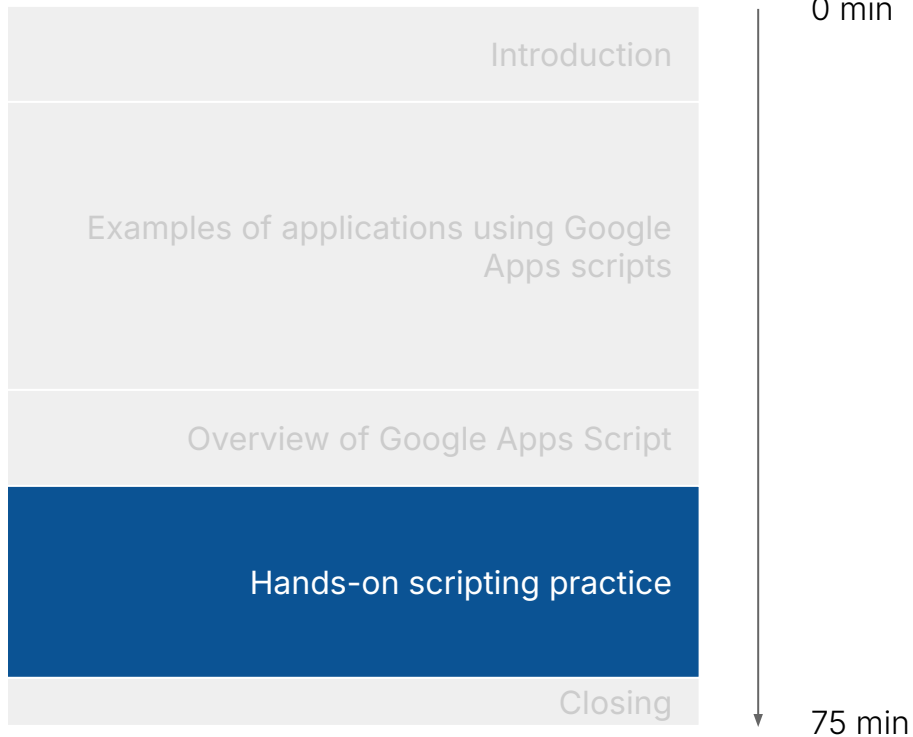
### Sheet methods

- `deleteRow()`
- `hideColumn()`
- `getLastRow()`
- `protect()`
- `setTabColor(color)`

### Range methods

- `getValue()`
- `setValue()`
- `clear()`
- `setFormula()`
- `getFontLines()`

# Agenda



# Hands-on Scripting Practice

## Practice

We are going to create a script that is bound to a spreadsheet. Our script will:

- Add students and their scores to a list of data
- Insert a column to the dataset
- Conditionally format a cell based on its value

## Advanced Practice

If you want a challenge, here are some ideas for more advanced practice using the script editor:

- Add 10 more students to the list using a "for" loop
- Copy "Sheet1" and rename it
- Sort the dataset
- Add a border to the dataset



***Please open up a new Google sheet and create the following simple table in cells A1:B4***

Name	Score
Student 1	60
Student 2	95
Student 3	85

# Reference code for our practice

```
function myFunction() {
  var ss = SpreadsheetApp.getActive();
  var sheet = ss.getSheetByName('Sheet1');

  // This adds a 4th student to the list
  var targetRange = sheet.getRange(5,1);
  targetRange.setValue('Student 4');
  targetRange.offset(0, 1).setValue(70);

  // This adds a student to the bottom of the list
  var lastRow = sheet.getLastRow();
  var newTargetRow = lastRow + 1;
  targetRange = sheet.getRange(newTargetRow, 1);
  targetRange.setValue('Student 5');
  targetRange.offset(0, 1).setValue(90);
}
```

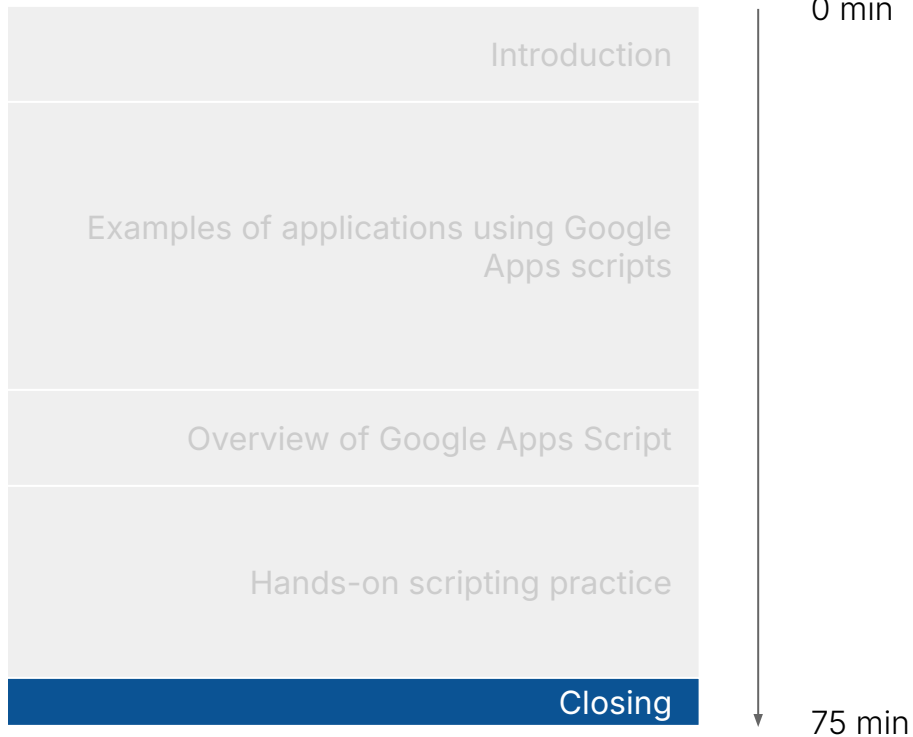
```
...continued...

// This inserts a column
sheet.insertColumnAfter(1);
targetRange = sheet.getRange(1, 2);
targetRange.setValue('')

// This sets the cell color to green for scores >= 80
for (var i = 2; i <= 6; i++) {
  var targetCell = sheet.getRange(i, 3);
  var score = targetCell.getValue();
  if (score >= 80) {
    targetCell.setBackground('green');
  }
}
}
```

[Spreadsheet Service documentation](#)

# Agenda



Closing questions

What are a few key takeaways from this session on Google Apps Script?

Are there any questions you have?

# Contact Information & References

## Contact Info

Email: [chris.cutrona@edsightful.com](mailto:chris.cutrona@edsightful.com)

Website: [www.edsightful.com](http://www.edsightful.com)

## Google Apps Script Resources

[Google Apps Script](#) - comprehensive technical documentation about how Google Apps Script works

[Stackoverflow](#) - a great site for developers to troubleshoot and ask technical questions