Workspace Automation
For PgMs/PjMs

04/10

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Automate with Apps Script	2 mins
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Intro to GenAI Programming	10 mins
End to End WSR Automation - Hands On	20 mins
Explore Possibilities	5 mins

Objectives of this Session

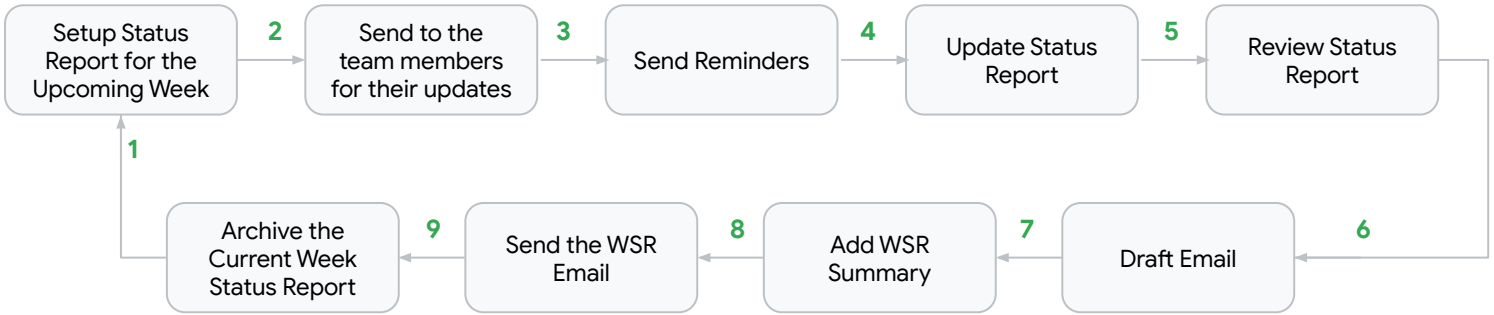
Objectives

At the end of the session, you should be able to

- Explore **use cases** that can be automated in your job function
- Architect **Apps Script** to automate your workflows
- Understand **basics of GenAI,** it's Input parameters
- Use **GenAI programmatically** in your job function

Weekly Status Reporting Workflow

We will use this workflow as an example for automation with App Script (and GenAI)



Survey Results:

- **85.7%** of the respondents **use Slides** to send Customer Weekly Status Reports and **send them in email**
- **71.4%** spend upto 1 hour **drafting the status report email** and **setting up the status report for the following week**
- **28.6%** spend more than 2 hours for the same task
- **40%** spend up to 2 hours **sending reminders to the team**, in addition to thinking about sending the reminders
- **60%** spend up to 1 hour for the same task

Automate Workspace with Apps Script

Apps Script

- Google Apps Script is a cloud-based development platform that extends the functionality of Google Workspace applications using JavaScript.
- With Apps Script, you can automate tasks, create custom functions, and even build add-ons and web apps, all designed to streamline your work within the Google Workspace environment.

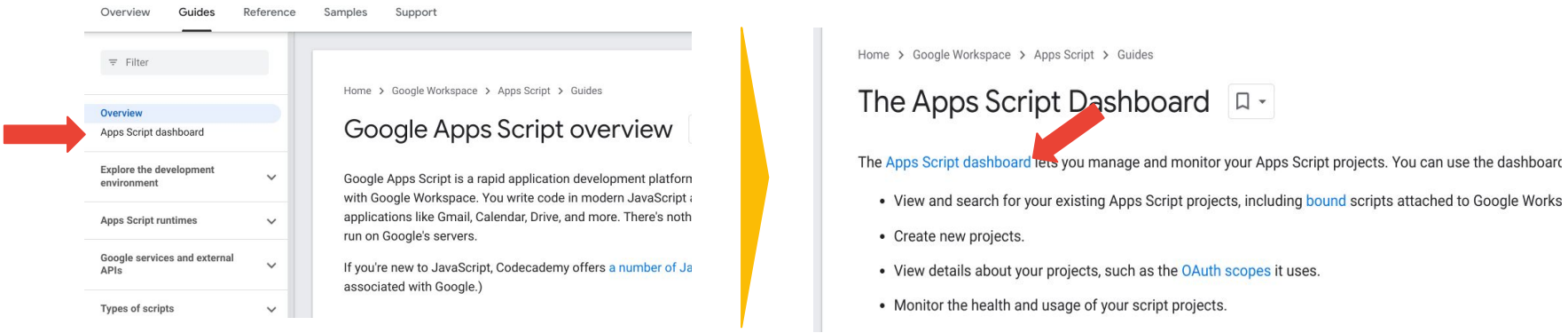
Key Capabilities

- Automate tasks across Google products (Gmail, Sheets, etc.)
- Create custom Google Sheets functions
- Build add-ons for Docs, Sheets, Slides, Forms
- Develop basic web applications
- Integrate with other Google services

Hands On

Apps Script

- Visit go/appscript



Apps Script

Let us **Send an email to yourself** through Apps Script

Steps:

1. Click on New Project and you will see code.gs
2. Name your Project
3. Click on the + button next to “Files” and choose “Script” and name the file scriptOne
4. **Visit:** go/appscriptforpgms
5. Copy Script 1, go back to the Editor, select all and paste
6. Save the file (Floppy disk icon)
7. Now click Run
8. Go check your inbox

Apps Script

Let us **Send an email to yourself along with a link to your file** using Apps Script

Steps:

1. Click on the + button next to “Files” and choose “Script” and name the file scriptTwo
2. **Visit:** go/appscriptforpgms
3. Copy Script 2, go back to the Editor, select all and paste
4. Save the file (Floppy disk icon)
5. Now click Run
6. Go check your inbox

Apps Script

Setup a trigger to send recurring email

Steps:

1. On the left side of the Apps Script window
2. Click on “Triggers”
3. On the bottom right corner, click on “Add Trigger”
4. Choose the function within the current Project you want to run
5. Select event type as Week timer
6. Select day of week and time of day as per your need
7. Create as many triggers as you want

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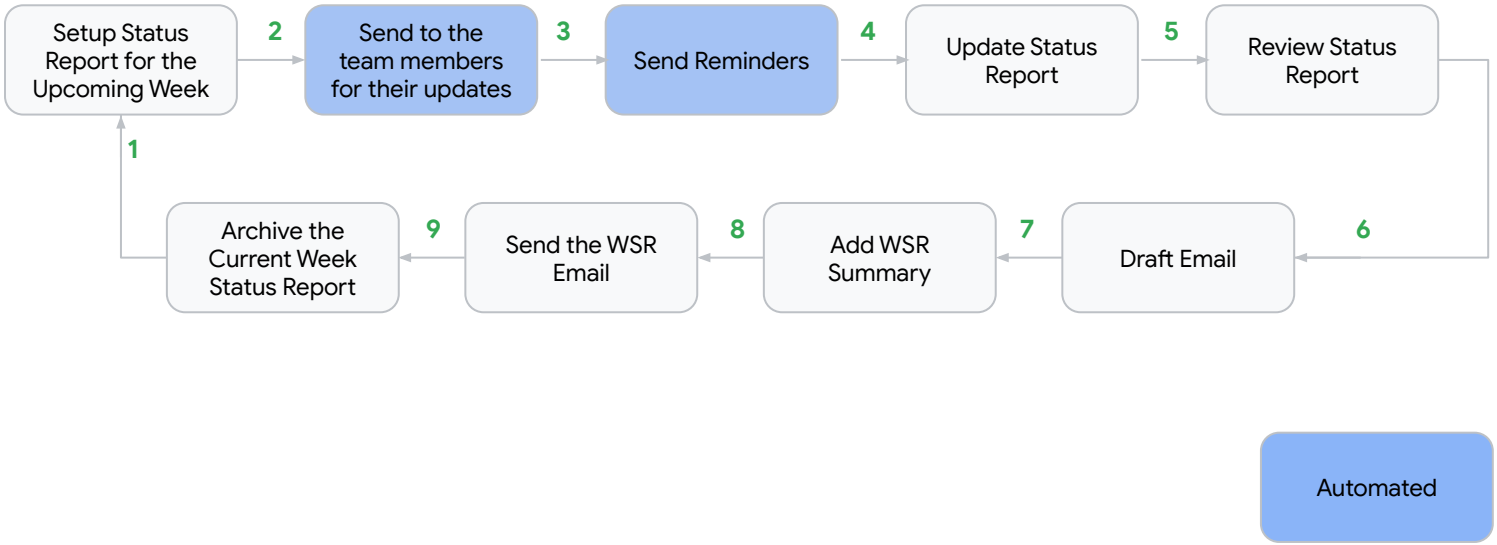


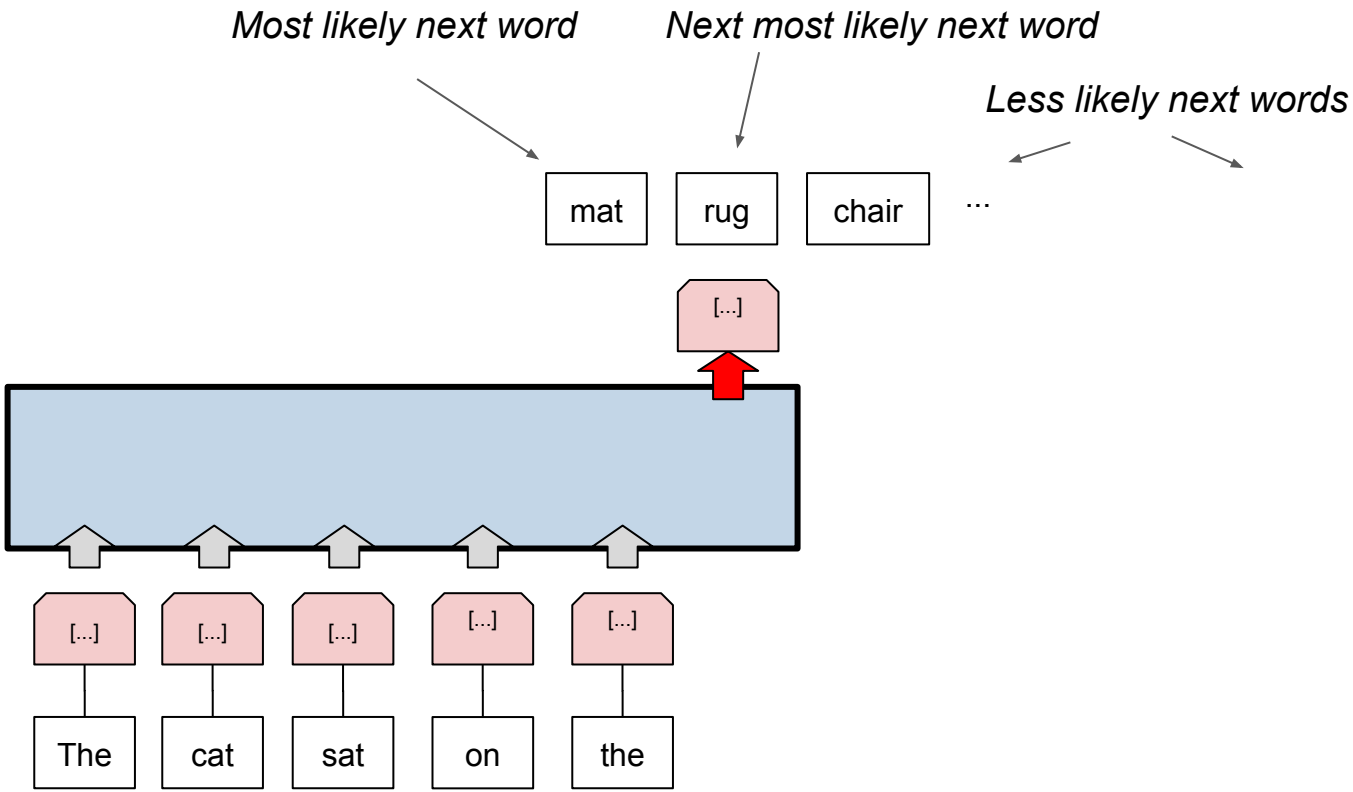
Introduction to GenAI Programming

The world's smallest LLM (XXXXS)

Let us say, the only data that you trained your model with is this …

The cat sat on a mat
The cat sat on a chair
The cat sat on a rug
The cat sat on a mat
The cat sat on a rug
The cat sat on a mat

When asked to predict the next word ...



Decoding Strategies

INPUT The garden was full of beautiful ....

OUTPUT [*flowers (0.5), trees (0.23), herbs (0.05) ... bugs (0.03)*]

Which word do we return? 🧐

Greedy Decoding

INPUT The garden was full of beautiful ....

OUTPUT [*flowers (0.5), trees (0.23), herbs (0.05) ... bugs (0.03)*]

Select word with highest probability

Random Sampling

INPUT The garden was full of beautiful ....

OUTPUT [*flowers (0.5), trees (0.23), herbs (0.05) ... bugs (0.03)*]

Randomly sample over the distribution

Temperature

Temperature is a number used to tune the degree of randomness.

Lower temperature →less randomness

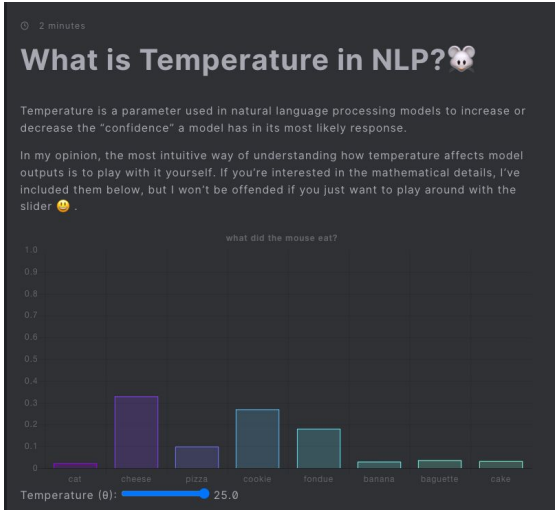
- Temperature of 0 is deterministic (greed decoding)
- Generally better for tasks like q&a and summarization where you expect a more “correct” answer
- If you notice the model repeating itself, the temp is probably too low

High temperature → more randomness

- Can result in more unusual (you might even say creative) response
- If you notice the model going off topic or being nonsensical, the temp is likely too high

Temperature is a configurable input in most LLM APIs

Temperature



A nice visualization of temperature:

https://lukesalamone.github.io/posts/what-is-temperature/

Top K

[*flowers (0.5), trees (0.23), herbs (0.05) ... bugs (0.03)*]

Only sample from top K tokens

K = 2

Top P

[flowers (0.5), trees (0.23), herbs (0.05) ... bugs (0.03)]

Only sample from top P tokens

P = 0.73

Zero-shot Prompting vs Few-shot prompting

https://aistudio.google.com/app/prompts/new_chat

Apps Script

Let us **Send an email to yourself with a GenAI joke** to your file using Appscript

Steps:

1. Click on the + button next to “Files” and choose “Script” and name the file scriptThree
2. **Visit:** go/appscriptforpgms
3. Copy Script 3, go back to the Editor, select all and paste
4. Save the file (Floppy disk icon)
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Weekly Status Report Automation

Weekly Status Reporting Workflow

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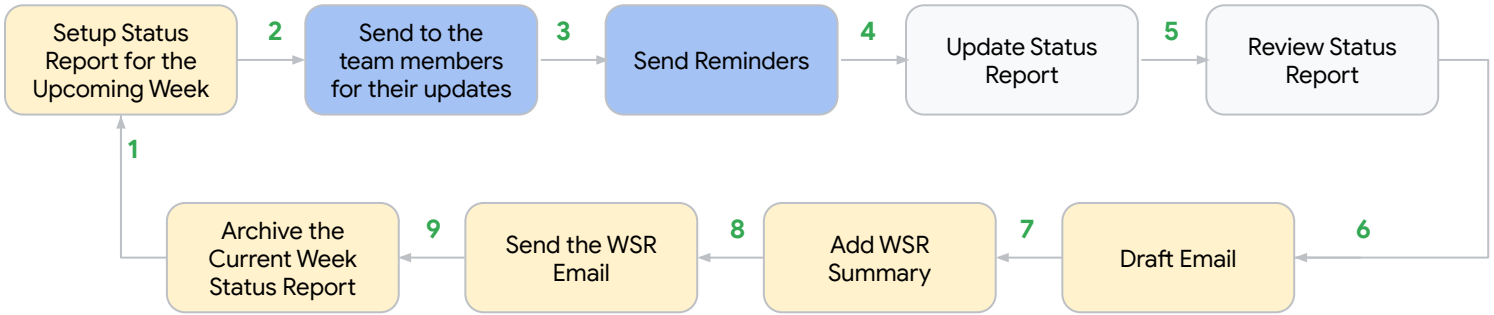

Automated

Focus of this Section

1) Read the status updates
2) Use GenAI to create a summary for the body of the email

1) Draft the message
2) Add email ids
3) Attach the status report in pdf format

Apps Script

Steps:

1. Click on the + button next to “Files” and choose “Script” and name the file scriptFour
2. **Visit:** go/appscriptforpgms
3. Copy Script 4, go back to the Editor, select all and paste
4. Save the file (Floppy disk icon)
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Code Walkthrough

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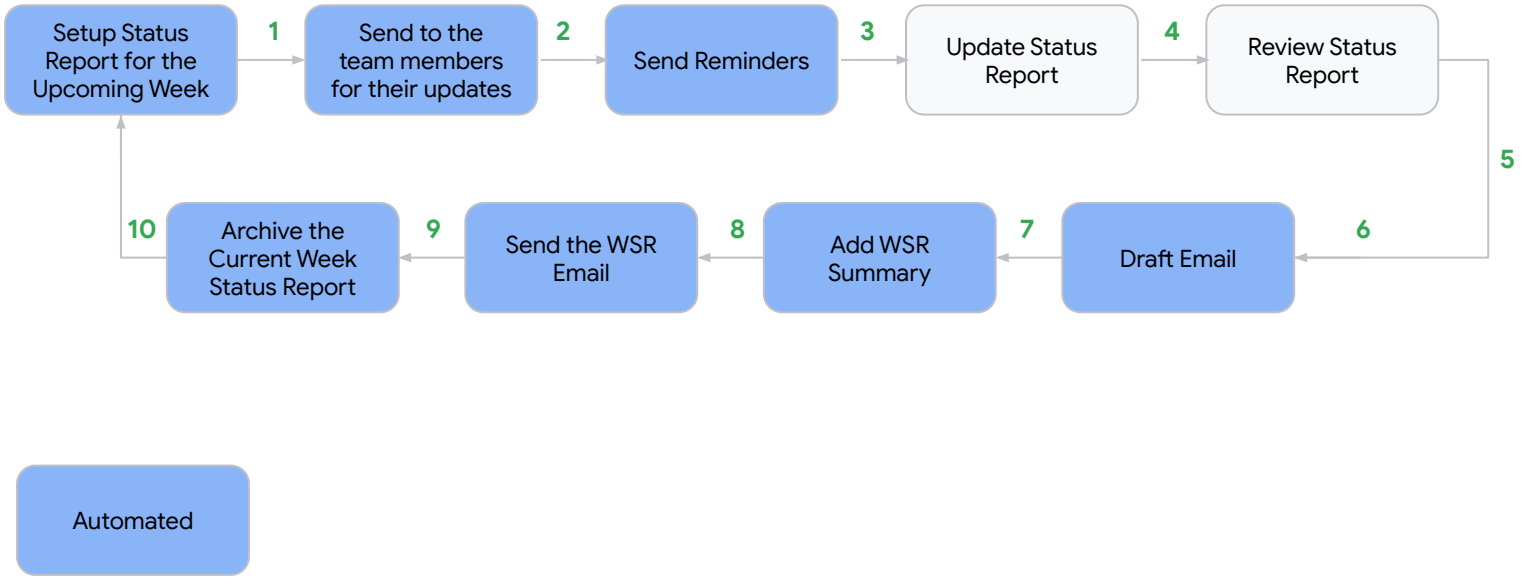

Explore Possibilities

go/iamhere

Join workspace-wizards@google.com
[Google Group]