
Professional Certificate in Google Apps Script Fundamentals

Introduction to Google Apps Script

Google Apps Script (GAS) is a JavaScript-based scripting language developed by Google for light-weight application development in the G Suite platform. This platform includes Gmail, Google Sheets, Google Slides, Google Forms, and Google Docs, among others. GAS allows users to automate tasks, create custom functions, and integrate these applications with other services. This vocabulary list will cover key terms and concepts related to the Introduction to Google Apps Script course in the Professional Certificate in Google Apps Script Fundamentals.

1. **Google Apps Script (GAS)**: A JavaScript-based scripting language developed by Google for light-weight application development in the G Suite platform.
2. **G Suite**: A collection of productivity and collaboration tools developed by Google, including Gmail, Google Sheets, Google Slides, Google Forms, and Google Docs, among others.
3. **Script**: A set of instructions written in Google Apps Script that automates tasks, creates custom functions, and integrates G Suite applications with other services.
4. **Project**: A collection of scripts and files that make up a single Google Apps Script application.
5. **Code Editor**: The interface where users write and edit Google Apps Script code.
6. **Triggers**: Automated events that run a script at a specific time or in response to a specific action.
7. **Functions**: Reusable blocks of code that perform a specific task.
8. **Libraries**: Reusable code that can be shared across multiple projects.
9. **Variables**: Containers that hold data and values used in a script.
10. **Data Types**: Different categories of data, including numbers, strings, booleans, and arrays.
11. **Operators**: Symbols that perform operations on variables and values.
12. **Control Structures**: Code blocks that control the flow of a script, including if-else statements and loops.
13. **Arrays**: Lists of values that can be accessed and manipulated using index numbers.
14. **Objects**: Complex data structures that contain properties and methods.
15. **Classes**: Templates for creating objects with specific properties and methods.
16. **Methods**: Functions that are associated with objects.
17. **Properties**: Values that are associated with objects.
18. **Exception Handling**: Code blocks that handle errors and exceptions that occur during script execution.
19. **Google Sheets API**: An API that allows Google Apps Script to read and write data in Google Sheets.
20. **Google Docs API**: An API that allows Google Apps Script to read and write data in Google Docs.
21. **Google Slides API**: An API that allows Google Apps Script to read and write data in Google Slides.
22. **Google Forms API**: An API that allows Google Apps Script to read and write data in Google Forms.
23. **OAuth 2.0**: A protocol for authorizing access to protected resources, such as user data.
24. **JDBC**: An API that allows Google Apps Script to connect to and manipulate data in external databases.

25. **Webhooks**: User-defined HTTP callbacks that are triggered by specific events.
26. **Google Drive API**: An API that allows Google Apps Script to read and write data in Google Drive.
27. **Google Calendar API**: An API that allows Google Apps Script to read and write data in Google Calendar.
28. **Google Contacts API**: An API that allows Google Apps Script to read and write data in Google Contacts.
29. **Google Sites API**: An API that allows Google Apps Script to read and write data in Google Sites.
30. **Google Maps API**: An API that allows Google Apps Script to integrate with Google Maps.

Here are some examples and practical applications of Google Apps Script:

- * Automating repetitive tasks, such as data entry, formatting, and data manipulation.
- * Creating custom functions in Google Sheets that perform complex calculations and data analysis.
- * Integrating G Suite applications with external services, such as databases, webhooks, and APIs.
- * Building custom dashboards and reports in Google Sheets and Google Slides.
- * Creating custom workflows and approval processes in Google Forms and Google Sheets.
- * Building custom applications and add-ons for G Suite, such as project management tools, customer relationship management (CRM) systems, and inventory management systems.

Here are some challenges for learners:

- * Automate a repetitive task in Google Sheets, such as data entry or formatting.
- * Create a custom function in Google Sheets that performs a complex calculation or data analysis.
- * Integrate Google Sheets with an external service, such as a database or API.
- * Build a custom dashboard or report in Google Sheets or Google Slides.
- * Create a custom workflow or approval process in Google Forms and Google Sheets.
- * Build a custom application or add-on for G Suite using Google Apps Script.

In conclusion, Google Apps Script is a powerful tool for automating tasks, creating custom functions, and integrating G Suite applications with other services. This vocabulary list covers key terms and concepts related to the Introduction to Google Apps Script course in the Professional Certificate in Google Apps Script Fundamentals. With these concepts, learners can build custom applications and solutions that meet their unique needs and streamline their workflows.