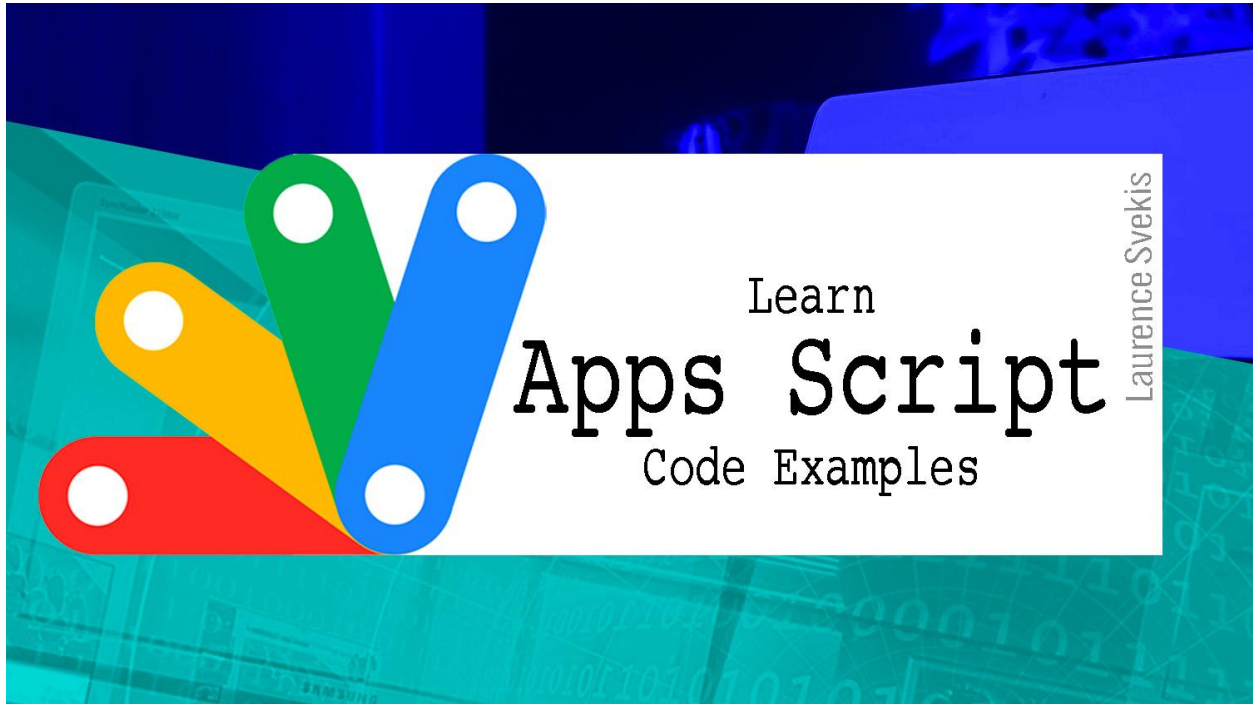


# Apps Script Fun Coding Exercises 4



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## Adding a UI menu option

Create a script that adds a custom menu to a Google Sheet and runs a function when a menu item is clicked.

```
function onOpen() {  
  var ui = SpreadsheetApp.getUi();  
  ui.createMenu("Custom Menu")  
    .addItem("Function 1", "function1")  
}
```

```

    .addItem("Function 2", "function2")
    .addToUi();
}

function function1() {
    // code to run when menu item "Function 1" is clicked
}

function function2() {
    // code to run when menu item "Function 2" is clicked
}

```

## How to create a new sheet

Create a script that automatically creates a new Google Sheet and copies data from a template sheet.

```

function createNewSheet() {
    var template =
DriveApp.getFileById("templateSheetId");
    var folder = DriveApp.getFolderById("folderId");
    var newFile = template.makeCopy("New Sheet", folder);
    var newSheet =
SpreadsheetApp.openById(newFile.getId()).getSheets()[0]
;
    var data =
SpreadsheetApp.getActiveSpreadsheet().getDataRange().getValues();
    newSheet.getRange(1, 1, data.length,
data[0].length).setValues(data);
}

```

## Sending Custom emails from data

Create a script that sends a customized email to each recipient in a Google Sheet.

```
function sendCustomizedEmails() {
  var sheet =
SpreadsheetApp.getActiveSpreadsheet().getSheetByName("Sheet1");
  var data = sheet.getDataRange().getValues();
  for (var i = 1; i < data.length; i++) {
    var recipient = data[i][0];
    var subject = "Hello, " + data[i][1] + "!";
    var message = "This is a customized message for you.";
    MailApp.sendEmail(recipient, subject, message);
  }
}
```

## Add image button to Doc

Create a script that adds a new row to a Google Sheet when a button is clicked in a Google Doc.

```
function addButtonToDocument() {
  var doc = DocumentApp.getActiveDocument();
  var body = doc.getBody();
  var button = body.appendInlineImage(
    UrlFetchApp

.fetch("https://www.gstatic.com/images/icons/material/system/1x/add_white_24dp.png")

```

```

        .getBlob()
        .setName("Add Row")
    );
    button.setLinkUrl("javascript:addRowToSheet()");
}

function addRowToSheet() {
    var sheet =
SpreadsheetApp.getActiveSpreadsheet().getSheetByName("Sheet1");
    sheet.appendRow(["new data"]);
}

```

## Creating calendar events and trigger

Create a script that automatically creates a new Google Calendar event when a new row is added to a Google Sheet.

```

function createCalendarEvent(e) {
    var title = e.namedValues["Title"][0];
    var start = new Date(e.namedValues["Start"][0]);
    var end = new Date(e.namedValues["End"][0]);
    var calendar = CalendarApp.getDefaultCalendar();
    calendar.createEvent(title, start, end);
}

function createSheetTrigger() {
    var sheet =
SpreadsheetApp.getActiveSpreadsheet().getSheetByName("Sheet1");
    ScriptApp.newTrigger("createCalendarEvent")

```

```
.forSpreadsheet(sheet)  
.onFormSubmit()  
.create();  
}
```