

QR Code Scanning Attendance

QR code scanning with Blackboard

How this Works

1. A QR Code for each student is generated by Blackboard within each paper.
2. Scanning this QR code populates Google form and Google spreadsheet which track date and time each student attended.



Setup

1. **Create** or **log in** to your Google Drive – www.drive.google.com
2. **Create** a google form called Attendance with three short answer fields:
 - Course ID
 - Full Name
 - User ID

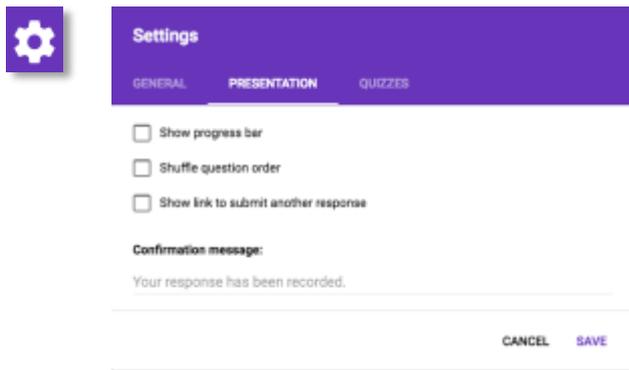
3. **Preview** the form



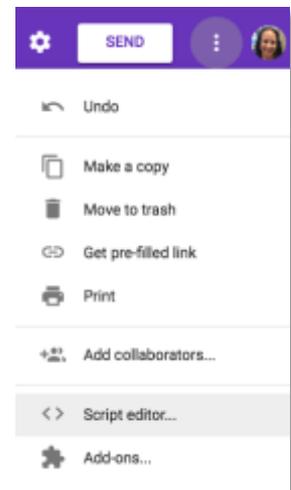
4. **Fill in** the form with the following:
 - Course ID = CourseID
 - Full Name = FullName
 - User ID = UserID



5. **Disable** submit another response in the settings and **save** this setting:



6. **Open** the script editor:



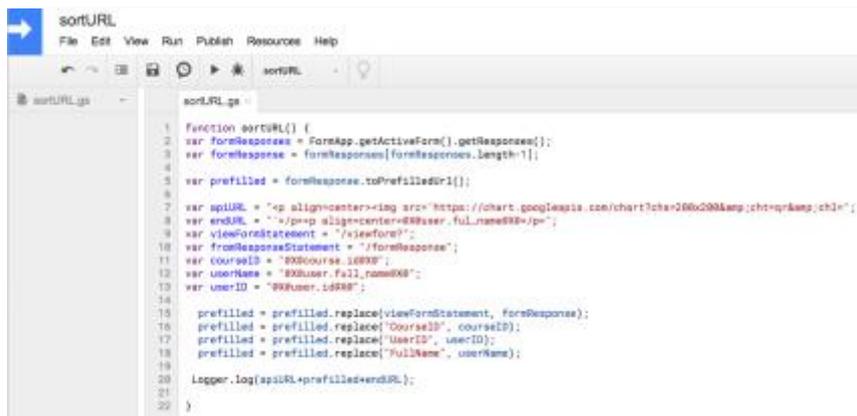
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7. **Delete** all text in the in the right-hand side pane and **copy** the below text into the right-hand pane.

```
function sortURL() {
var formResponses = FormApp.getActiveForm().getResponses();
var formResponse = formResponses[formResponses.length-1];
var prefilled = formResponse.toPrefilledUrl();
  prefilled = prefilled.replace(/\s/g, "");
  prefilled = prefilled.replace("https://docs.google.com/forms/d/e/", "");
  prefilled = prefilled.replace("/viewform?usp=pp_url&",
"/formResponse?");
  prefilled = encodeURIComponent(prefilled);
  prefilled = prefilled.replace("CourseID", "@X@course.id@X@");
  prefilled = prefilled.replace("UserID", "@X@user.id@X@");
      prefilled = prefilled.replace("FullName",
"@X@user.full_name@X@");

var url = "<p align=center><img
src='https://chart.googleapis.com/chart?chs=200x200&cht=qr&chl=https://do
cs.google.com/forms/d/e/'+prefilled+' '></p><p
align=center>@X@user.full_name@X@</p>";

  Logger.log(url);
}
```



The screenshot shows a code editor window titled 'sortURL'. The code is as follows:

```
1 function sortURL() {
2   var formResponses = FormApp.getActiveForm().getResponses();
3   var formResponse = formResponses[formResponses.length-1];
4   var prefilled = formResponse.toPrefilledUrl();
5
6   var url = "<p align=center><img src='https://chart.googleapis.com/chart?chs=200x200&cht=qr&chl='";
7   url += "https://docs.google.com/forms/d/e/' + prefilled + "'></p><p align=";
8   url += "center>@X@user.full_name@X@</p>";
9   var viewFormStatement = "/viewform?";
10  var formResponseStatement = "/formResponse?";
11  var courseID = "@X@course.id@X@";
12  var userName = "@X@user.full_name@X@";
13  var userID = "@X@user.id@X@";
14
15  prefilled = prefilled.replace(viewFormStatement, formResponse);
16  prefilled = prefilled.replace(courseID, courseID);
17  prefilled = prefilled.replace(userID, userID);
18  prefilled = prefilled.replace(userName, userName);
19
20  Logger.log(url);
21
22 }
```

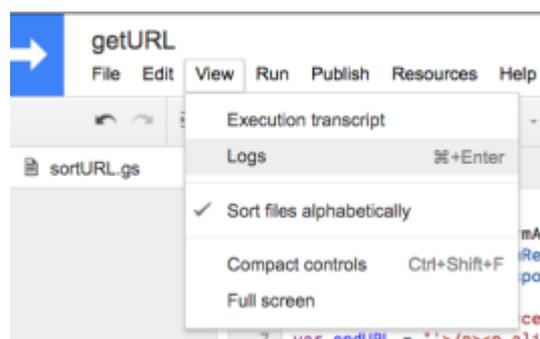
Your script will look similar to the one above but may not be exactly the same.

8. **Save** this script with the name sortURL.



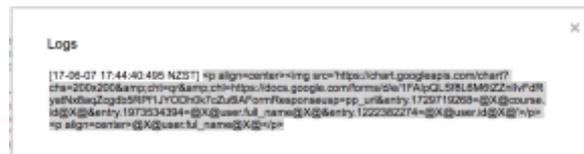
- A popup may appear asking for Authorization – review permissions and allow this.

9. **Run** the script then view the Log file



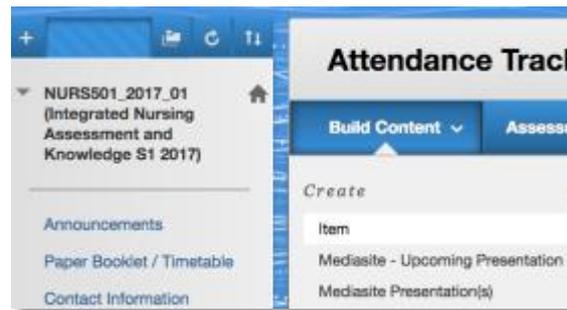
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10. **Copy** the selected text from the log file



*** Your HTML will look similar to the one above but may not be exactly the same.

11. In Blackboard create a new **item** where students can find their QR code.



12. In the text box click on the button labelled **HTML**.
13. Paste the text from the log copied earlier and **update** this



Your HTML will look similar to the one below but may not be exactly the same.

14. **Submit** the new item on Blackboard.



The result should look something like this with your name on the bottom.

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15. Download a QR code scanner for your phone or tablet for example:

- Apple = <https://itunes.apple.com/nz/app/qr-code-reader-and-scanner/id388175979?mt=8>
- Android = <https://play.google.com/store/apps/details?id=com.google.zxing.client.android&hl=en>
- Windows = <https://www.microsoft.com/en-nz/store/p/barcode-scanner/9wzdncrfj0k8>

Congratulations:

You now have an individual QR code for each student on your Blackboard course page which links with your attendance form.

Let Students Know

1. they have an individual QR code and where to find this.
3. bring this to class on their device or paper

Video

Scanning a QR Code using an iPhone

- <https://www.youtube.com/watch?v=8RyHmzcZugQ>