



## Introduction

For the following, it is assumed that the user already has a google account and the computer being used is already logged in to that account.

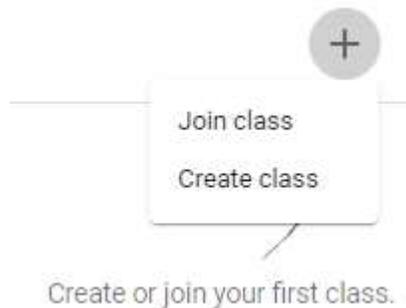
To explain the major parts of the google classroom application we will have a look at the following aspects.

1. Create and configure a class
2. Join a class
3. Submit an assignment
4. Grading a piece of work

It should be noted that there are many functionalities that are available for google classroom and its parts or collaborating applications. However, in what follows we focus on providing a basic description of how certain tasks can be achieved.

## Creating and configuring a class

1. Use google classroom and manage an online environment for a class
2. When you first find and select classrooms, you are presented with a dialog confirming your first contact with classroom and you are asked to confirm that your contact information will be shared by students. Click the 'CONTINUE' button at the bottom
3. You are then taken inside the classroom application with an empty set of classes. The top right of the window includes a plus sign (+) button. If you click it you can either 'join class' (an existing class previously created) or 'create class' (a new one)



4. If you select 'Create class' a dialog informs you about using classrooms for schools or university classes. (for the purposes of this demo we'll select No and continue).

Using Classroom at a school/university with students?

If so, your school/university must sign up for a free [G Suite for Education](#) account before you can use Classroom. [Learn More](#)

G Suite for Education lets schools/universities decide which Google services their students can use, and provides additional [privacy and security](#) protection that is important in a school or university setting. Students cannot use Google Classroom in a school or university with their personal accounts.

I've read and understand the above notice, and I'm not using Classroom at a school/university with students

Go back Continue

TRY ANOTHER ACCOUNT

5. Then you are presented with a dialog to insert the details of your class

Create class

Class name (required)

Section

Subject

Room

Cancel Create

6. Click create, and your class is created. You are then directed to the main page of the classroom. As you can see in the capture below there are 4 tabs for different

## functionalities

The screenshot shows the top navigation bar with tabs for Stream, Classwork, People, and Marks. The Stream tab is active. Below the navigation bar is a header for 'Be-com Class A' with the class code 'wvdoth2'. A green banner features an illustration of books and a pencil. Below the banner, there is a section for 'Upcoming' with the text 'No work due in soon' and a 'View all' link. To the right, there is a text input field for sharing with the class. Below this is a section titled 'Communicate with your class here' with two options: 'Create and schedule announcements' and 'Respond to student posts'.

- The **stream** tab allows communication between you and the students. You can add posts or reply to posts made by students
- The **classwork** tab allows you to insert coursework and assign it to students. As you can see from the capture below, in addition to class-work you can use google calendar (for setting up releases or deadlines or anything time related). Also you can create a folder in your google drive that will be associated with the classroom.

The screenshot shows the 'Classwork' tab selected in the navigation bar. Below the navigation bar, there is a green 'Create' button and two icons: 'Google Calendar' and 'Class Drive folder'. Below this is a section titled 'Assign work to your class here' with three options: 'Create assignments and questions', 'Use topics to organise classwork into modules or units', and 'Order work the way you want students to see it'.

- The **people** tab is where you can edit who is part of the class. In here you can manually invite by pressing the icons on the right of teachers or students. it is important to note that the class code provided (in this case **wvdoth2**) is the code

to give to your students so they can manually join the class.

Stream   Classwork   **People**   Marks

---

## Teachers

Instructor Name

---

## Students

Invite students or give them the class code: wvdoth2

- d. The **marks** tab will contain the marks for the assigned work. At startup, as no students exists and no work has been assigned, the tab is empty.
- e. Use the 'main menu' icon on the top left to see your classes, the calendar, tasks to review, archived classes and finally the settings for the classroom

### Creating an assignment

1. Switch to the classwork tab
2. Clicking the 'Create' button will bring up a pop-up menu to allow you to create assignments, quiz assignments, questions, material, topics, or to re-use a post
3. Select an assignment and the interface directs to the assignment creation dialog

X   Assignment   Assign

Title

Instructions (optional)

Add   Create

For

Be-com Clas...   All students

Points

100

Due

No due date

Topic

No topic

Rubric

+ Rubric

- Once you complete the details (title, instructions, due date) the assignment is created and listed in the classwork tab (initially only the title is shown but if you click on the little icon the preview (shown below) appears).

The screenshot shows the Classroom interface with tabs for Stream, Classwork, People, and Marks. The Classwork tab is active. At the top left is a green '+ Create' button. To the right are icons for 'Google Calendar' and 'Class Drive folder'. Below is an assignment card for 'C1 - arrays input and manipulation' due on '30 Jul'. The card shows it was 'Posted 16:09' and contains the instruction: 'Write a C program that will declare an array of 10 integers and ask the user to enter values for each position in the array. Once all data is present, write code to go through the array and calculate and show the sum of all elements in the array'. To the right of the text are two progress indicators: '0 Handed in' and '0 Assigned'. At the bottom of the card is a 'View assignment' link.

### Joining a class (as a student)

- Open classroom and click the plus sign to join a class
- Classroom asks for the class code, enter the code and click join

The screenshot shows a 'Join class' dialog box. It contains the text: 'Join class' followed by 'Ask your teacher for the class code, then enter it here.' Below this is a text input field with a light blue background. The field is labeled 'Class code' and contains the text 'wvdoth2'. At the bottom of the dialog are two buttons: 'Cancel' and 'Join'.

- The class is joined and opened. Note how the student only has 3 tabs (stream, classwork and people) and in the stream there is an announcement of the coursework

that has been posted by the instructor.

The screenshot shows a class page interface. At the top, there are three navigation tabs: "Stream", "Classwork", and "People". Below the tabs is a green banner for "Be-com Class A" with an illustration of books and papers. Under the banner, there are three main sections: 1. "Upcoming" section with a message "Woohoo, no work due in soon!" and a "View all" button. 2. A "Share something with your class..." input field with a user icon. 3. A post from "Instructor Name" at "16:09" titled "posted a new assignment: C1 - arrays input and manipulat...". A question mark icon is visible at the bottom left of the page.

4. You have joined the class

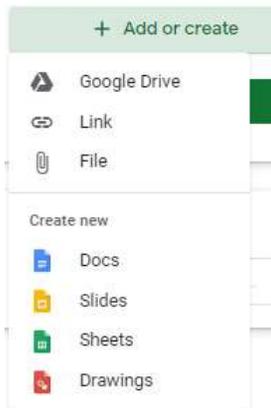
### Submitting an assignment (as a student)

1. Login in and open the class
2. You can switch to the 'classwork' tab to see the assignments or if the post is recent (appearing in the stream) you can click its icon
3. When you view the assignment the interface updates

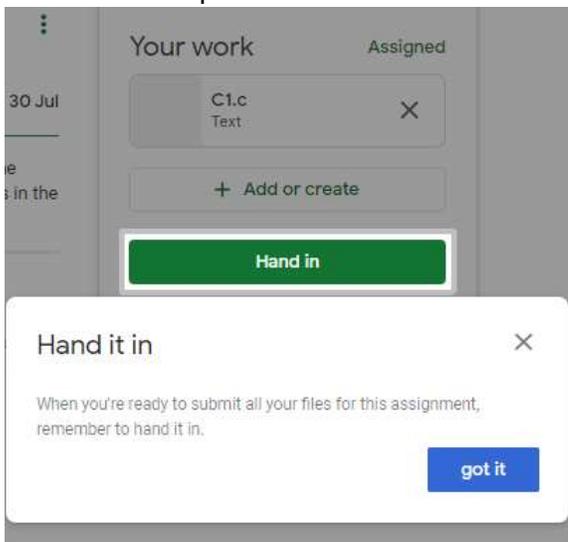
The screenshot shows the assignment submission interface for "C1 - arrays input and manipulation". The assignment is by "thanasis tsalikiis" at "16:09", worth "100 points", and is due on "30 Jul". The assignment description reads: "Write a C program that will declare an array of 10 integers and ask the user to enter values for each position in the array. Once all data is present, write code to go through the array and calculate and show the sum of all elements in the array". On the right side, there is a "Your work" section with a status of "Assigned", containing a "+ Add or create" button and a "Mark as Done" button. Below that is a "Private comments" section with an "Add private comment..." input field and a submit button. At the bottom, there is a "Class comments" section with an "Add class comment..." input field and a submit button.

4. In here you can 'add or create' a file (top right) and also make comments either for the whole class or as part of his submission (private to the instructor).

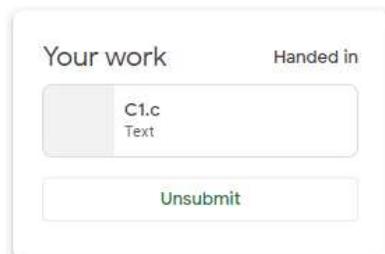
- Assuming that you have worked and created a file you can click '+ Add or create' to upload your file(s). The menu shown below appears and you can select



- Select 'File' and classroom will prompt you for what to include. You will have options for g-drive files or any other location. Assuming the file is created locally, select 'Upload' and navigate and select the file you want to upload.
- The interface updates with the file and classroom prompts you to confirm submission



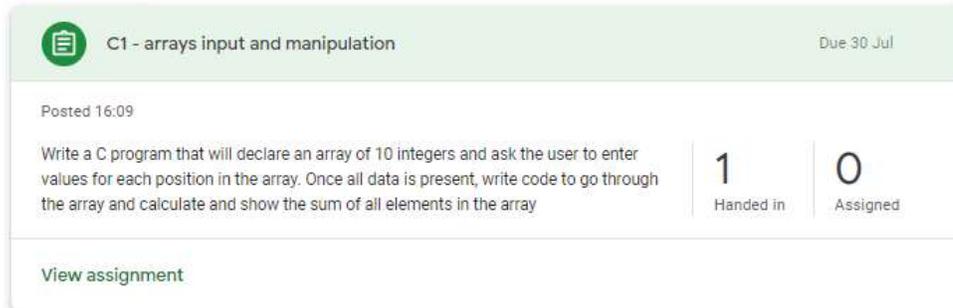
- Click 'got it' to dismiss the help dialog and then click 'Hand in' to submit your work. Classroom will once again ask you to confirm that you want to submit and once you do, the submission will be finalized and the interface will update accordingly



- That is it, you have completed the submission.

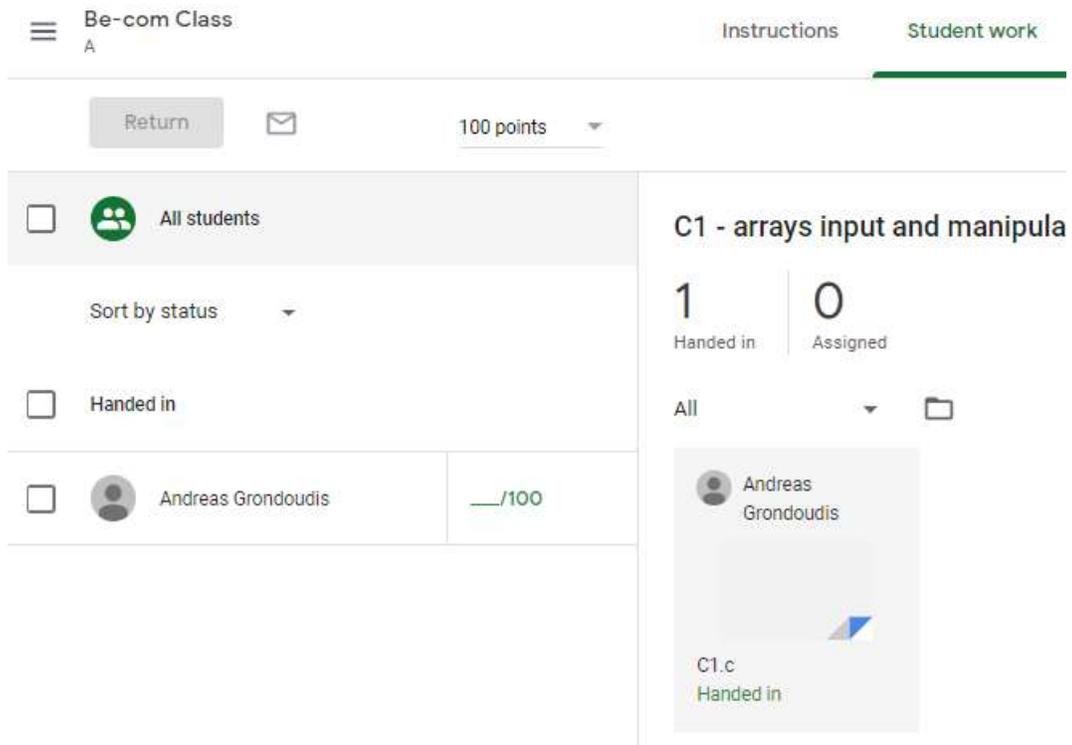
## Grading a piece of work (as the instructor)

1. When submissions are made the interface (in the classwork tab) updates



The screenshot shows an assignment card for 'C1 - arrays input and manipulation' with a due date of 'Due 30 Jul'. It was posted at '16:09'. The instructions are: 'Write a C program that will declare an array of 10 integers and ask the user to enter values for each position in the array. Once all data is present, write code to go through the array and calculate and show the sum of all elements in the array'. The card shows '1 Handed in' and '0 Assigned'. A 'View assignment' link is at the bottom.

2. If you click on the handed in number you are taken to the Student Work page. In here you can see lists of students. Depending on the selections you make on the left hand side you can see 'all students' or just the students that have 'Handed in'.



The screenshot shows the 'Student work' page for the assignment. At the top, there are tabs for 'Instructions' and 'Student work'. Below the tabs, there is a 'Return' button, an envelope icon, and a '100 points' dropdown. On the left, there is a list of student filters: 'All students' (selected), 'Sort by status', 'Handed in', and 'Andreas Grondoudis' (with a score of '\_\_\_/100'). On the right, the assignment title 'C1 - arrays input and manipulation' is shown, along with '1 Handed in' and '0 Assigned'. Below this, there is a list of students, with 'Andreas Grondoudis' selected, showing a submitted file 'C1.c' with the status 'Handed in'.

3. If you select a student by clicking on their name, the interface updates to show you the submitted files. Click on the file to open it.



The screenshot shows the student's submitted files. On the left, there is a list of students with 'Andreas Grondoudis' selected (score '\_\_\_/100'). On the right, there is a preview of the submitted file 'C1.c' with the type 'Text'.

4. By clicking on the <C1.c> file the marking page opens. Here you can see the file submitted by the student. You can use the controls on the right to
  - a. Open the file externally
  - b. Mark the hand in
  - c. Make comments on the submission (for the student to see)

C1 - arrays input and manipulation

Andreas Grondoudis Handed in < > Return

```
#include<stdio.h>
int main()
{
    printf("I don't really know how to program in C\n");
}
```

Files  
Handed in on 22 Jul, 16:34  
[See history](#)

C1.c

Mark  
/100

Private comments  
Add private comment...

Cancel Post

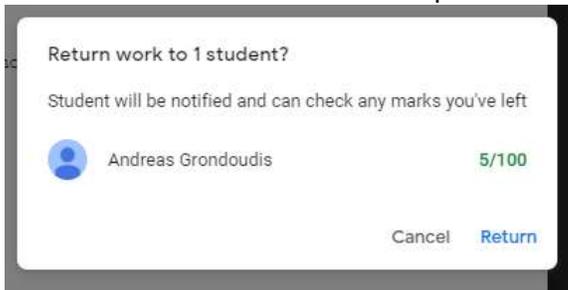
5. The student has not completed so a low mark is assigned and a comment is inserted

Mark  
5/100

Private comments  
Please come and see me if you need help with this

6. To complete the marking, click the 'Post' to post the feedback and then

7. Click the 'Return' button on the top left. Classroom confirms



8. Click 'Return' to notify the student and you have finished.
9. When the student gets the notification they can go in classroom and see your mark and feedback (as demonstrated below and highlighted with the read circled areas)

The classroom assignment page for "C1 - arrays input and manipulation". The instructor's name is "Instructor name" and the score is "5/100", which is circled in red. The due date is "Due 30 Jul". The assignment description says: "Write a C program that will declare an array of 10 integers and ask the user to enter values for each position in the array. Once all data is present, write code to go through the array and calculate and show the sum of all elements in the array". There is a "Class comments" section with an input field "Add class comment..." and a send button.

The "Your work" section, labeled "Marked". It shows the submitted assignment "C1.c Text" with a close button. Below it is a "+ Add or create" button and a green "Resubmit" button.

The "1 private comment" section. It shows a message from "Instructor name" at 17:10: "Please come and see me if you need help with this", which is circled in red. Below it is an input field "Add private comment..." and a send button.