

MTH 337. Differential Equations

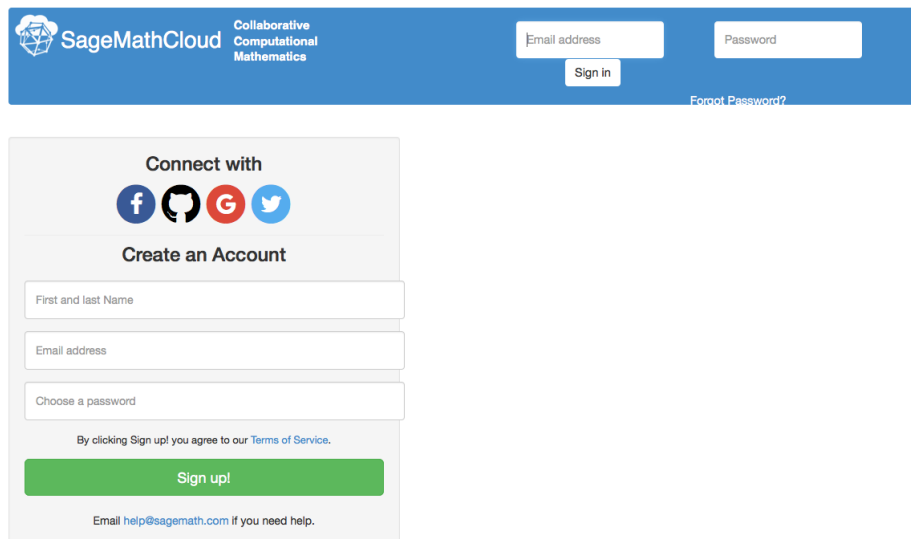
The Quick Start Guide for SageMathCloud

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January 11, 2017

SageMathCloud Basics

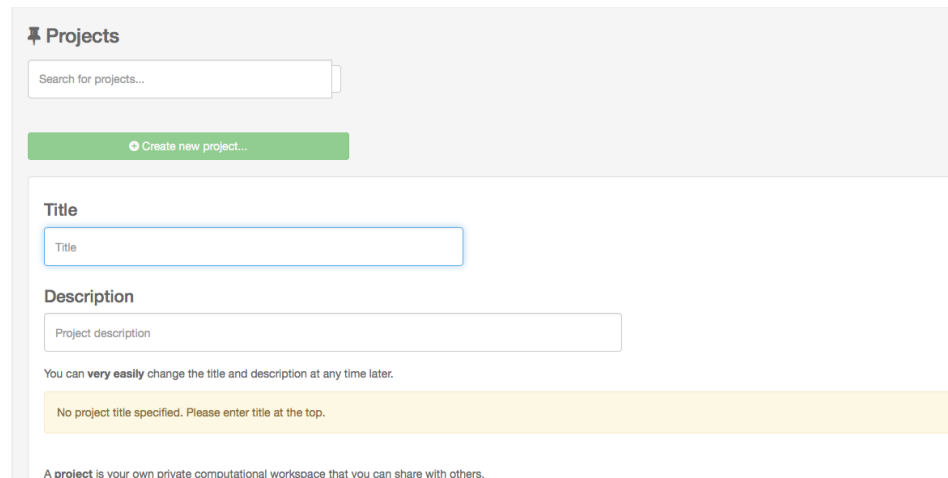
1. Visit <http://cloud.sagemath.com>. You will see a screen where you can create an account:



The image shows a screenshot of the SageMathCloud website. At the top, there is a blue header with the SageMathCloud logo and the text "Collaborative Computational Mathematics". To the right of the header are two input fields: "Email address" and "Password", with a "Sign in" button below them. Below the header is a "Connect with" section with icons for Facebook, GitHub, Google+, and Twitter. Below that is a "Create an Account" section with three input fields: "First and last Name", "Email address", and "Choose a password". Below the input fields is a green "Sign up!" button. At the bottom of the "Create an Account" section, there is a link to "Terms of Service" and a note: "By clicking Sign up! you agree to our Terms of Service." At the very bottom, there is a link to "Email help@sagemath.com if you need help."

Fill out the form, using a real e-mail address, and you have an account. Please use your SFA email address.

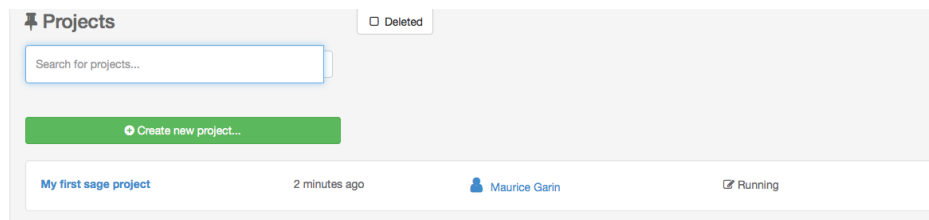
2. You will be taken to a screen where you see a list of projects (currently empty):



The screenshot shows the 'Projects' page with a search bar, a 'Create new project...' button, and a form with 'Title' and 'Description' fields. A yellow warning message states: 'No project title specified. Please enter title at the top.' Below the form, it says: 'A project is your own private computational workspace that you can share with others.'

Click “New project.” Give it a title and description.

3. Back in the projects list, click on your project name:



The screenshot shows the 'Projects' page with a search bar, a 'Create new project...' button, and a list of projects. The first project is 'My first sage project', created '2 minutes ago' by 'Maurice Garin', and is 'Running'.

4. Next, add a new worksheet: click “Create or upload files:”
Give it a name (like “Sage Demo”) and choose “SageMath Worksheet:”

+ Create a new file or directory

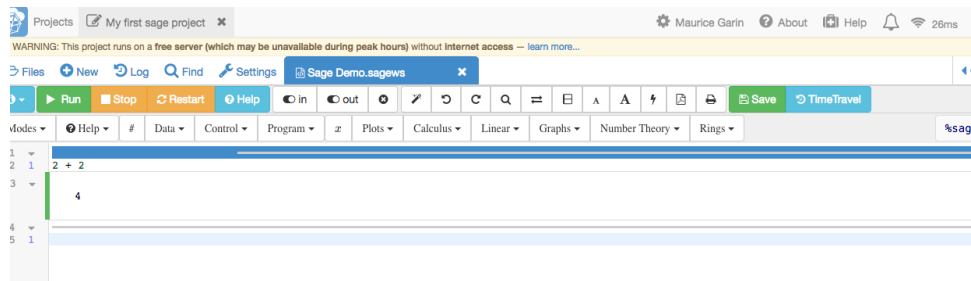
Name your file, folder or paste in a link

Sage Demo

Select the type

- SageMath Worksheet
- Jupyter Notebook
- File
- Folder
- LaTeX Document
- Terminal
- Task List
- Manage a Course
- Download from Internet (internet access blocked -- see project settings)
- Create a Chatroom

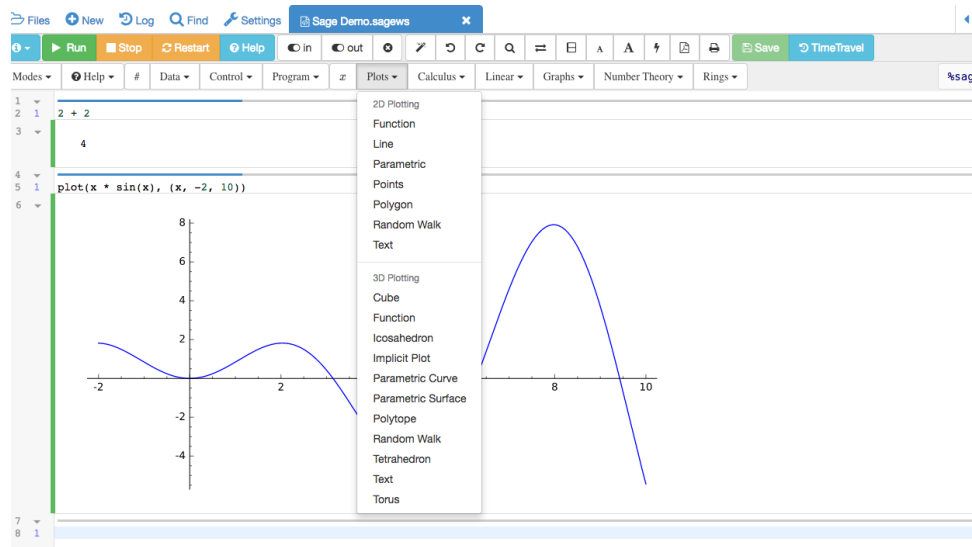
5. Now were in a Sage worksheet; your screen should look like this:



Type “2+2” and press Shift-Return. (That is, hold down the Shift key and press Return.) Sage should compute “4” for you:

6. Okay, not so impressive so far. The worksheet has some menus to help you get started with Sage syntax. Lets try graphing a function. From the Plots menu select “Function.”

Then press shift-return. You should see a plot of the function. Play around with the function, and press shift-return to get a new plot. Sage can also do 3D plotting; see the screenshot.



Final Notes

- SageMathCloud works best in Google Chrome. Safari also works but there are issues with Firefox. Avoid Internet Explorer.
- Try some other computations and hand in a printout of your Sage worksheet. This will be your “first” Sage project for MTH 337.