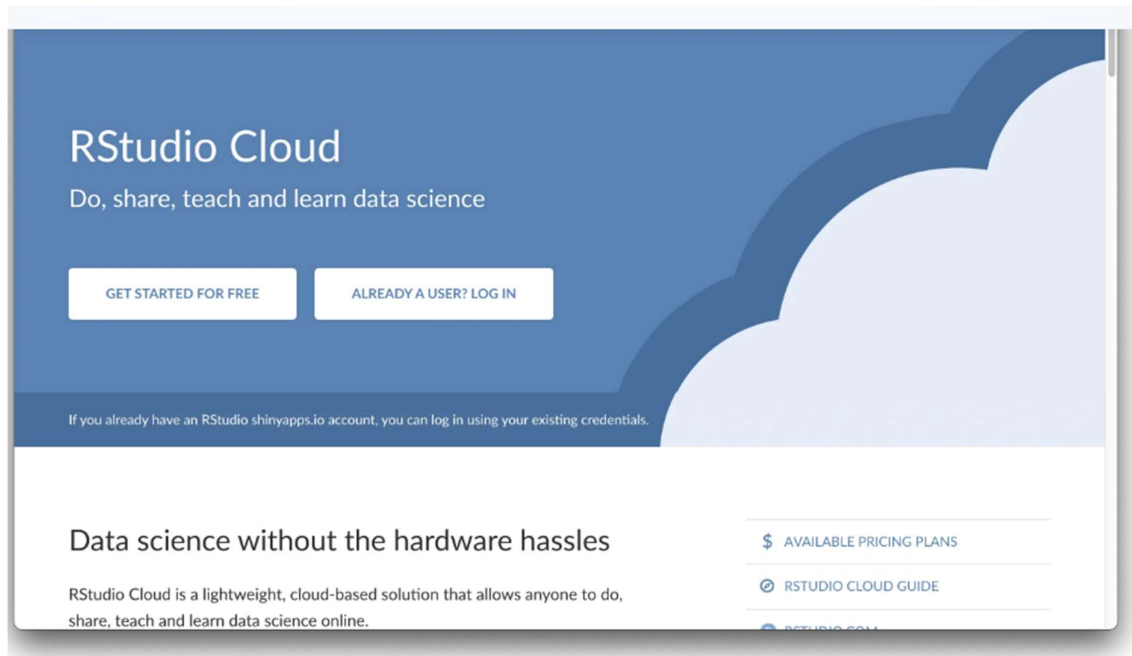
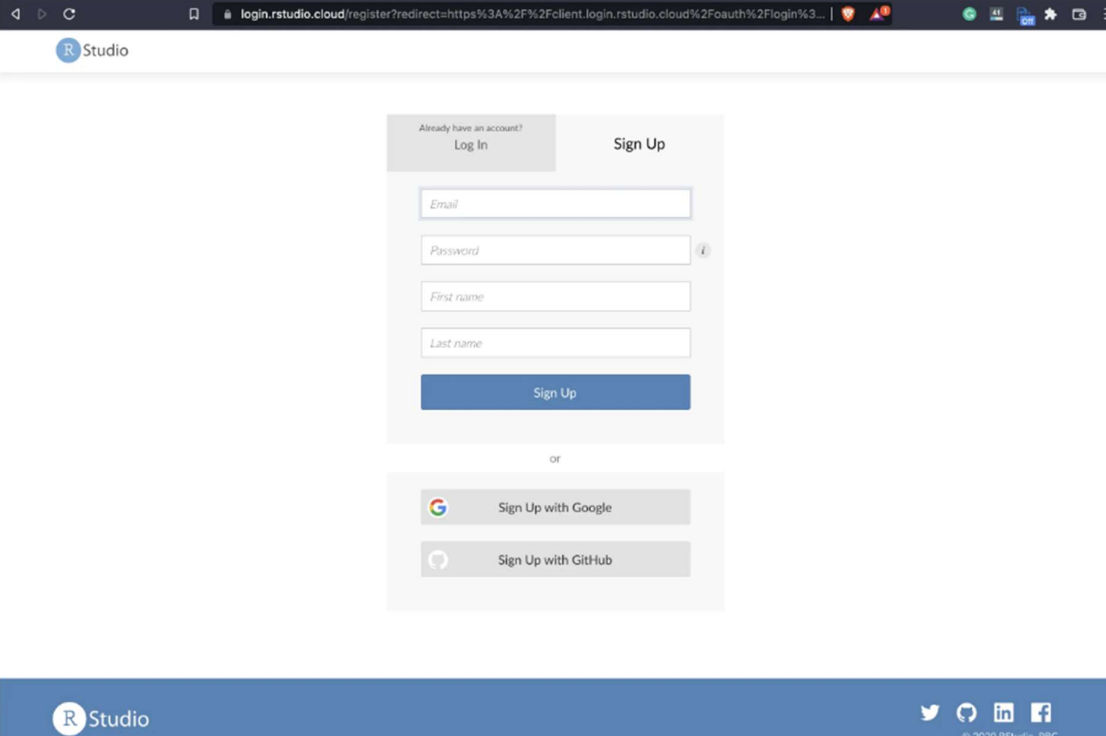


Step 1: Choose Your Cloud Environment

RStudio Cloud - Getting Started



Step 2 - RStudio Cloud website Click on the *Sign-Up* button in the top right corner and the following form will pop up:



The screenshot shows the registration form on the RStudio Cloud website. The form is titled "Sign Up" and includes a "Log In" link for users who already have an account. The registration fields are: "Email", "Password", "First name", and "Last name". A "Sign Up" button is located below these fields. Below the "Sign Up" button, there is a section for social login options, including "Sign Up with Google" and "Sign Up with GitHub". The footer of the page features the RStudio logo, social media icons for Twitter, GitHub, LinkedIn, and Facebook, and the copyright notice "© 2020 RStudio, PBC".

Step 3 - RStudio Cloud sign up form

By far the fastest and easiest registration method is by using your Google or GitHub credentials. We opted for Google sign-up, and it took two clicks. Once done, you'll be presented with the RStudio Cloud dashboard:

The screenshot displays the RStudio Cloud dashboard interface. At the top, there is a navigation bar with a hamburger menu icon, the text 'Your Workspace' with a sub-label 'Nilesh Kolekar', and tabs for 'Content', 'Usage', and 'About'. On the right side of the navigation bar, there is a user profile icon with the initials 'NK' and the name 'Nilesh Kolekar', followed by an upward-pointing chevron icon.

Below the navigation bar, the main content area is titled 'Your Content (0)'. On the left side of this area, there is a sidebar with three items: 'Your Content' (highlighted with a blue background), 'Archive', and 'Trash'. To the right of the sidebar, there is a search bar and a 'New Project' button. Below the search bar, there are filters for 'TYPE' (set to '*'), 'ACCESS' (set to '*'), and 'SORT' (set to 'A Z'). A search icon is also present.

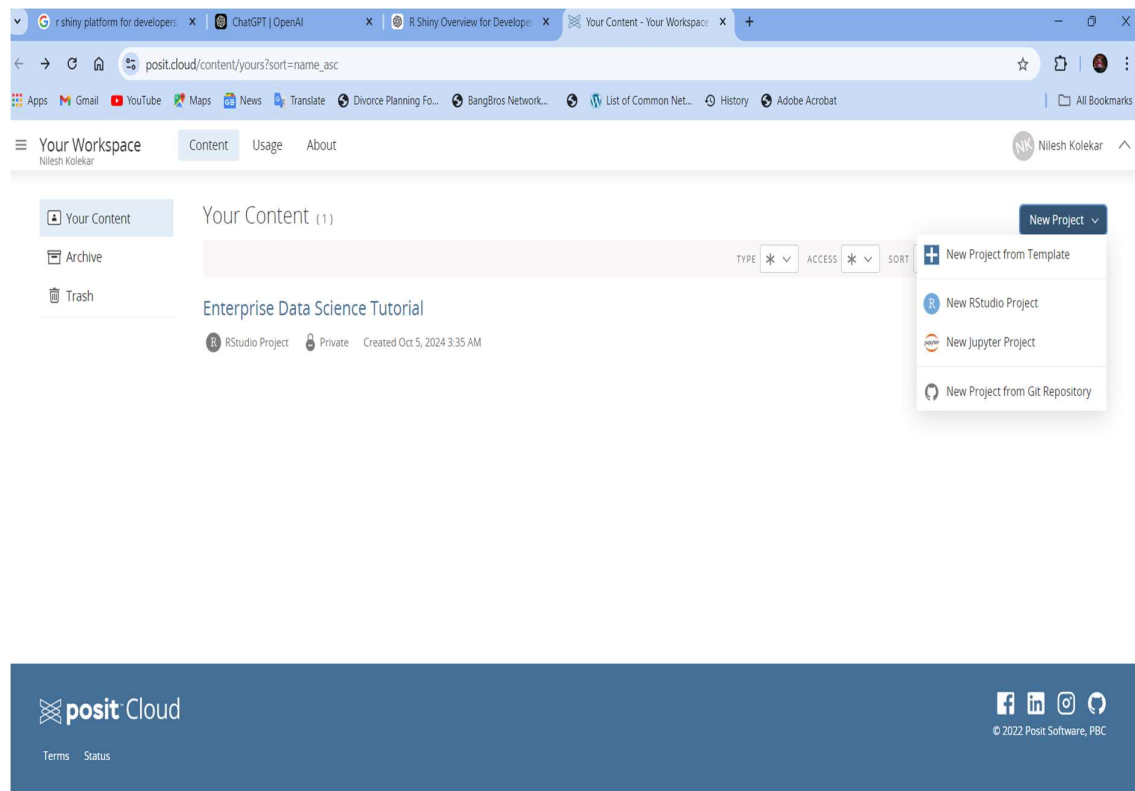
The main content area shows a list of items, but it is currently empty, displaying the text 'no content'.

At the bottom of the dashboard, there is a dark blue footer bar. On the left side of the footer, there is the 'posit Cloud' logo and links for 'Terms' and 'Status'. On the right side, there are social media icons for Facebook, LinkedIn, Instagram, and GitHub, followed by the copyright notice '© 2022 Posit Software, PBC'.

Step 4 - RStudio Cloud dashboard

How to Create a New Project in RStudio Cloud

Once in the dashboard, you can click on the *New Project - New RStudio Project* to get started:



Step 5 - Creating a new project in RStudio Cloud

You'll have to wait 30-60 seconds until the new project is provisioned. Once done, you'll see a well-familiar RStudio interface:

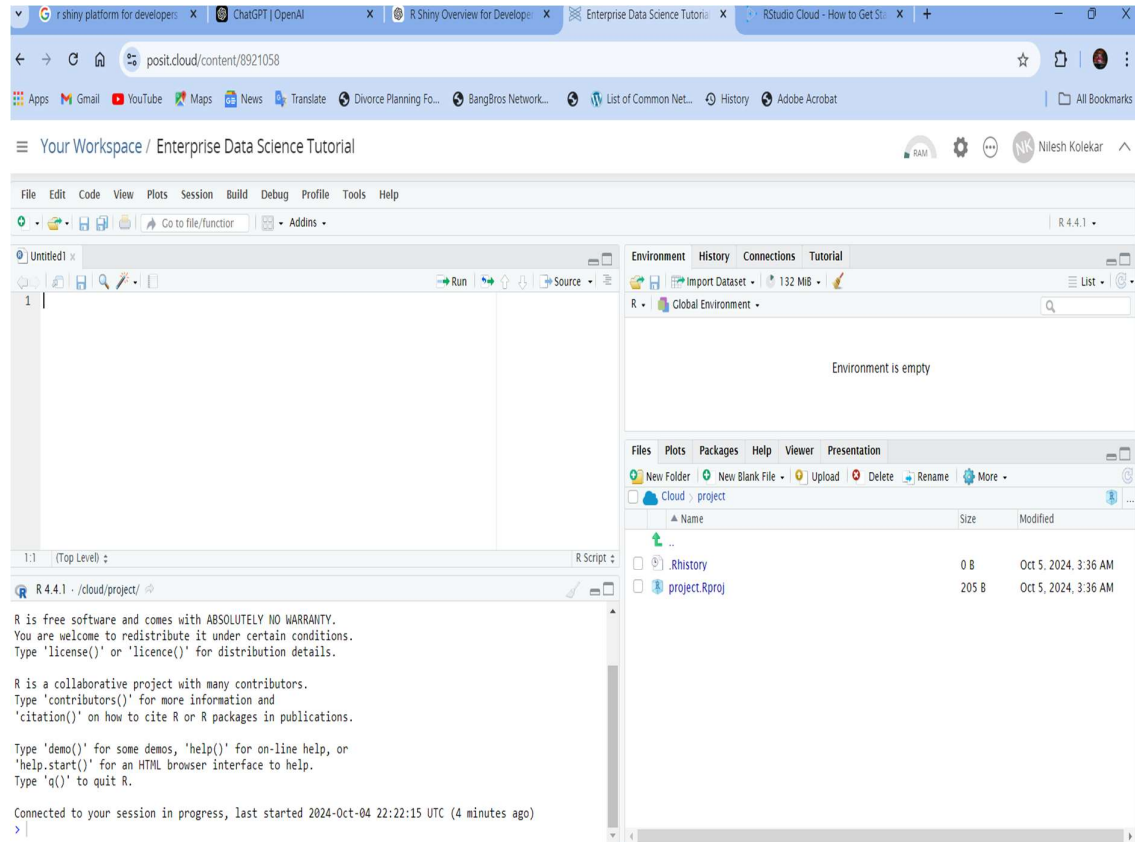


Image 6 - RStudio Cloud interface

The whole cloud IDE works just as you would expect. You can create a new R script by going to *File - New File - R Script* as shown below:

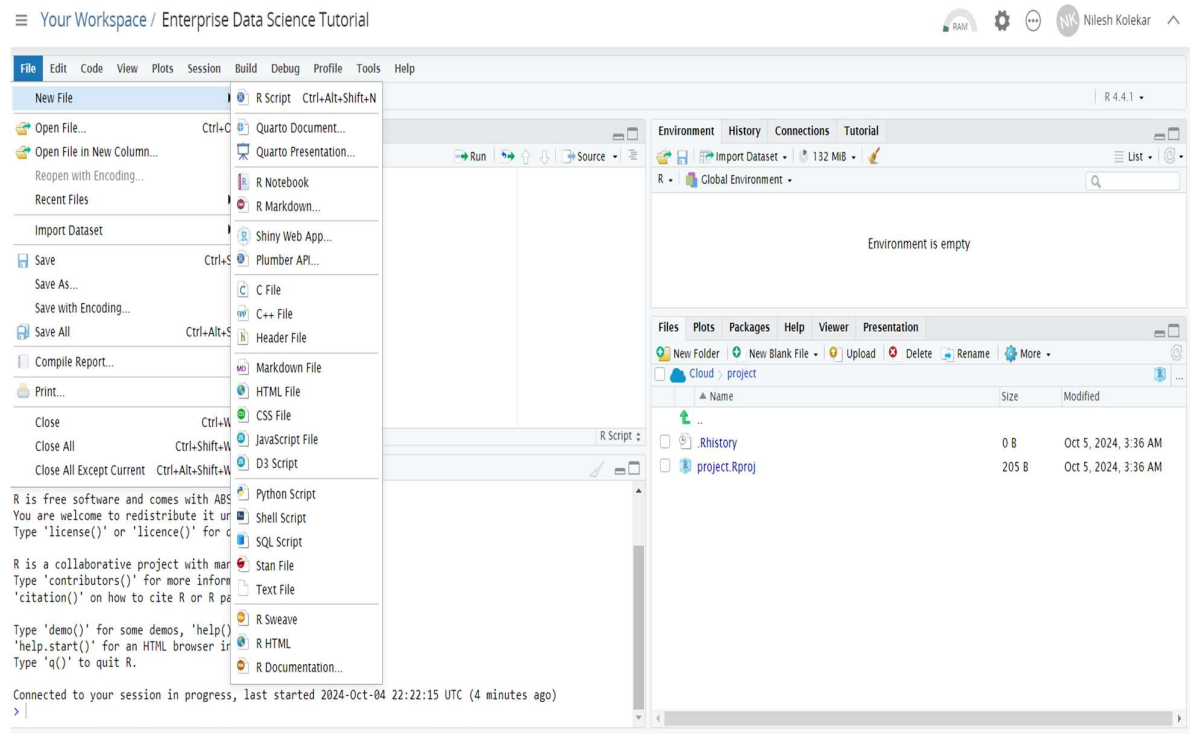


Image 7 - Creating a new R script We'll see you in the next section where we'll upload and explore some data.

How to Upload and Work With Data in RStudio Cloud

Uploading a dataset to RStudio Cloud is as simple as clicking on the *Upload* button in the *Files* tab (bottom right quadrant). Once there, click on *Choose file* and specify the path to your dataset. For demonstration purposes, we're using the training subset of the [Titanic dataset](#):

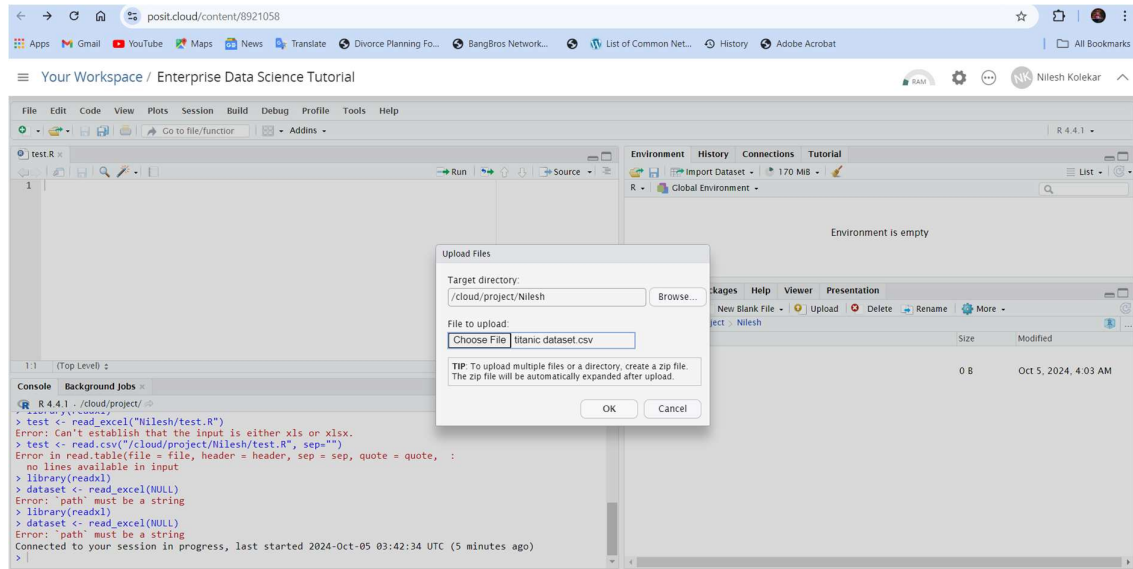
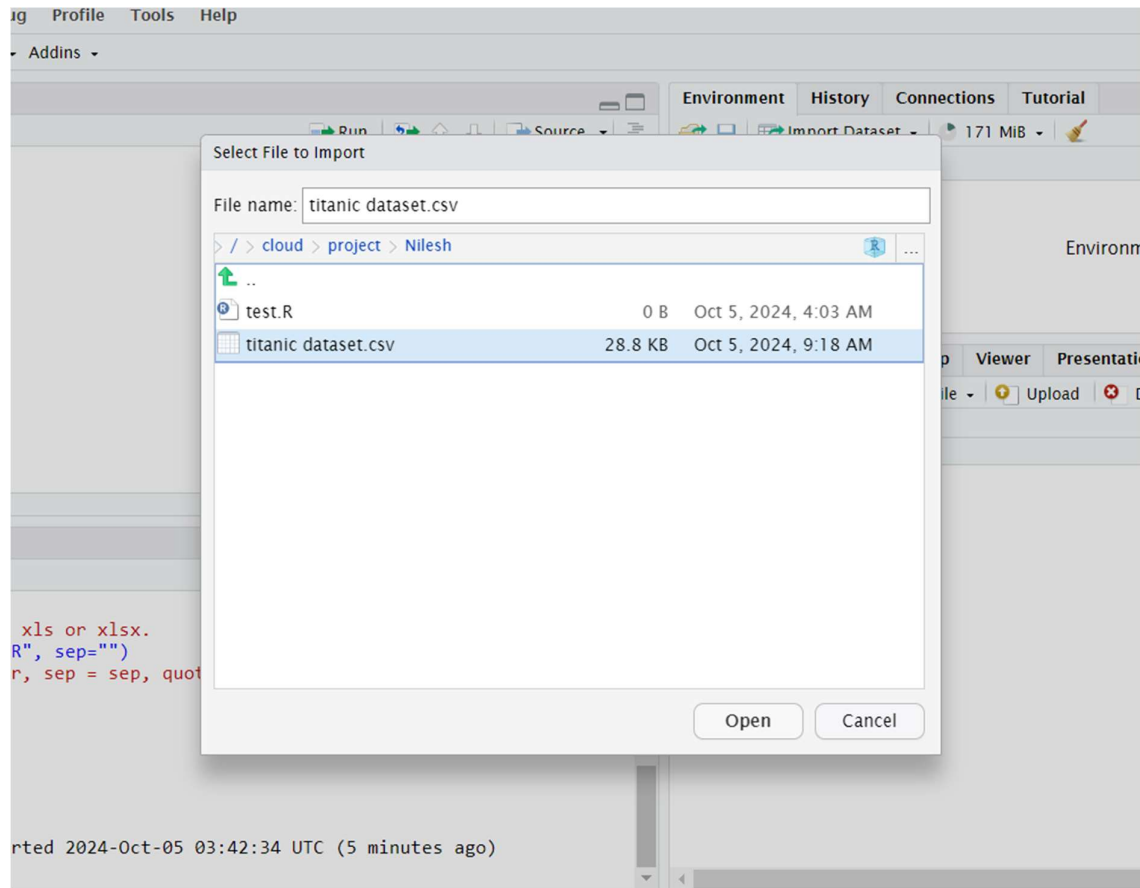


Image 8 - Uploading a dataset to RStudio Cloud Once the dataset is uploaded to the cloud, you can load it into the R environment. There are two approaches:

1. **Import dataset functionality** - Click on the *Import Dataset* button under Environment in the top right quadrant.
2. **R's CSV reader** - A dedicated R package loads CSV files.

We'll opt for the first option today. Here's what you should see:



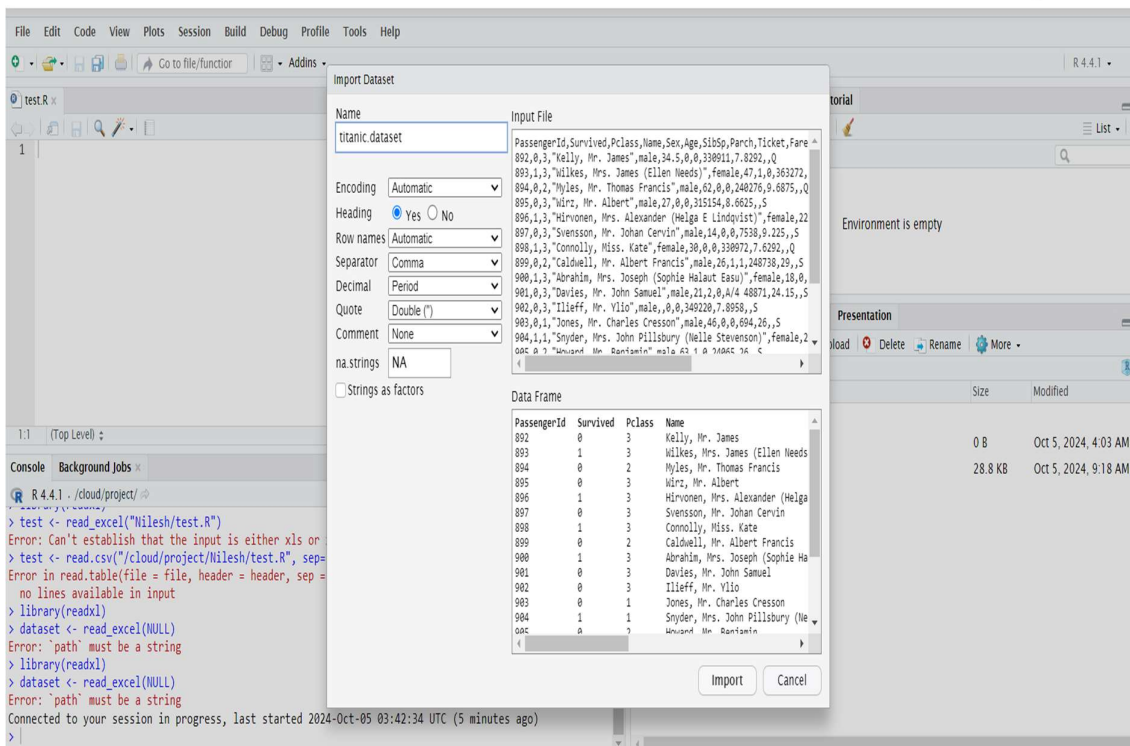


Image 9 - Loading a dataset into the R environment

Once you click on Import, you'll have the dataset ready to use in your RStudio Cloud environment:

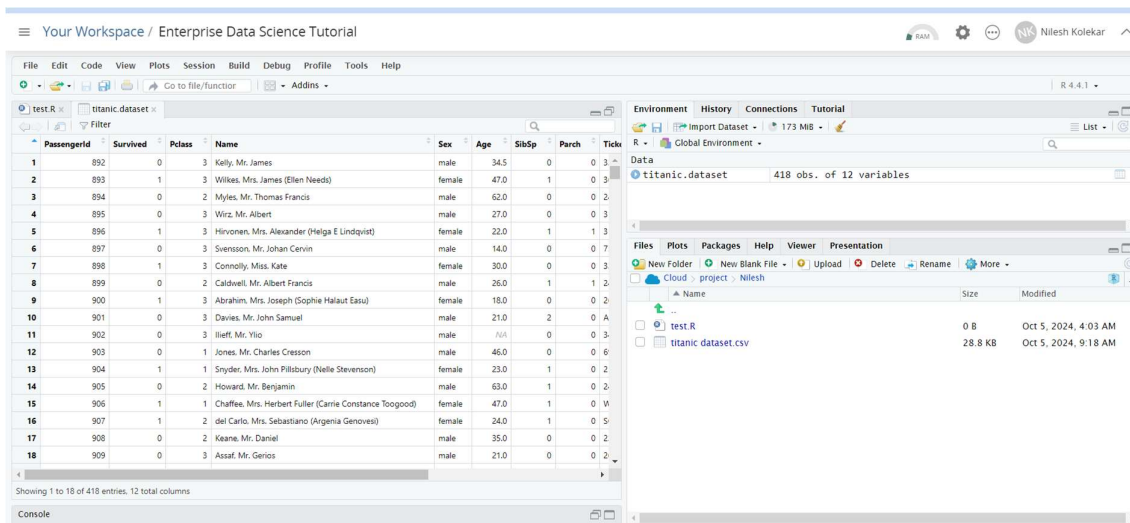


Image 10 - Dataset successfully imported to RStudio Cloud But what now? Well, we have to install a couple of R packages before we can work with it. To keep things simple, we'll only install dplyr and ggplot2. Run the following commands from the R console:

```
install.packages('ggplot2')
```

```
install.packages('dplyr')
```

```
Console Background Jobs x
R 4.4.1 . /cloud/project/
> titanic.dataset <- read.csv("/cloud/project/Nilesh/titanic dataset.csv")
> View(titanic.dataset)
> install.packages('dplyr')
Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
(as 'lib' is unspecified)
also installing the dependencies 'withr', 'generics', 'tidyselect'

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/withr_3.0.1.tar.gz'
Content type 'application/x-gzip' length 218696 bytes (213 KB)
=====
downloaded 213 KB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/generics_0.1.3.tar.gz'
Content type 'application/x-gzip' length 77807 bytes (75 KB)
=====
downloaded 75 KB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/tidyselect_1.2.1.tar.gz'
Content type 'application/x-gzip' length 221715 bytes (216 KB)
=====
downloaded 216 KB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/dplyr_1.1.4.tar.gz'
Content type 'application/x-gzip' length 1475398 bytes (1.4 MB)
=====
downloaded 1.4 MB

* installing *binary* package 'withr' ...
* DONE (withr)
* installing *binary* package 'generics' ...
* DONE (generics)
* installing *binary* package 'tidyselect' ...

'/tmp/kmpxp1KTA/downloaded_packages'
> install.packages('ggplot2')
Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.4'
(as 'lib' is unspecified)
also installing the dependencies 'colorspace', 'farver', 'labeling', 'munsell', 'RColorBrewer', 'viridis
Lite', 'gtable', 'isoband', 'scales'

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/colorspace_2.1-1.tar.gz'
Content type 'application/x-gzip' length 2629335 bytes (2.5 MB)
=====
downloaded 2.5 MB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/farver_2.1.2.tar.gz'
Content type 'application/x-gzip' length 1485495 bytes (1.4 MB)
=====
downloaded 1.4 MB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/labeling_0.4.3.tar.gz'
Content type 'application/x-gzip' length 59707 bytes (58 KB)
=====
downloaded 58 KB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/munsell_0.5.1.tar.gz'
Content type 'application/x-gzip' length 242364 bytes (236 KB)
=====
downloaded 236 KB

trying URL 'http://rspm/default/__linux__/focal/latest/src/contrib/RColorBrewer_1.1-3.tar.gz'
Content type 'application/x-gzip' length 53281 bytes (52 KB)
```

Image 11 - Installing dplyr and ggplot2 R packages And now let's import and use the packages.

The following code snippet imports both dplyr and ggplot2 and prints three columns for female passengers over the age of 50 embarked in Southampton:

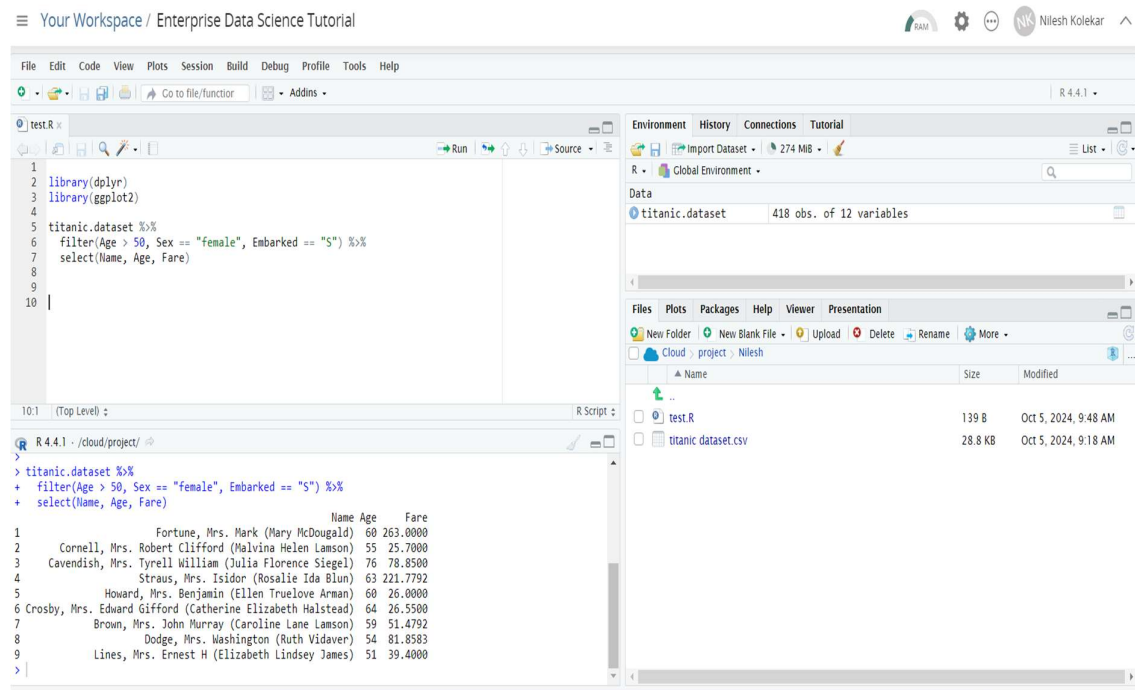


Image 12 - Data manipulation with dplyr

It works just in your regular RStudio desktop IDE. Onto the visualization now. We'll use ggplot2 to draw a histogram of the Age column:

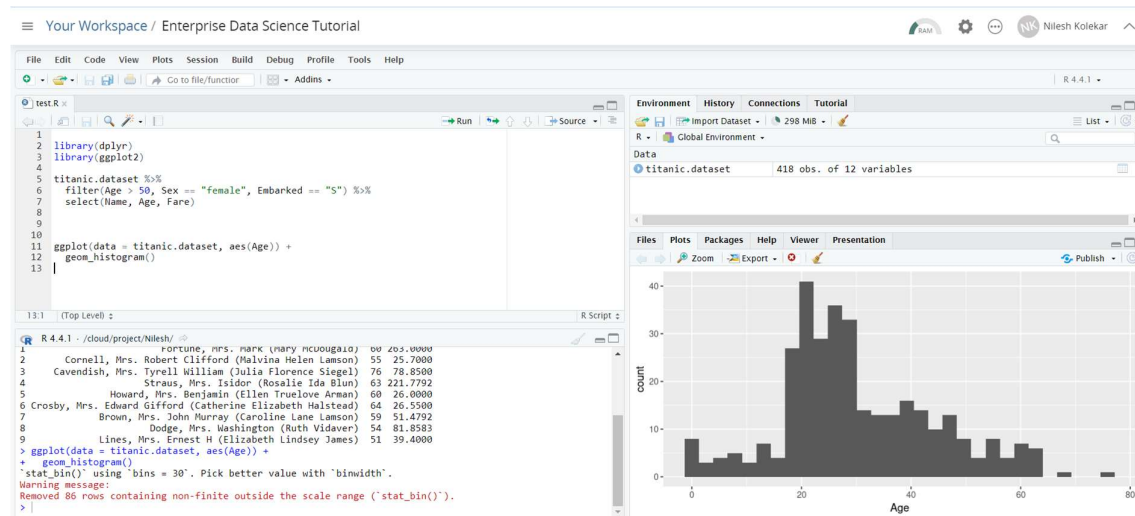


Image 13 -How to Share Your RStudio Cloud Workspace

The biggest selling point of RStudio Cloud is the ease of collaboration. Multiple users or coworkers can work on the same project easily in the cloud. The collaboration option isn't enabled by default, so you'll have to change a couple of things.

First, click on the settings icon in the top right corner. Then go under *Access*, and change the access type to *Everyone*:

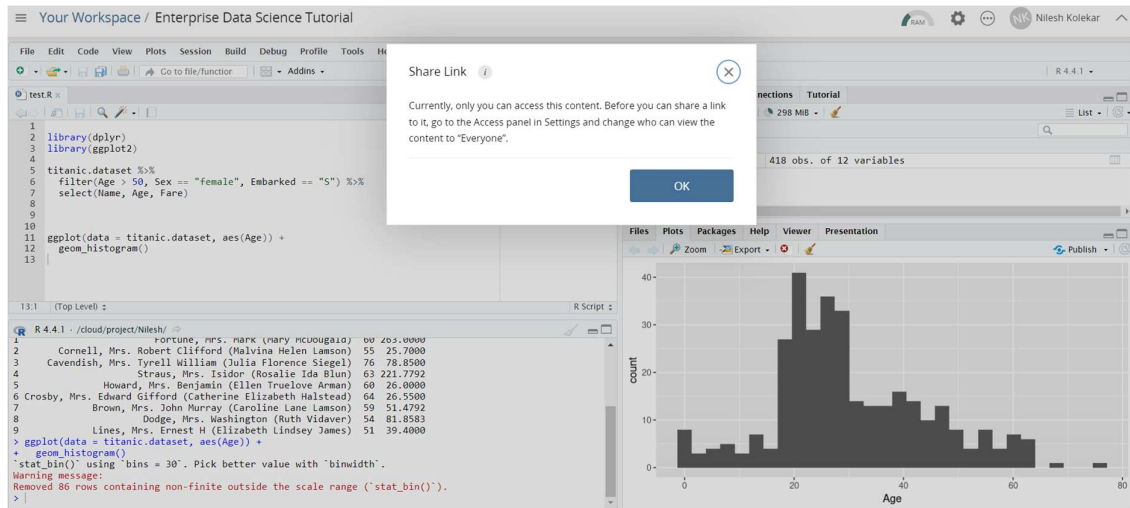


Image 14- Changing access type That takes care of the permissions.

The next step is to send an invite to the users. To do so, click on the icon next to the settings icon, and select the *Share Project Link* option:

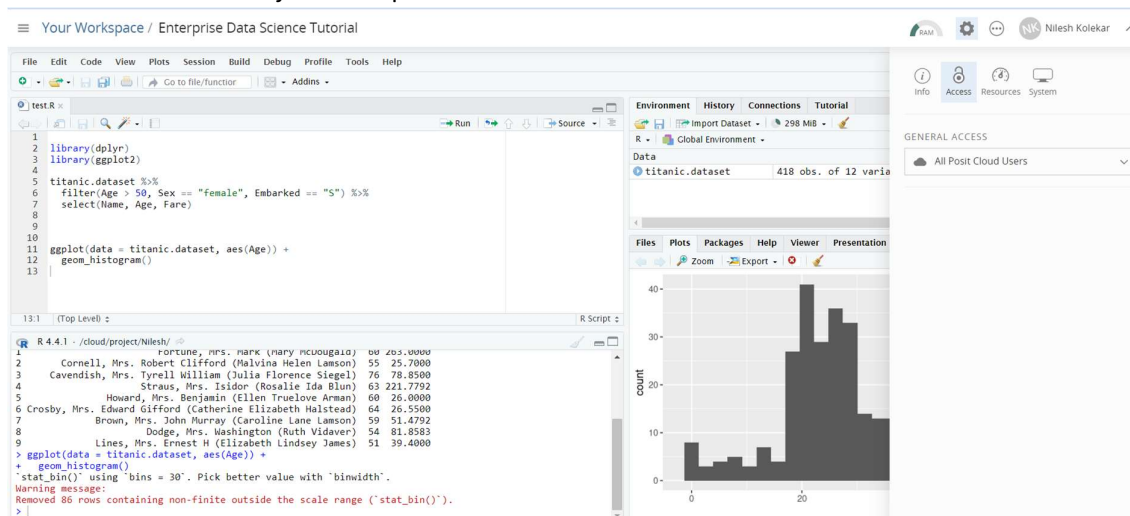


Image 15 - Sharing the project link A new modal window will pop up.

From here, you can enter an email of the person you want to collaborate with and an optional message. We won't invite anyone today, but this is how you can do it.

