

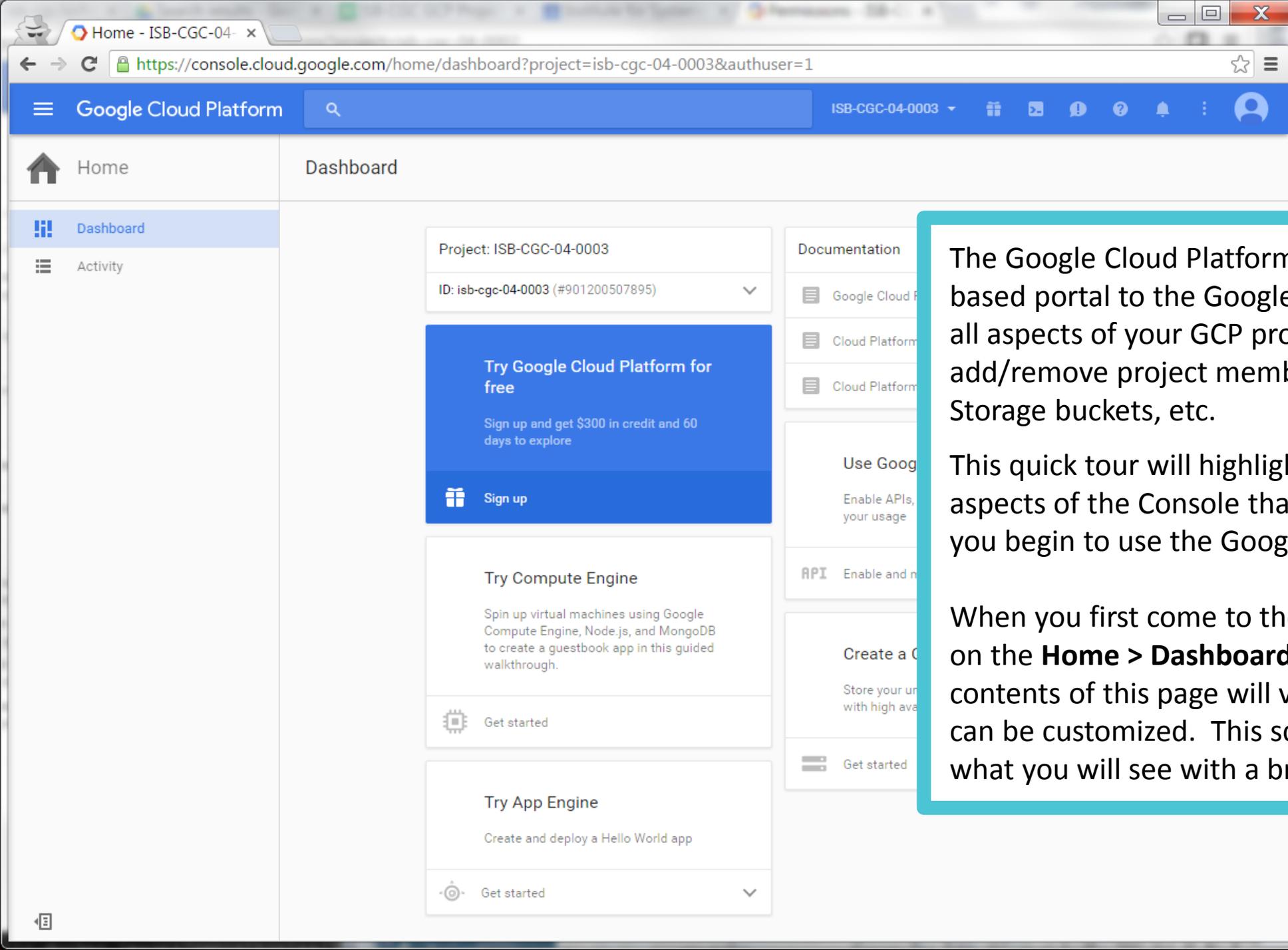
# A Quick Tour of the Google Cloud Console

(in 15 minutes)

brought to you by

## The ISB Cancer Genomics Cloud

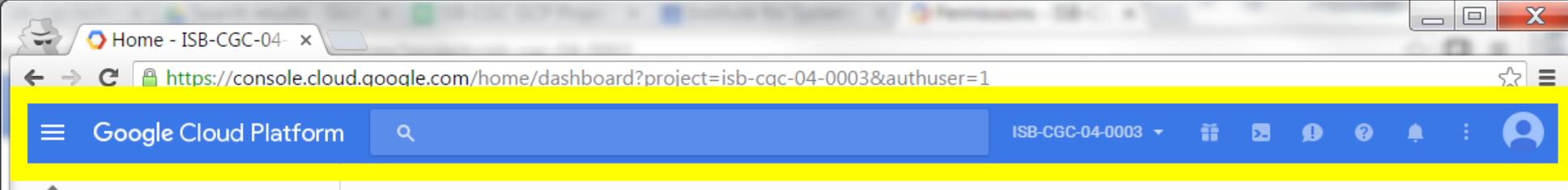




The Google Cloud Platform [Console](#) is your web-based portal to the Google Cloud. You can monitor all aspects of your GCP project from the Console, add/remove project members, launch VMs, create Storage buckets, etc.

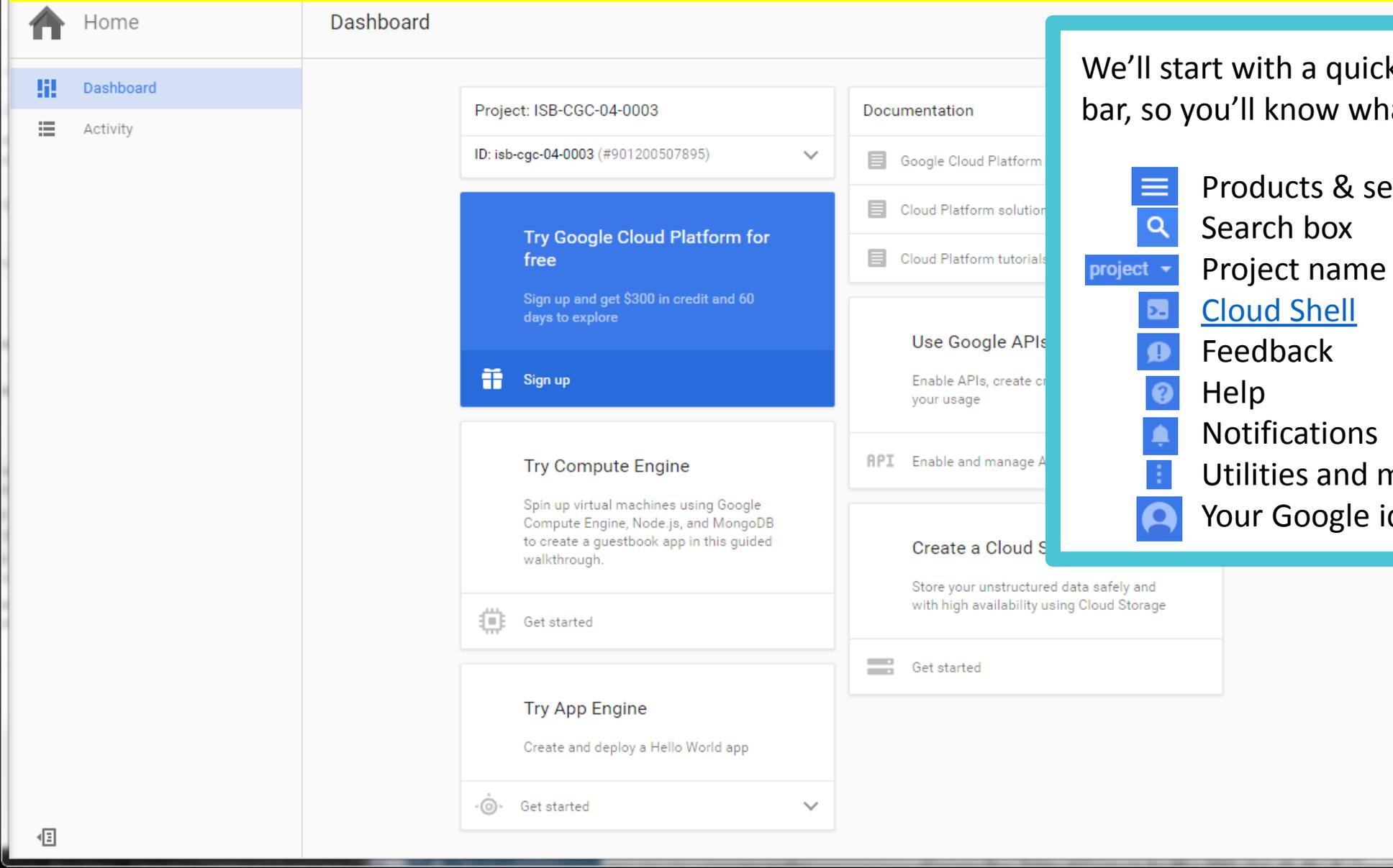
This quick tour will highlight the most important aspects of the Console that you are likely to need as you begin to use the Google Cloud.

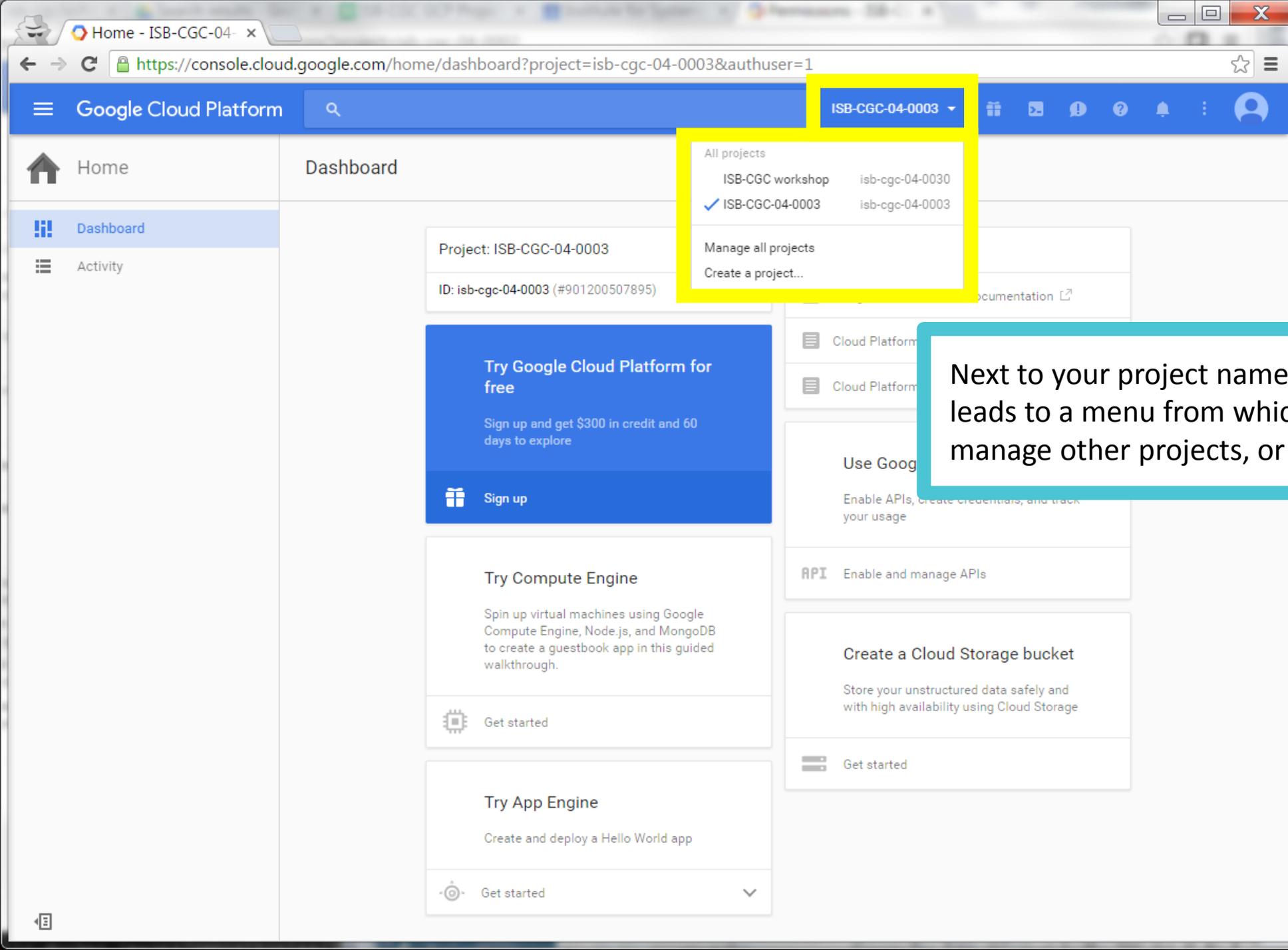
When you first come to the Console, you will land on the **Home > Dashboard** page shown here. The contents of this page will vary from day to day, and can be customized. This screenshot is typical of what you will see with a brand new project.



We'll start with a quick tour of the upper menu bar, so you'll know what the icons represent:

-  Products & services menu
-  Search box
-  Project name
-  [Cloud Shell](#)
-  Feedback
-  Help
-  Notifications
-  Utilities and more
-  Your Google identity





Next to your project name is a down arrow which leads to a menu from which you can access and manage other projects, or create a new project.

Activity

Home

Dashboard

Activity

All projects 3 categories Latest

Today

8:47 AM Set IAM policy

Yesterday

4:29 PM Set IAM policy

4:07 PM UpdateProject

4:07 PM Project renamed

4/14/16

11:23 AM Accepted owner invite

11:01 AM Accepted owner invite

4/13/16

7:09 PM Invited a project owner

7:09 PM Invited an admin

7:00 PM Invited a project owner

7:00 PM Invited an admin

6:53 PM Created the application

6:53 PM Project created

6:44 PM Created the application

6:44 PM Project created

Select all None

Configuration

Data Access

Monitoring

Recommendation

OK Cancel

has set the project's IAM policy ISB-CGC-04-0003

has set the project's IAM policy

has executed UpdateProject

renamed project ISB-CGC-04-0003

Sheila Reynolds accepted an invitation to be a pro

Sheila Reynolds accepted an invitation to be a pro

Zack Rodebaugh invited sreynolds@systemsbiolo

Zack Rodebaugh invited an admin: isb-cgc-04-0003

Zack Rodebaugh invited sreynolds@systemsbiolo

Zack Rodebaugh invited an admin: isb-cgc-04-0003 ISB-CGC-04-0003

Zack Rodebaugh created the application: isb-cgc-04-0030 ISB-CGC workshop

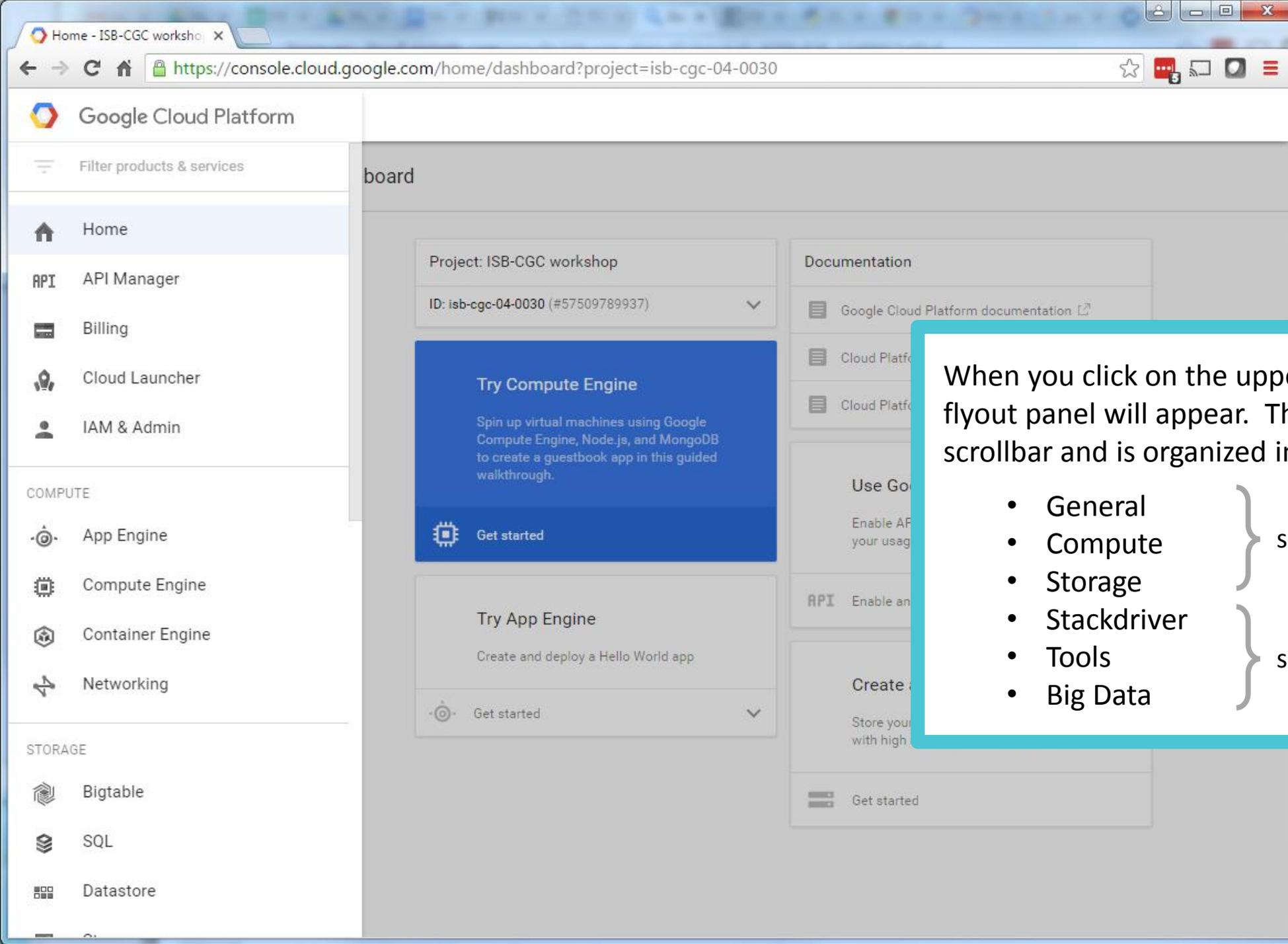
Zack Rodebaugh created project ISB-CGC-04-0030. ISB-CGC workshop

Zack Rodebaugh created the application: isb-cgc-04-0003 ISB-CGC-04-0003

Zack Rodebaugh created project ISB-CGC-04-0003. ISB-CGC-04-0003

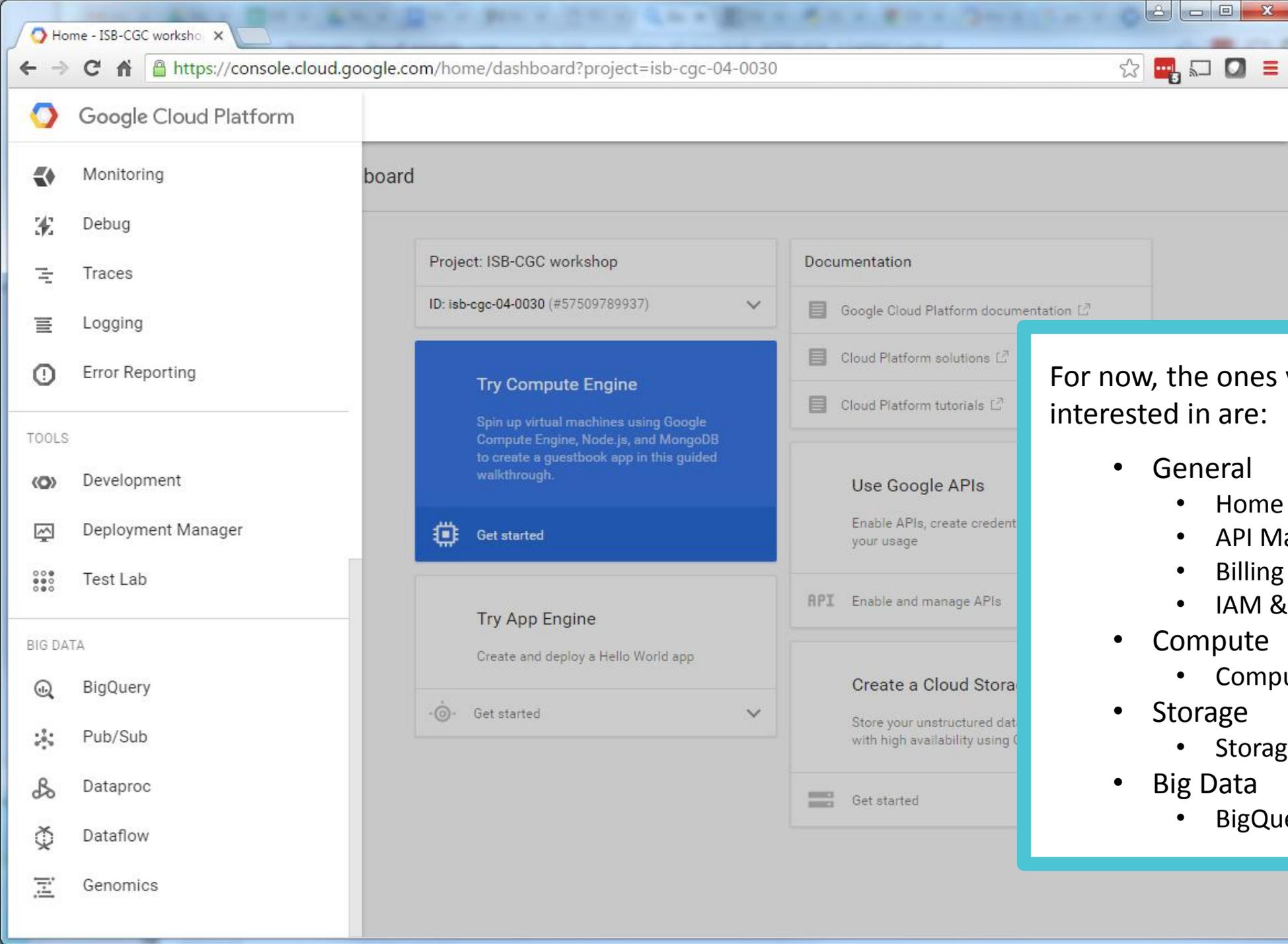
From the Home section of the Console, you can also see recent project **Activity**.

You can choose which types of activities you would like to see, and select whether you want to see activities for all of your projects or just one project, *etc.* Actions taken by you as well as other members of the project(s) will be shown here.



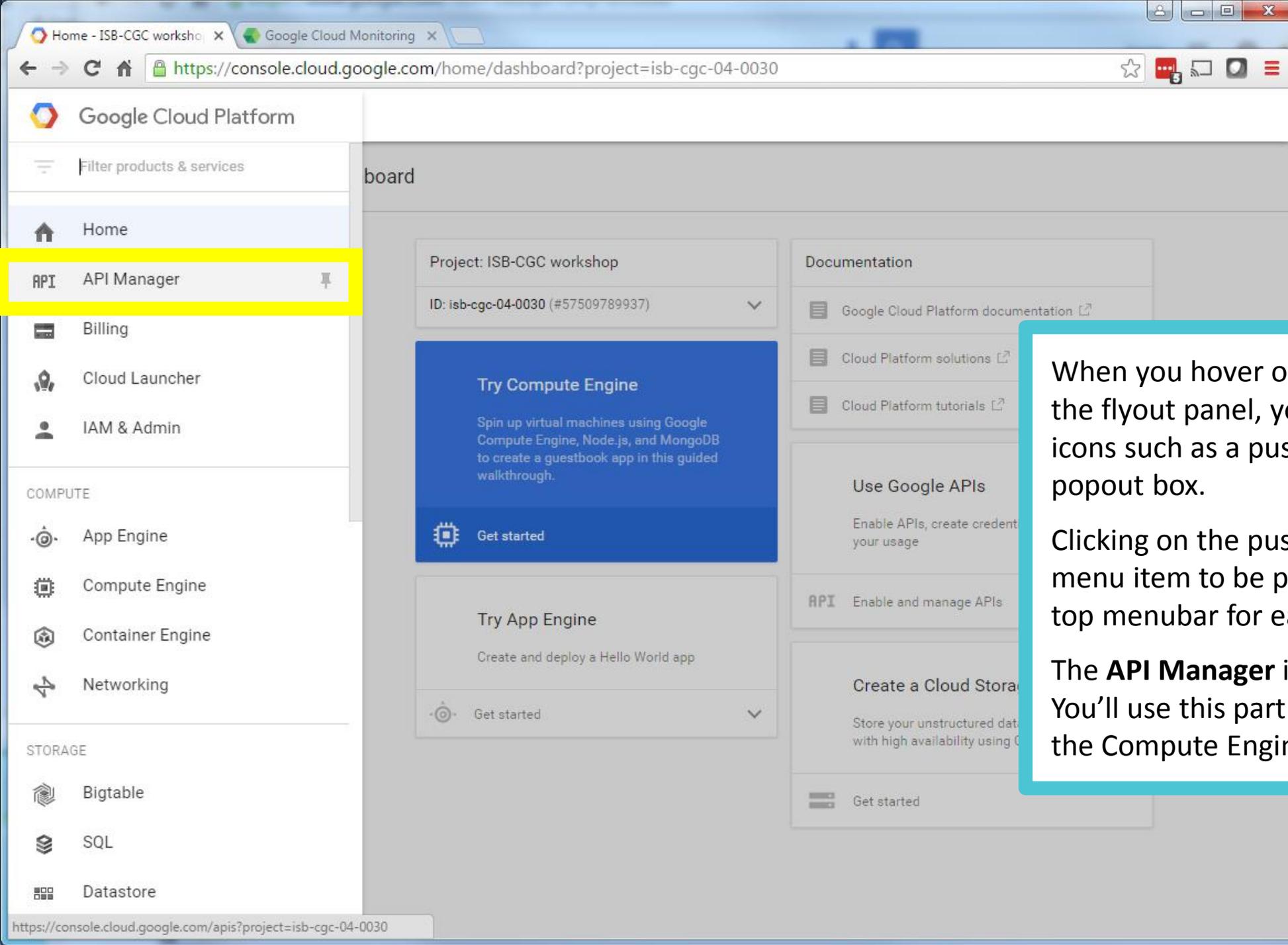
When you click on the upper-left menu icon, a flyout panel will appear. This flyout panel includes a scrollbar and is organized into six sections:

- General
  - Compute
  - Storage
  - Stackdriver
  - Tools
  - Big Data
- } shown on this page
- } shown on the next page



For now, the ones you're most likely to be interested in are:

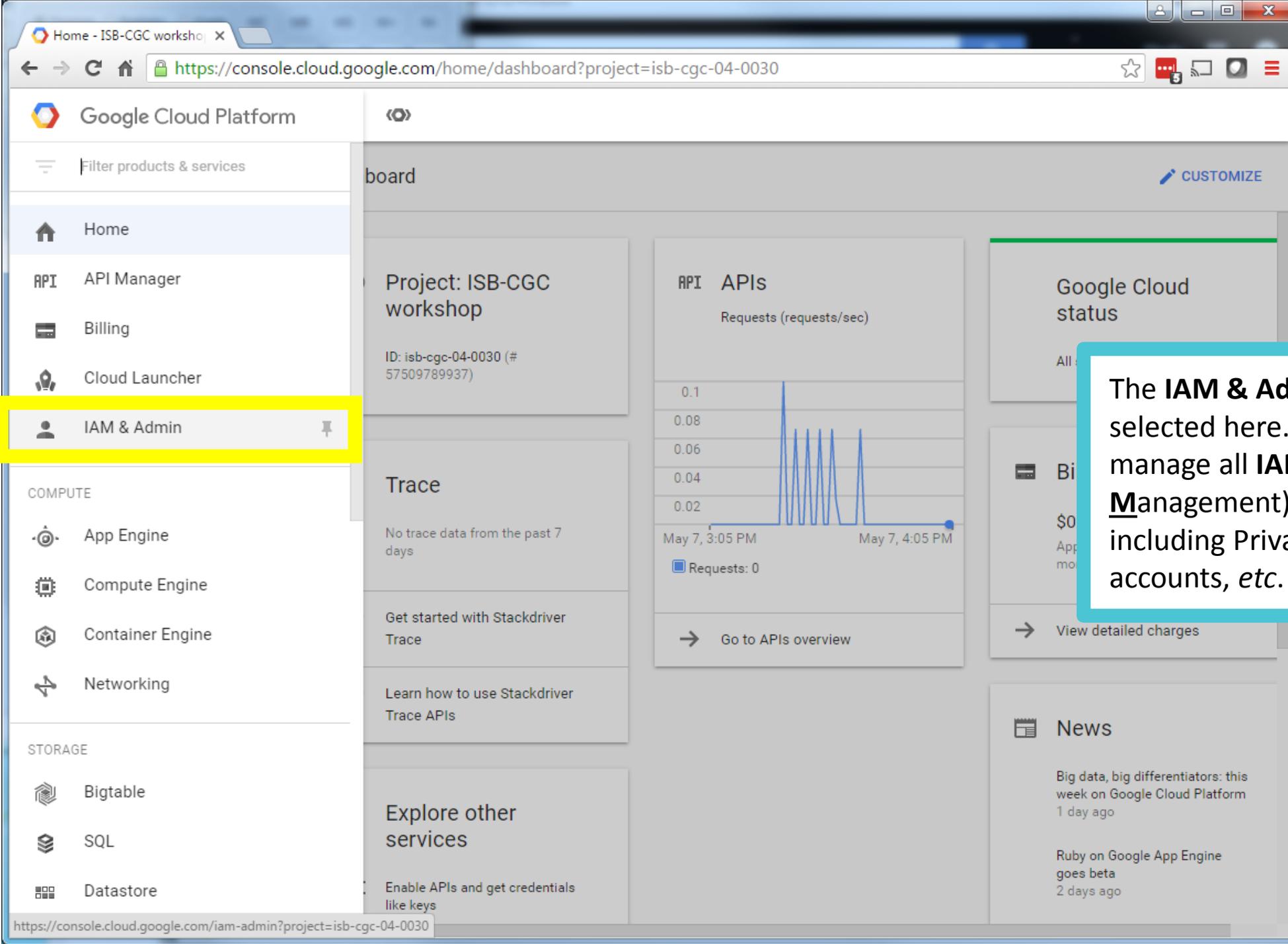
- General
  - Home
  - API Manager
  - Billing
  - IAM & Admin
- Compute
  - Compute Engine
- Storage
  - Storage
- Big Data
  - BigQuery



When you hover over one of the items in the flyout panel, you may see additional icons such as a pushpin, info icon, or popout box.

Clicking on the pushpin will cause this menu item to be pinned (as an icon) to the top menubar for easier access.

The **API Manager** is shown selected here. You'll use this part of the Console to enable the Compute Engine and Genomics APIs.



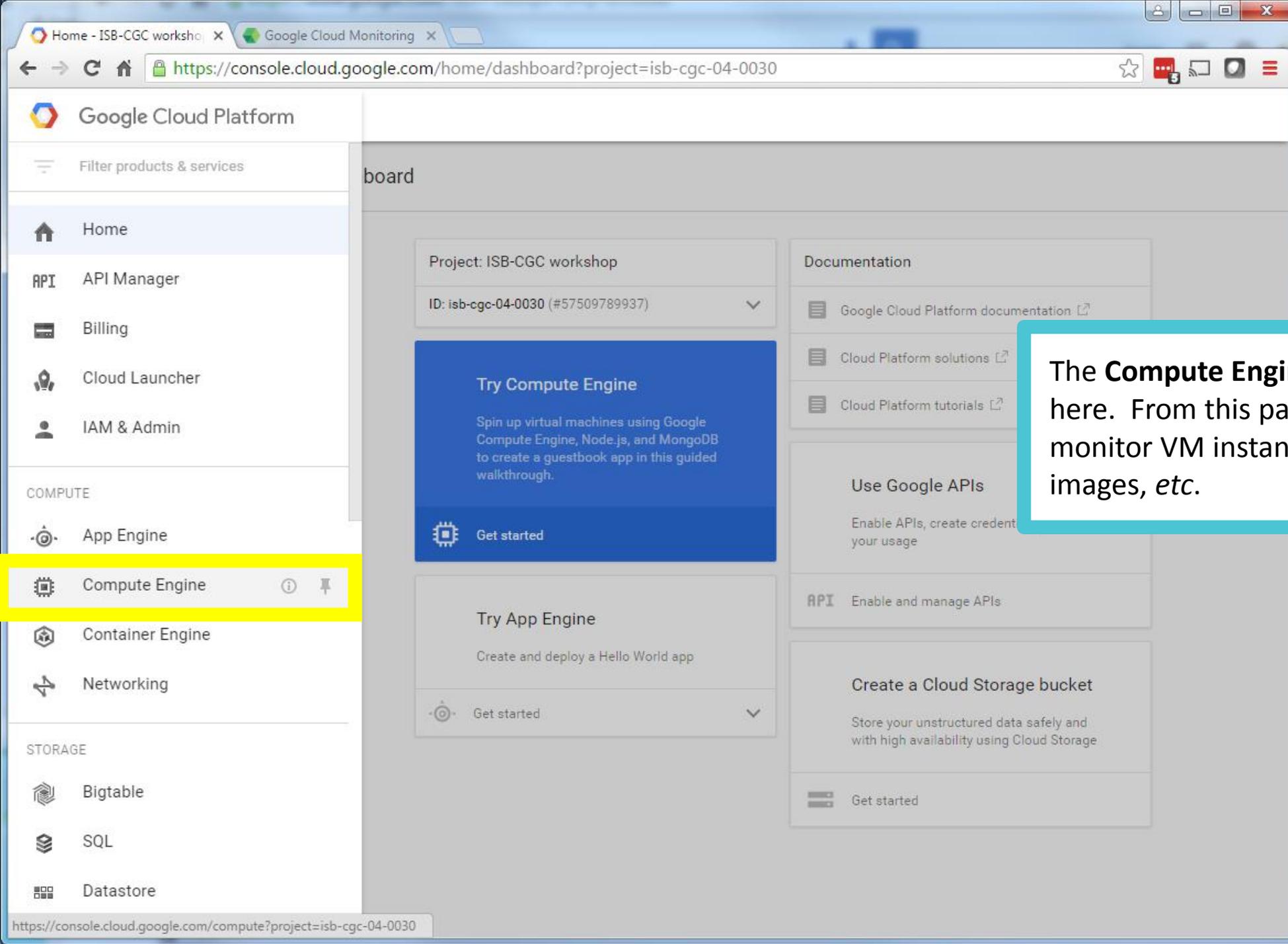
The **IAM & Admin** section is shown selected here. This is where you will manage all **IAM** (**I**ntity and **A**ccess **M**anagement) aspects of your project, including Privacy and Security, Service accounts, *etc.*

The screenshot shows the Google Cloud Platform IAM Admin console for project "ISB-CGC-04-0003". The left sidebar contains navigation options: IAM & Admin, All projects, IAM, GCP Privacy & Security, Settings, Service accounts, Labels, and Quotas. The main content area is titled "IAM" and includes buttons for "ADD MEMBER" and "REMOVE MEMBER". Below this, it displays "Permissions for project 'ISB-CGC-04-0003'", explaining that these permissions affect the entire project and its resources. A search bar is provided for finding users, groups, service accounts, and domains. Two roles are listed: "Owner" (Full access to all resources) and "Editor" (Edit access to all resources). Each role has a list of members with checkboxes for selection.

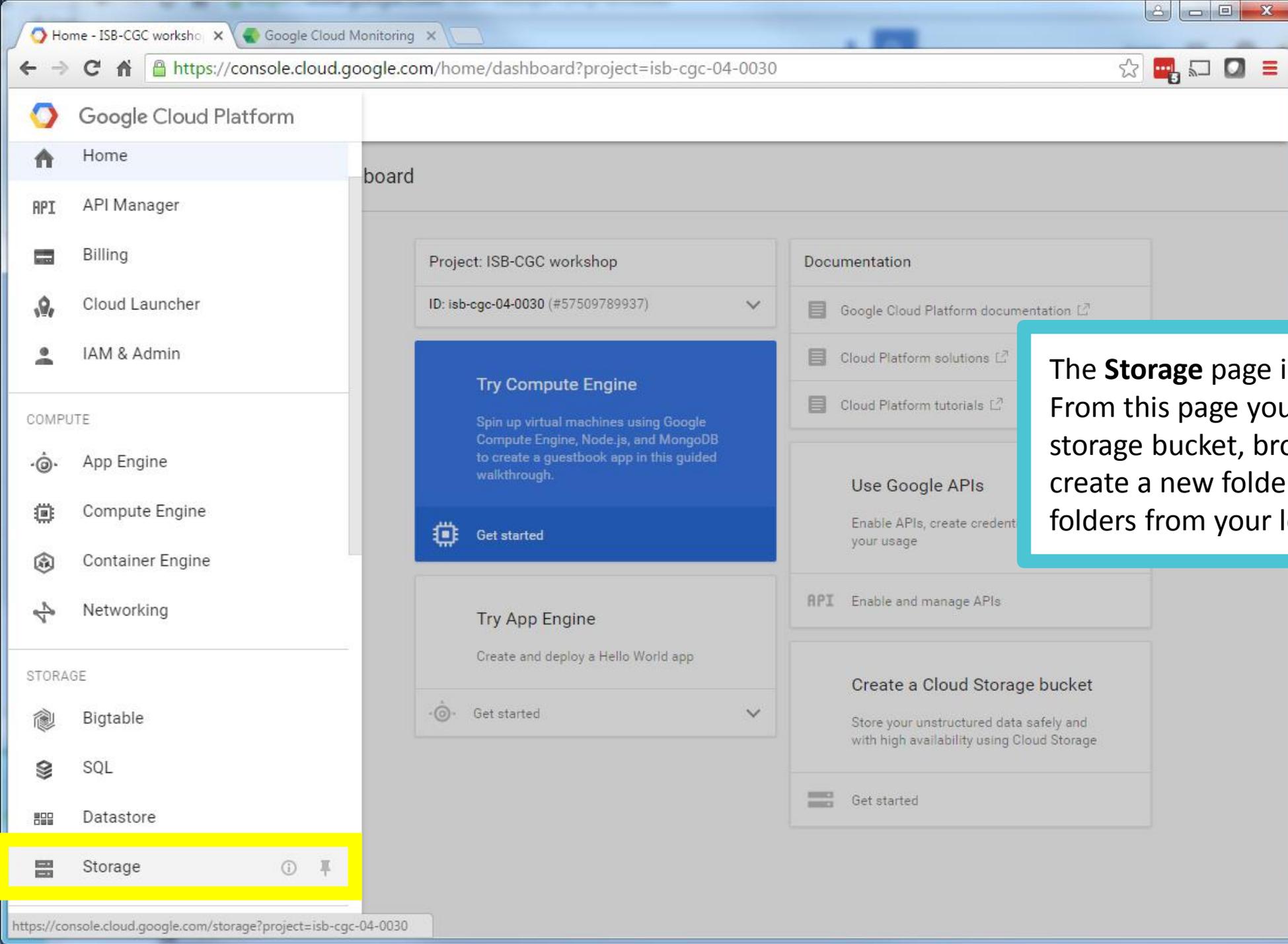
Role	Description
Owner	Full access to all resources.
<input type="checkbox"/> Type <a href="#">Members ^</a>	
<input type="checkbox"/>	sreynolds@systemsbiology.org
<input type="checkbox"/>	zrodebau@systemsbiology.org
Editor	Edit access to all resources.
<input type="checkbox"/> Type <a href="#">Members ^</a>	
<input type="checkbox"/>	Compute Engine default service account 901200507895-compute@developer.gserviceaccount.com
<input type="checkbox"/>	Google APIs service account <a href="#">?</a> 901200507895@cloudbuild.gserviceaccount.com
<input type="checkbox"/>	Google APIs service account <a href="#">?</a> 901200507895@cloudservices.gserviceaccount.com
<input type="checkbox"/>	dr.ruth.mackin@gmail.com
<input type="checkbox"/>	App Engine default service account isb-cgc-04-0003@appspot.gserviceaccount.com

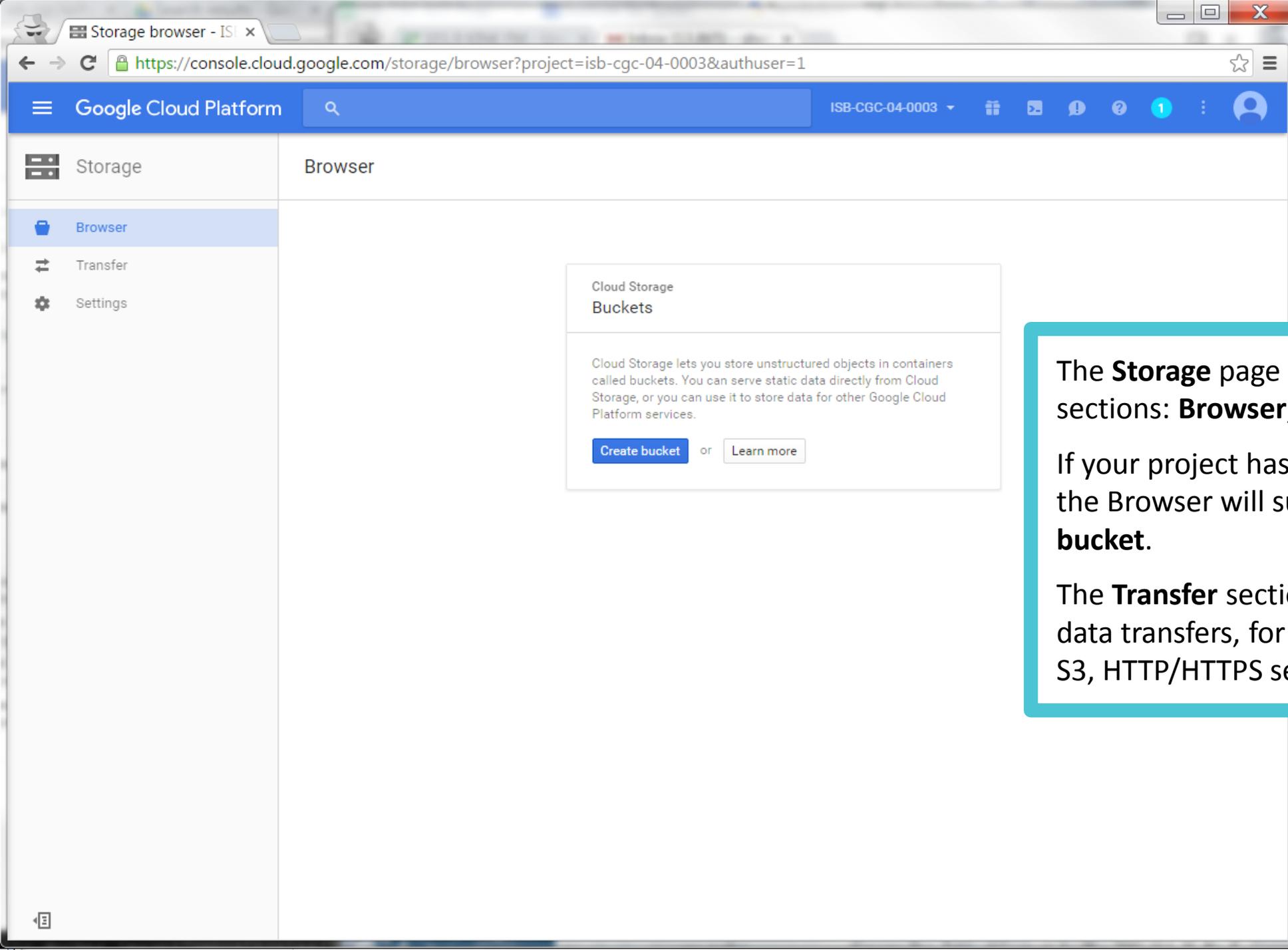
The main IAM page shows the permissions settings for your project. Project-level permissions affect **all** of the project's resources (buckets, VMs, etc).

Until recently, project member roles were limited to "Owner", "Editor", and "Viewer", but new [IAM](#) features now allow much finer-grained access control with a much larger number of more specific roles. (These features are being rolled out gradually, with many currently in alpha or beta, or available only for some components of the Google Cloud.)



The **Compute Engine** is shown selected here. From this page you can create and monitor VM instances, persistent disks, VM images, etc.

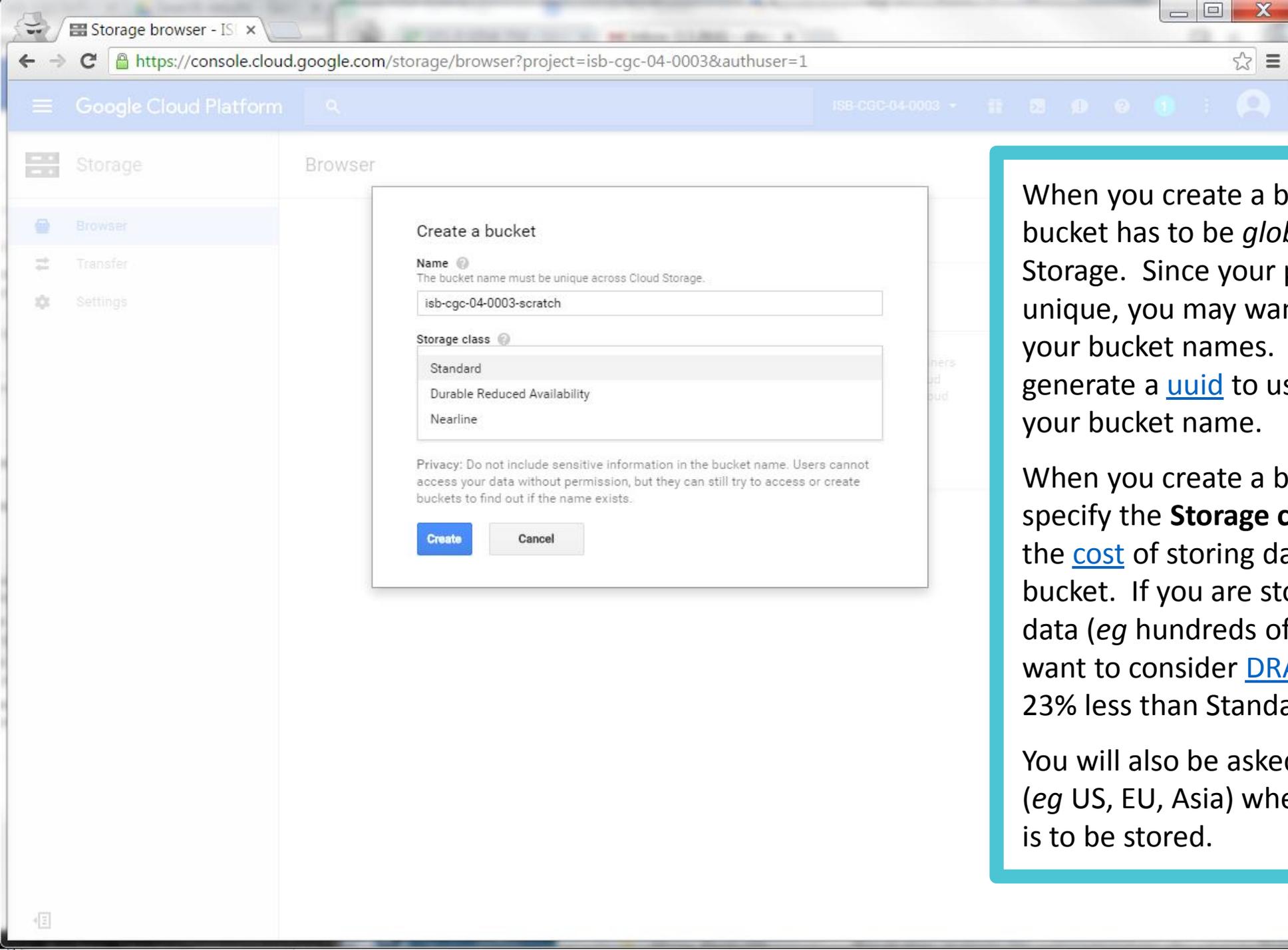




The **Storage** page of the Console has three sections: **Browser**, **Transfer**, and **Settings**.

If your project has no storage buckets yet, the Browser will suggest that you **Create a bucket**.

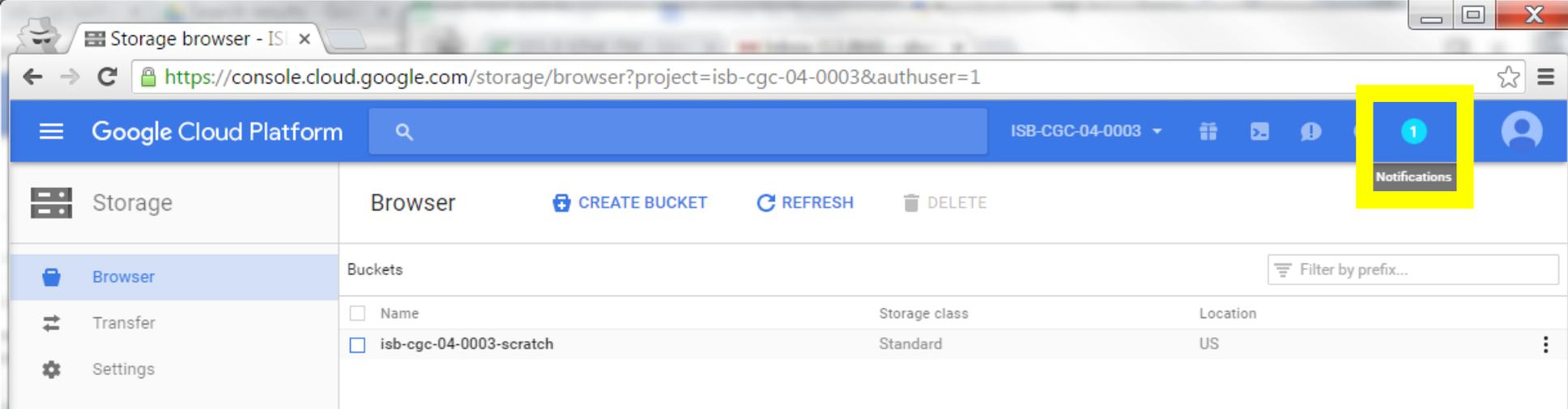
The **Transfer** section lets you set up large data transfers, for example from Amazon S3, HTTP/HTTPS servers, or other buckets.



When you create a bucket, the name of the bucket has to be *globally unique* across Cloud Storage. Since your project id is also globally unique, you may want to use it as a prefix for your bucket names. Another option is to generate a [uuid](#) to use as a prefix or suffix for your bucket name.

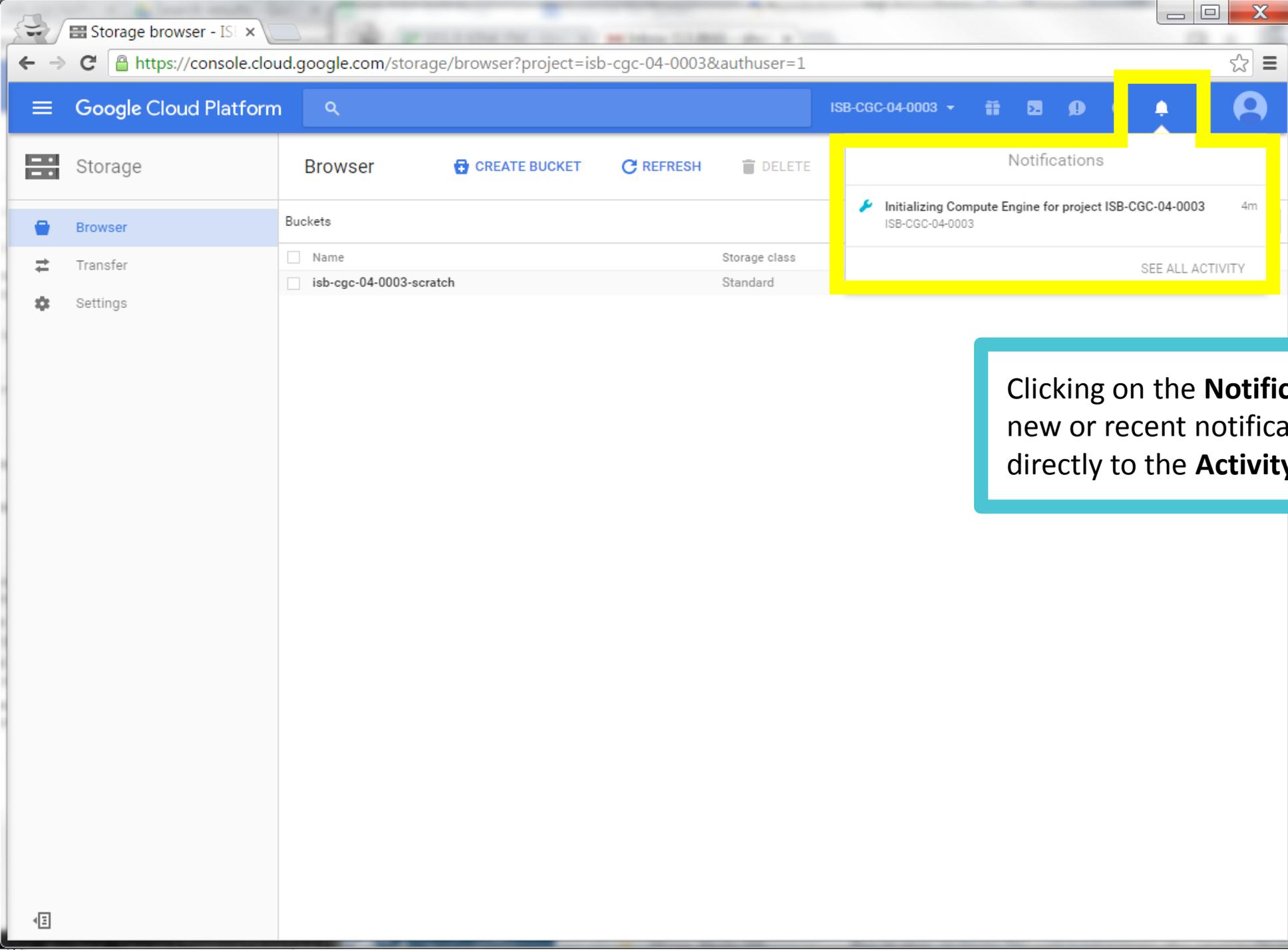
When you create a bucket, you need to specify the **Storage class**. This will determine the [cost](#) of storing data that you copy into this bucket. If you are storing large amounts of data (eg hundreds of TB or more, you may want to consider [DRA](#) storage which costs 23% less than Standard storage).

You will also be asked to specify the **Location** (eg US, EU, Asia) where the data in this bucket is to be stored.



Once your project includes at least one bucket, the **Storage Browser** provides an easy way to create new buckets, create folders in buckets, upload data, *etc.*

When you (or someone else in the same project) performs an action such as creating a bucket, adding a new user, or launching a VM, you'll notice the Notifications icon in the top menu bar will change, alerting you that there are **Notifications**.



Clicking on the **Notifications** bell will show you new or recent notifications and allow you to go directly to the **Activity** page to see all Activity.

Home - ISB-CGC-04 - x Compute Engine - Ia x

https://console.cloud.google.com/home/dashboard?project=isb-cgc-04-0003&authuser=1

# Google Cloud Platform

board CUSTOMIZE

STACKDRIVER

- Monitoring
- Debug
- Traces
- Logging
- Error Reporting

TOOLS

- Development
- Deployment Manager
- Test Lab

BIG DATA

- BigQuery** 🔗 📘 📌
- Pub/Sub
- Dataproc
- Dataflow
- Genomics

Project: ISB-CGC-04-0003

ID: isb-cgc-04-0003 (#901200507895)

## APIs

Requests (requests/sec)

Time	Requests (requests/sec)
May 3, 8:30 AM	~0.02
May 3, 9:13 AM	~0.25

Requests: 0

→ Go to APIs overview

## Resources

Cloud Storage  
1 bucket

## Trace

No trace data from the past 7 days

Get started with Stackdriver Trace

Learn how to use Stackdriver Trace APIs

## Google Cloud status

All

Go inc Ele on Be

All

Da

status.cloud.google.com

## Billing

\$0.00

Approximate charges so far this month

→ View detailed charges

## News

The BigQuery page is shown selected here. Notice the popout icon which indicates that the [BigQuery Web UI](#) will open in a new tab of your browser.

# Cancer Genomics Cloud

## What Next?

Now that you know your way around the Google Cloud Console, you're ready to start exploring further!

The ISB-CGC platform includes an interactive [Web App](#), over a Petabyte of TCGA data in Google Genomics and Cloud Storage, and tutorials and code examples on [GitHub](#) to get you started.

Documentation for the [ISB-CGC](#) platform and [Google Genomics](#) can be found on readthedocs.