

## Creating and securing google-maps API

*Sign in with your google account and connect your credit card to enable the key's.*

1. <https://developers.google.com/maps/documentation/javascript/get-api-key>
2. Scroll to the 'Creating API keys' section.

### Creating API keys

The API key is a unique identifier that authenticates requests associated with your project. You must have at least one API key associated with your project.

To create an API key:

1. Go to the **APIs & Services > Credentials** page.

[Go to the Credentials page](#)

2. On the **Credentials** page, click **Create credentials > API key**.  
The **API key created** dialog displays your newly created API key.

3. Click **Close**.

The new API key is listed on the **Credentials** page under **API keys**.  
(Remember to restrict the API key before using it in production.)

3. Now create a new project

[SELECT PROJECT](#) [CREATE PROJECT](#)

4. Press create credentials and then API key:

The screenshot shows the Google Cloud 'Credentials' page. At the top, there is a '+ CREATE CREDENTIALS' button and a 'DELETE' button. Below this, there is a section for 'Create credentials to access your project' with three options: 'API key' (highlighted with a red box), 'OAuth client ID', and 'Service account'. The 'API key' option is described as 'Identifies your project using a simple API key to check quota and access'. Below this, there is a 'Remember this' checkbox and a 'CONFIGURE CONSENT SCREEN' button. Further down, there is a section for 'API Keys' with a 'Name' column and a 'Help me choose' button. Below this, there is a section for 'OAuth 2.0 Client IDs' with a table showing 'Name', 'Creation date', 'Type', and 'Client ID'. At the bottom, there is a section for 'Service Accounts' with a table showing 'Email' and 'Name'.

## 5. Now you have an API key!

### API key created

Use this key in your application by passing it with the `key=API_KEY` parameter.

Your API key

AIzaSyC8fTaINAFENrmHEksFD71kXcFQrKKARFI

⚠ Restrict your key to prevent unauthorized use in production.

CLOSE

RESTRICT KEY

This key should be kept private, and usually will not be uploaded to a public git repository. However, we would like to have our app online on github pages. So we will restrict the API key access to avoid a miss use.

## 6. To add restrictions for an API key, do the following:

- Select HTTP referrers (web sites).
- After the project is on github pages, add the github pages link:

### Website restrictions

Restrict key usage requests to the specified websites.

⚠ If left blank, your API key will accept requests from any website.

New item

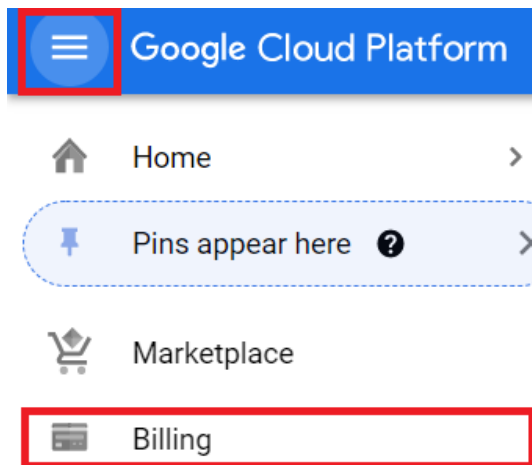
Referrer \*

CANCEL DONE

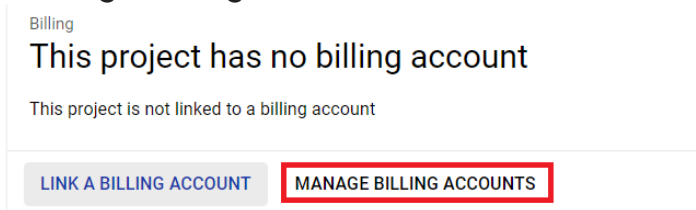
ADD AN ITEM

- Click Save.

7. Go to 'billing' (search it inside the google console):



8. Manage billing accounts and create a new billing account:



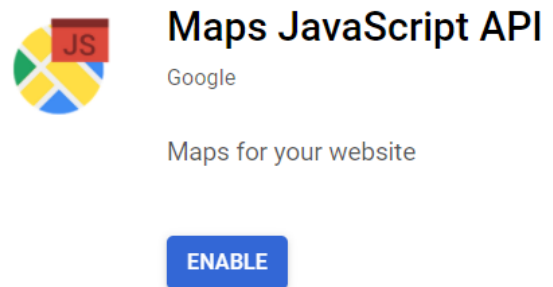
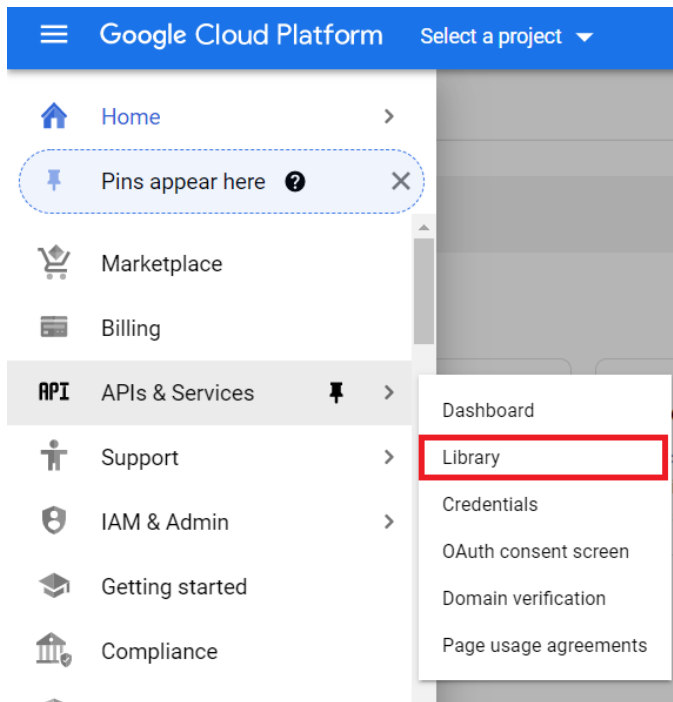
9. Go to Budgets & alerts.

10. Create a budget

11. Select a name for your budget and make sure it looks like this:

A screenshot of the 'Create budget' form in Google Cloud. The form is titled 'Create budget' and includes several sections: 'Project or billing account' with a dropdown menu showing 'My Billing Account'; 'Budget amount' with a dropdown menu showing 'Specified amount' and a text input field with '0.5'; 'Cost after credit' with a checked checkbox; 'Set alert threshold rules' with a table of rules; and 'Manage notifications' with a checkbox to 'Connect a Pub/Sub topic to this budget'. The 'Save' button is highlighted with a blue background.

12. Go to APIs & Services => Library and select Maps JavaScript API and enable it:



Now you should have a restricted API based on your website address, and an alert if you are getting charged (shouldn't happen). API keys are a sensitive thing, keep them safe, and if compromised re-generate them.