



# Step-by-Step: Creating Two Google Maps API Keys



## Prerequisites

- Google account
  - Credit card (won't be charged - just for verification)
  - 20 minutes
- 

## PART 1: INITIAL SETUP

### Step 1: Go to Google Cloud Console

1. **Open your browser**
  2. **Go to:** <https://console.cloud.google.com/>
  3. **Sign in** with your Google account
  4. **Accept terms** if this is your first time
- 

### Step 2: Create a New Project

1. **Look at the top of the page**
  - You'll see a dropdown that says "Select a project" or shows a project name
  - It's next to the Google Cloud logo
2. **Click that dropdown**
3. **Click "New Project"** (top right of the popup)
4. **Fill in the form:**
  - **Project name:**  (or any name you like)
  - **Location:** Leave as "No organization"
5. **Click "CREATE"** (blue button, bottom right)
6. **Wait 10-30 seconds**
  - You'll see a notification in the top right

- "Creating project Premium App..."
- Then: "Project created"

7. **Click "SELECT PROJECT"** in the notification

- Or click the project dropdown again and select "Premium App"

 **Your project is now created and selected**

---

### **Step 3: Enable Billing**

**Why:** Google requires a credit card even for free tier

1. **Look at the left sidebar**
2. **Click the hamburger menu** (≡ three horizontal lines, top left)
3. **Scroll down and click "Billing"**
4. **You'll see one of two things: Option A: "This project has no billing account"**
  - Click "LINK A BILLING ACCOUNT"
  - Then "CREATE BILLING ACCOUNT"

**Option B: "Enable billing for this project"**

  - Click "ENABLE BILLING"
5. **Fill in the billing form:**
  - **Country:** Select your country
  - **Name:** Your name
  - **Address:** Your address
  - **Credit card:** Your card details
6. **Check the box:** "I have read and agree to the terms"
7. **Click "START MY FREE TRIAL"** or "SUBMIT AND ENABLE BILLING"
8. **You should see:** "Your billing account is now active"

 **Billing enabled (you get \$200 FREE per month)**

---

## Step 4: Enable Places API

1. **Click the hamburger menu (☰) again**
2. **Go to:** APIs & Services → Library
  - Or search "API Library" in the search bar at top
3. **You'll see a page full of API options**
4. **In the search box, type:**
5. **Click on "Places API"** (should be first result)
  - Icon looks like a map pin
  - Says "Places API" underneath
6. **Click the blue "ENABLE" button**
7. **Wait 5-10 seconds**
  - Page will refresh
  - You'll see "API enabled"
  - Top will say "Places API" with a green checkmark

 **Places API is now enabled**

---

## Step 5: Enable Geocoding API

1. **Click "← " (back arrow) at the top**
  - Or click "API Library" in the left sidebar
2. **In the search box, type:**
3. **Click on "Geocoding API"**
  - Icon looks like a location pin with circles
4. **Click the blue "ENABLE" button**
5. **Wait 5-10 seconds**
  - Page will refresh
  - You'll see "API enabled"

 **Geocoding API is now enabled**

---

## PART 2: CREATE KEY 1 (PUBLIC - FOR PLACES AUTOCOMPLETE)

### Step 6: Go to Credentials Page

1. **Click the hamburger menu** (☰)
  2. **Go to:** APIs & Services → Credentials
  3. **You'll see a page with tabs:** Credentials, OAuth consent screen, Domain verification
- 

### Step 7: Create the First API Key

1. **Click the "+ CREATE CREDENTIALS" button** (near the top)
  2. **Select "API key"** from the dropdown
  3. **A popup appears:**
    - Shows your API key (starts with `AIzaSy...`)
    - Says "API key created"
  4. **IMMEDIATELY COPY THIS KEY:**
    - Select all the text (highlight it)
    - Copy it (Ctrl+C or Cmd+C)
    - **Paste it somewhere safe:**
      - Notepad (Windows)
      - Notes app (Mac)
      - Text file
    - **Label it:** "KEY 1 - PUBLIC - PLACES"
  5. **DO NOT CLOSE THE POPUP YET**
  6. **Click "RESTRICT KEY"** (blue button in the popup)
    - This takes you to the key editing page
-

## Step 8: Restrict Key 1 - Set Name

1. You're now on the "Edit API key" page
  2. At the very top, find "API key name"
    - Currently says something like: "API key 1"
  3. Click in the text box
  4. Change it to:
  5. Don't click Save yet - we have more to do
- 

## Step 9: Restrict Key 1 - Application Restrictions

1. Scroll down to "Application restrictions"
2. You'll see 4 radio button options:
  - ☐ None
  - ☐ HTTP referrers (websites)
  - ☐ IP addresses
  - ☐ Android apps
  - ☐ iOS apps
3. Select: "HTTP referrers (websites)" ← Click this one
4. A new section appears: "Website restrictions"
5. Click "+ ADD AN ITEM"
6. In the text box that appears, type:
7. Click "+ ADD AN ITEM" again
8. Type:
9. Click "+ ADD AN ITEM" again
10. Type: 
  - Or whatever your Netlify domain will be
  - You can update this later

Your list should now show:

```
localhost:*  
127.0.0.1:*  
premium-app.netlify.app/*
```

---

## Step 10: Restrict Key 1 - API Restrictions

1. **Scroll down further to "API restrictions"**
2. **You'll see 2 radio button options:**
  - ☐ Don't restrict key
  - ☐ Restrict key
3. **Select: "Restrict key"** ← Click this one
4. **A dropdown appears that says "Select APIs"**
5. **Click the dropdown**
6. **You'll see a long list of APIs**
7. **Scroll down and find "Places API"**
8. **Click the checkbox next to "Places API"** ☒
  - Should see a blue checkmark
9. **Make sure ONLY Places API is checked**
  - Scroll through to verify
  - Especially make sure "Geocoding API" is NOT checked ❌
10. **Click anywhere outside the dropdown** to close it

**You should see:**

```
API restrictions: Restrict key  
Selected APIs: Places API
```

---

## Step 11: Save Key 1

1. **Scroll to the bottom of the page**

2. **Click "SAVE"** (blue button)
3. **Wait 5-10 seconds**
4. **You'll see a notification:**
  - "API key updated"
  - Or "API key saved successfully"
5. **IMPORTANT:** Wait 5 minutes for restrictions to take effect

 **KEY 1 IS NOW CREATED AND SECURED!**

---

## **PART 3: CREATE KEY 2 (SECRET - FOR GEOCODING)**

### **Step 12: Create the Second API Key**

1. **You're still on the Credentials page**
    - If not: Go to APIs & Services → Credentials
  2. **Click "+ CREATE CREDENTIALS"** again (at the top)
  3. **Select "API key"**
  4. **Another popup appears with a new key**
  5. **IMMEDIATELY COPY THIS KEY:**
    - It's different from Key 1!
    - Starts with `AIzaSy...` but has different characters
    - Copy it (Ctrl+C or Cmd+C)
    - **Paste it somewhere safe**
    - **Label it:** "KEY 2 - SECRET - GEOCODING"
  6. **Click "RESTRICT KEY"** in the popup
- 

### **Step 13: Restrict Key 2 - Set Name**

1. **You're now on the edit page for the second key**
2. **At the top, change "API key name" to:** `Premium App - Geocoding (Secret)`
3. **Don't click Save yet**

---

## Step 14: Restrict Key 2 - Application Restrictions



1. **Scroll to "Application restrictions"**
2. **Select: "None"** ← This is different from Key 1!
  - Click the "None" radio button
  - This is because Key 2 will be used server-side (in Netlify functions)
  - Server-side calls don't have domains

**Your selection should show:**

Application restrictions: None

---

## Step 15: Restrict Key 2 - API Restrictions

1. **Scroll down to "API restrictions"**
2. **Select: "Restrict key"**
3. **Click the dropdown "Select APIs"**
4. **Find "Geocoding API" in the list**
5. **Click the checkbox next to "Geocoding API"** 
6. **Make sure ONLY Geocoding API is checked**
  - Especially make sure "Places API" is NOT checked 
7. **Click outside the dropdown to close it**

**You should see:**

API restrictions: Restrict key  
Selected APIs: Geocoding API



## Step 16: Save Key 2

1. **Scroll to the bottom**
2. **Click "SAVE"** (blue button)
3. **Wait 5-10 seconds**
4. **You'll see "API key updated"**
5. **IMPORTANT:** Wait 5 minutes for restrictions to take effect

✅ **KEY 2 IS NOW CREATED AND SECURED!**

---

## PART 4: VERIFY YOUR KEYS

### Step 17: Check Your Credentials Page

1. **Go to:** APIs & Services → Credentials
2. **Under "API Keys" section**, you should see:

Premium App - Places (Public)  
Premium App - Geocoding (Secret)

3. **You should have both keys saved in your notes:**

KEY 1 - PUBLIC - PLACES:  
AIzaSyA... (your actual key 1)

KEY 2 - SECRET - GEOCODING:  
AIzaSyB... (your actual key 2)

✅ **Both keys created successfully!**

---

## QUICK REFERENCE

### Key 1 (Public - Places)

- **Name:** Premium App - Places (Public)
- **Use for:** Autocomplete widget in HTML
- **Restrictions:**
  - Application: HTTP referrers (websites)
  - Domains: localhost:, 127.0.0.1:, premium-app.netlify.app/\*
  - API: Places API ONLY
- **Where it goes:** In your `index.html` file (line 722)

### Key 2 (Secret - Geocoding)

- **Name:** Premium App - Geocoding (Secret)
- **Use for:** Address verification via backend
- **Restrictions:**
  - Application: None (server-side)
  - API: Geocoding API ONLY
- **Where it goes:** Netlify environment variable (NEVER in code!)

---

## HOW TO TELL THEM APART

Look at your **Credentials page**:

Key Name	Application Restrictions	API Restrictions
Premium App - Places (Public)	HTTP referrers	Places API
Premium App - Geocoding (Secret)	None	Geocoding API

---

## CHECKLIST

Before moving on, make sure:

- ☐ Both API keys created
  - ☐ Both keys copied and saved safely
  - ☐ Key 1 restricted to: HTTP referrers + Places API
  - ☐ Key 2 restricted to: None + Geocoding API
  - ☐ Both keys labeled clearly in your notes
  - ☐ Waited 5 minutes for restrictions to activate
- 

## TROUBLESHOOTING

### Can't find "CREATE CREDENTIALS" button

#### Solution:

- Make sure you selected your project (check dropdown at top)
  - Go to: APIs & Services → Credentials
  - Look near the top of the page
  - Should be a blue button with "+ CREATE CREDENTIALS"
- 

### Don't see "HTTP referrers" option

#### Solution:

- Make sure you're editing Key 1 (Places key)
  - Under "Application restrictions"
  - Should see 4-5 radio button options
  - "HTTP referrers (websites)" should be one of them
- 

### Can't find "Places API" in the dropdown

#### Solution:

- Make sure Places API is enabled

- Go to: APIs & Services → Library
  - Search "Places API"
  - Should say "Manage" (not "Enable")
  - If says "Enable", click it first
- 

### **Restrictions not saving**

#### **Solution:**

- Scroll all the way to bottom
  - Click "SAVE" button
  - Wait for "API key updated" notification
  - Refresh the page
  - Click the key again to verify settings saved
- 

### **Lost track of which key is which**

#### **Solution:**

- Go to: APIs & Services → Credentials
  - Look at the key names:
    - "Premium App - Places (Public)" = Key 1
    - "Premium App - Geocoding (Secret)" = Key 2
  - Click each one to see restrictions
  - Key 1 should have HTTP referrers
  - Key 2 should have None
- 

### **NEXT STEPS**

Now that you have both keys:

1. **Use Key 1:** Put in your `index.html` file (line 722)
  2. **Use Key 2:** Add to Netlify environment variables
  3. **Never mix them up!**
  4. **Never commit Key 2 to Git!**
- 



## SAVE THIS TEMPLATE

Keep this in a safe place (NOT in Git):

PROJECT: Premium App

GOOGLE CLOUD PROJECT ID: [your project id]

KEY 1 - PUBLIC - PLACES (for autocomplete):

Name: Premium App - Places (Public)

Key: AIzaSyA\_\_\_\_\_

Restrictions:

- HTTP referrers: localhost:\*, premium-app.netlify.app/\*

- API: Places API only

Use: Put in index.html line 722

KEY 2 - SECRET - GEOCODING (for verification):

Name: Premium App - Geocoding (Secret)

Key: AIzaSyB\_\_\_\_\_

Restrictions:

- Application: None

- API: Geocoding API only

Use: Netlify environment variable

CREATED: [today's date]



## YOU'RE DONE!

You now have both API keys properly created and secured! 🎉

**Next:** Follow the main deployment guide to use these keys.

**Remember:**

- ☒ Key 1 goes in HTML (public, visible)
- ☒ Key 2 goes in Netlify env vars (secret, hidden)
- ☒ Never commit Key 2 to Git
- ☒ Wait 5 minutes after creating before using