

## Maps JavaScript API

Build dynamic, interactive, deeply customized maps, location, and geospatial experiences for your web apps.

Q Search Maps JS API docs

## Get Started

Start building with commonly used features of the Maps JavaScript API.



# Get started with Google Maps Platform

(https://devel opers.google. gle.com/ com/maps/d ntation/j ocumentation /javascript/cl oud-setup)

(https://developers.goo gle.com/maps/docume ntation/javascript/clou d-setup)

Follow the Google Maps Platform getting started guide to create an account.



### Build your first map with a marker

(https://developers.go
(https://develo ogle.com/maps/docu
pers.google.co mentation/javascript/
m/maps/docu adding-a-google-map)
mentation/java
script/addinga-google-map)
Learn how to load
the Maps

JavaScript API, and add a map with a marker to your web app.

generate an API key, and start building.



overview)

## <u>Customize the</u> <u>style of your map</u>

(https://developers.g
(https://develo oogle.com/maps/doc
pers.google.co umentation/javascript
m/maps/docu /maps-customizationmentation/java overview)
script/mapscustomization-

Customize just about every aspect of the map, including roads, geographical features, points of

interest, and more.



## Add info windows to your markers

(https://developers.go
(https://develoogle.com/maps/docu
pers.google.co mentation/javascript/i
m/maps/docu nfowindows)
mentation/java
script/infowind Show an info
ows)
window with
additional
information and
context when your
users click on a

marker.

## **Features**

Browse docs for core features of the Maps JavaScript API.

#### Map types

(https://developers.go ogle.com/maps/docu mentation/javascript/ maptypes)

Display the road, satellite, hybrid, terrain, and custom maps.

#### **Localization**

(https://developers.go ogle.com/maps/docu mentation/javascript/l ocalization)

Automatically localize text on the map into over 40 languages.

#### **Markers**

(https://developers.go ogle.com/maps/docu mentation/javascript/ markers)

Display the default Google Maps marker, or add your own <u>custom-styled</u> markers

(/maps/documentatio n/javascript/custommarkers)

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#### **UI controls**

(https://developers.go ogle.com/maps/docu mentation/javascript/ controls)

Customize the UI controls that appear on the map.

#### **Events**

(https://developers.go ogle.com/maps/docu mentation/javascript/ events)

Write code that reacts to user interactions and lifecycle events.

#### WebGL overlay

(https://developers.go ogle.com/maps/docu mentation/javascript/ webgl/webgl-overlayview)

Build rich 3D and 2D experiences on the vector basemap with the power of WebGL.

#### **Info windows**

(https://developers.go ogle.com/maps/docu mentation/javascript/i nfowindows)

Add increased context and information to your markers with interactive info windows.

#### **Shapes**

(https://developers.go ogle.com/maps/docu mentation/javascript/ shapes)

Draw a variety of shapes on the map with built-in functions, including polylines

(/maps/documentatio n/javascript/shapes#p olylines) and polygons

(/maps/documentatio n/javascript/shapes#p olygons)

#### **Custom overlays**

(https://developers.go ogle.com/maps/docu mentation/javascript/ customoverlays)

Create custom overlays to display data, imagery, and more on the map.

#### **Ground overlays**

(https://developers.go ogle.com/maps/docu mentation/javascript/ groundoverlays)

Overlay your own custom imagery that stays in sync with the map when it pans and zooms.

#### Data layer

(https://developers.go ogle.com/maps/docu mentation/javascript/ datalayer)

Display GeoJSON and other data types on the map in a variety of formats.

#### **Custom styling**

(https://developers.go ogle.com/maps/docu mentation/javascript/ maps-customizationoverview)

Custom style the appearance of almost every visual aspect of the map.

#### **Tilt & rotation**

(https://developers.go ogle.com/maps/docu mentation/javascript/ webgl/tilt-rotation)

Programmatically tilt and rotate the vector basemap in three dimensions.

#### Marker clustering

(https://developers.go ogle.com/maps/docu mentation/javascript/ marker-clustering)

Group large numbers of markers for a cleaner user experience.

#### **Heatmaps**

(https://developers.go ogle.com/maps/docu mentation/javascript/ heatmaplayer)

Visualize the denisity of data at geographical points.

## Libraries

Bootstrap optional libraries when you load the Maps JS API to add extended functionality.

#### <u>Libraries overview</u>

(https://developers.go ogle.com/maps/docu mentation/javascript/l ibraries)

#### <u>Drawing library</u>

(https://developers.go ogle.com/maps/docu mentation/javascript/ drawinglayer)

#### <u>Geometry library</u>

(https://developers.go ogle.com/maps/docu mentation/javascript/ geometry) Learn how to bootstrap available libraries when you load the Maps JS API. Give your users the ability to interactively draw on the map.

Use utility functions that computate geometric data on the surface of the Earth.

#### Places library

(https://developers.go ogle.com/maps/docu mentation/javascript/ places)

Search for nearby Places, enable Place Autocomplete, and retrieve Place details and photos.

### <u>Local Context</u> <u>library (beta)</u>

(https://developers.go ogle.com/maps/docu mentation/javascript/l ocal-context)

Add an interactive map with a place chooser consisting of a gallery of photos.

#### **Visualization**

#### <u>library</u>

(https://developers.go ogle.com/maps/docu mentation/javascript/ visualization)

Visualize data intensity at geographical points with heat maps.

## Services

Try built-in data services to enrich your web apps.

#### **Directions service**

(https://developers.google.com/maps/documentation/javascript/directions)

Get directions between two points on the map with up to 25 waypoints.

#### **Distance Matrix service**

(https://developers.google.com/maps/documentation/javascript/distancematrix)

Fetch travel distance and time for a matrix of origins and destinations.

#### **Elevation service**

(https://developers.google.com/maps/documentation/javascript/elevation)

Retrieve the elevation of locations on the surface of the Earth, including the ocean floor.

#### **Geocoding service**

(https://developers.google.com/maps/documentation/javascript/geocoding)

Convert addresses or Place IDs to coordinates and vice versa.

## <u>Maximum Zoom Imagery</u> service

(https://developers.google.com/maps/documentation/javascript/maxzoom)

Query for the maximum zoom level of imagery available at a location.

#### **Street View service**

(https://developers.google.com/maps/documentation/javascript/streetview)

Add 360 degree Street View imagery to your web apps, or upload your own imagery.

## Example apps

Run live code samples on your local machine and favorite code playgrounds.



#### **Searching for Places**

(https://developers.goo gle.com/maps/docume

(https://developer ntation/javascript/exam s.google.com/mapples/place-search) s/documentation/j avascript/example Use the Places s/place-search) library to search for

library to search for nearby places.



## Styling the map for dark mode

(https://developers.goog (https://develope le.com/maps/documenta rs.google.com/m tion/javascript/examples aps/documentati /style-array) on/javascript/exa

mples/stylearray)

Use custom map styling to add a dark mode map to your web app.



<u>Customizing marker</u> <u>icons</u>



<u>Using custom</u> <u>overlays</u> (https://developer (https://developers.goo s.google.com/ma gle.com/maps/documen ps/documentationtation/javascript/exampl /javascript/examples/icon-simple) les/icon-simple)

Change the marker icons on your map to a custom image.

(https://developer (https://developers.goo s.google.com/mapgle.com/maps/docume s/documentation/j ntation/javascript/exam avascript/example ples/overlav-simple) s/overlay-simple)

Create a rich overlay on the map that stays in sync when the user pans and zooms.

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## <u>Displaying a traffic</u> <u>layer</u>

(https://developers.goo (https://developer gle.com/maps/documen s.google.com/ma tation/javascript/exampl ps/documentation es/layer-traffic)

/javascript/examp

les/layer-traffic)

Display real-time traffic in a rich map overlay.



## <u>Tilting & rotating the</u> map

(https://developers.goo (https://developer\_gle.com/maps/docume s.google.com/mapntation/javascript/exam s/documentation/j ples/webgl/webgl-tiltavascript/example rotation) s/webgl/webgl-tiltrotation) Programmatically tilt

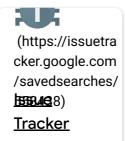
Programmatically tilt and rotate the vector map in three dimensions.

more example apps (https://developers.google.com/maps/documentation/javascript/examples)

## Help & support

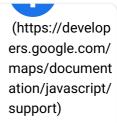
Get help. Give help. Join the community.







(https://statu s.cloud.google .com/mapsplatform/)



#### (https://stack

Get help. Give Help. Build Maps karma.

#### (https://issuet

Report a bug or open a feature request.

# Find out about platform incidents and outages.

#### Support

(https://devel opers.google. com/maps/do cumentation/j avascript/sup port)

Get help from the Google Maps Platform team.

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