Delivery Documentation

Prepared for Gerald Lofstead by Team UniDrive

Release Notes

- Initial release
- Known bugs/defects:
    - Right click submenu sometimes goes off screen
    - Files names in Folders do not change if opened.
    - Application relies on the user having cookies enabled
    - Google API takes long time or does not update Shared Folders
    - Application UI is not designed for mobile devices
    - On Google Chrome. When a folder is open, starring a file in that folder does not currently update the starred status in the right click menu.
    - On Safari. In the search bar, pressing enter to search does not work.

Install Guide

1. Pre-requisites

The required configuration of software and hardware that the customer must have before they can begin the installation process are a GitHub Account and Google Account.

An AWS Account is required for Hosting. For development, GIT, Node.js and Node Package Manager (NPM) are required.

2. Dependent libraries that must be installed

This section is only required if you plan on developing the application locally. We go through the steps into more details in **Section 7. Run instructions (Local Development).**

All of the libraries that need to be installed for our software to function can be done so with the command **npm install.**
Here's a list of all the dependent libraries:

```
"dependencies": {
    "@fortawesome/fontawesome-svg-core": "^1.2.32",
    "@fortawesome/free-brands-svg-icons": "^5.15.1",
    "@fortawesome/free-solid-svg-icons": "^5.15.1",
    "@fortawesome/react-fontawesome": "^0.1.11",
```

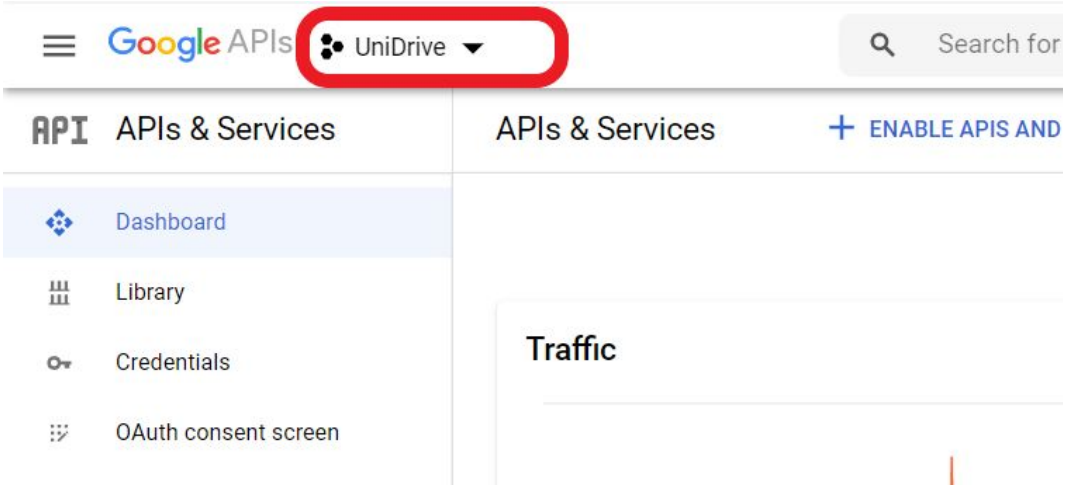
```
    "@testing-library/jest-dom": "^4.2.4",
    "@testing-library/react": "^9.5.0",
    "@testing-library/user-event": "^7.2.1",
    "prop-types": "^15.7.2",
    "react": "^16.13.1",
    "react-contextmenu": "^2.14.0",
    "react-datepicker": "^3.3.0",
    "react-dom": "^16.13.1",
    "react-scripts": "3.4.3",
    "react-select": "^3.1.0",
    "universal-cookie": "^4.0.4"
  },
```

3. Google Drive API Setup:

To gain access to the project, the costumer/users must following the upcoming steps:

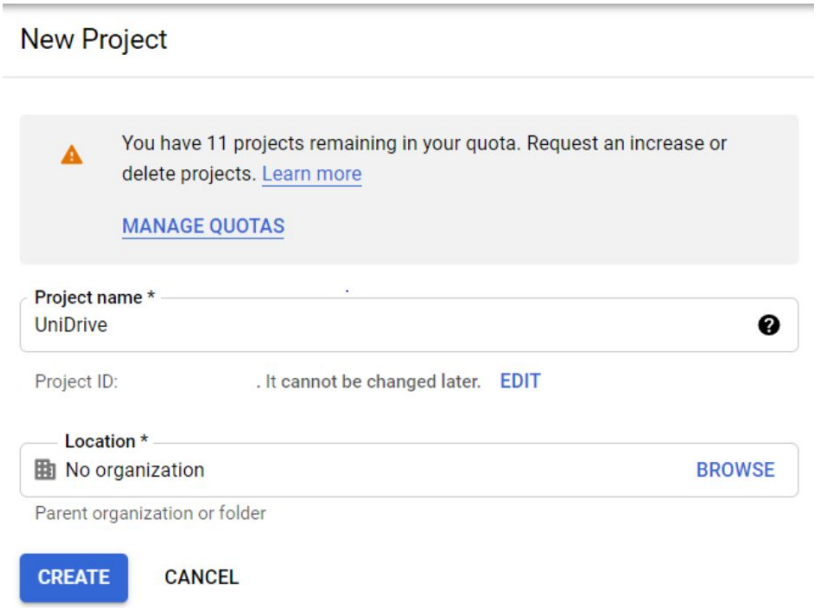
i. Creating the application in Google Console
   1. Go to https://console.developers.google.com/

ii. Click the dropdown icon. It is outlined in red below. It won't say UniDrive, yet.

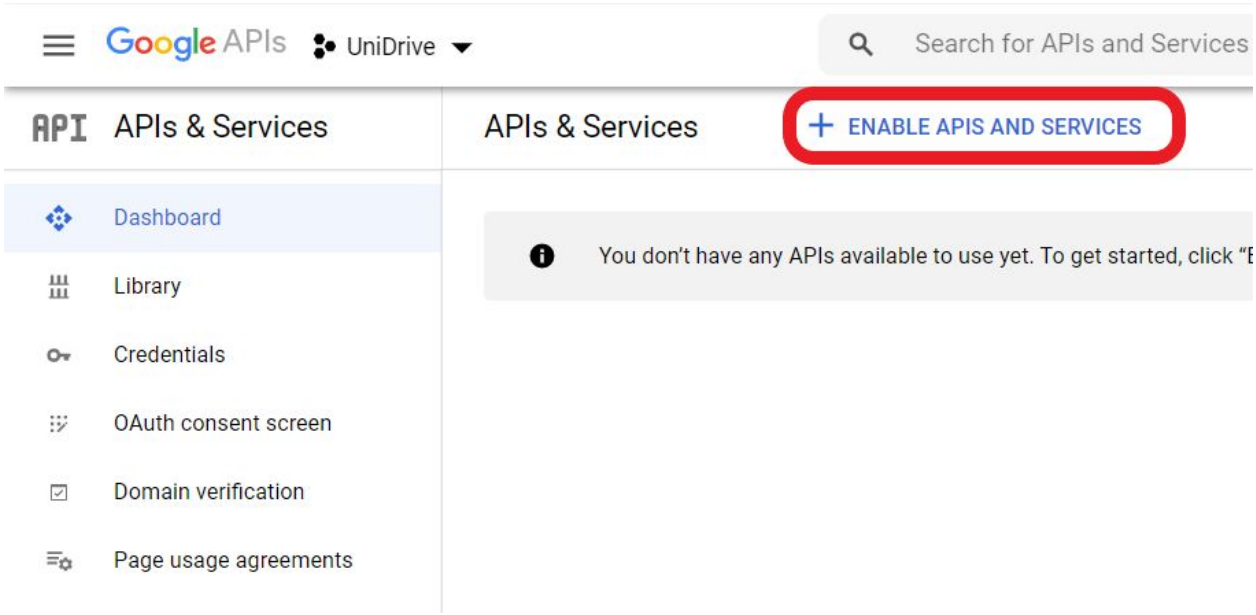


iii. Now, click **New Project** in the top right.

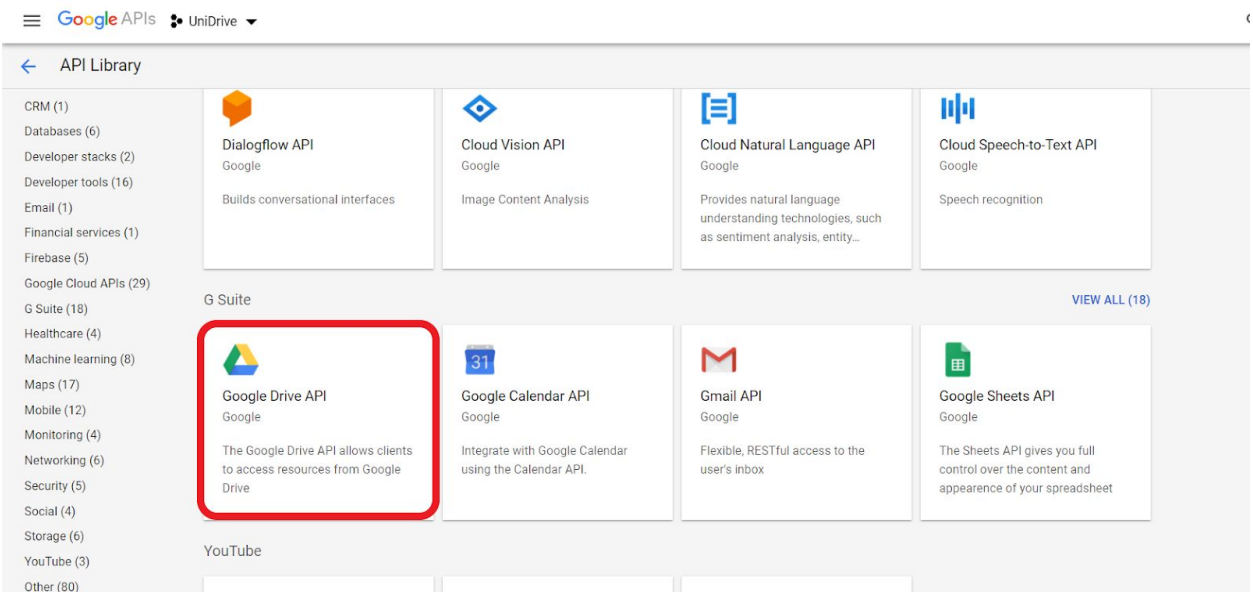
iv. Enter a project name and select a location. Then, click **Create**.



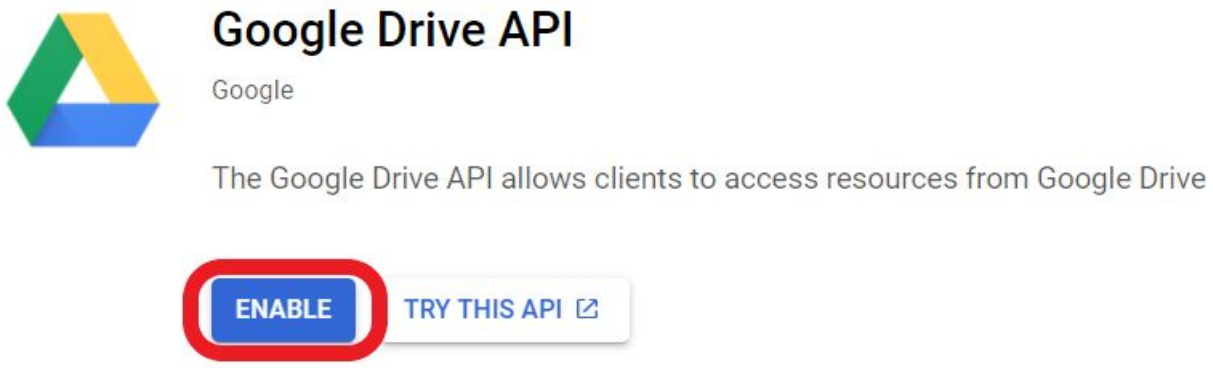
v. Now, click **ENABLE APIS AND SERVICES.**



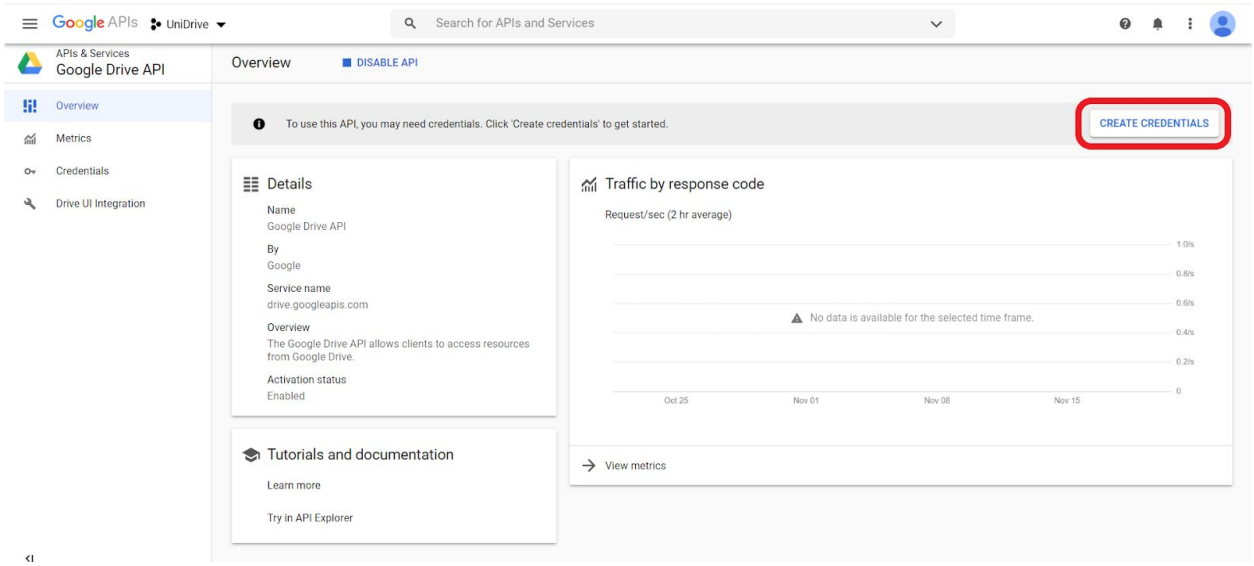
vi. Scroll down or search for **Google Drive API**. Then, click **Google Drive API**.



vii. Click **ENABLE** to enable the Google Drive API

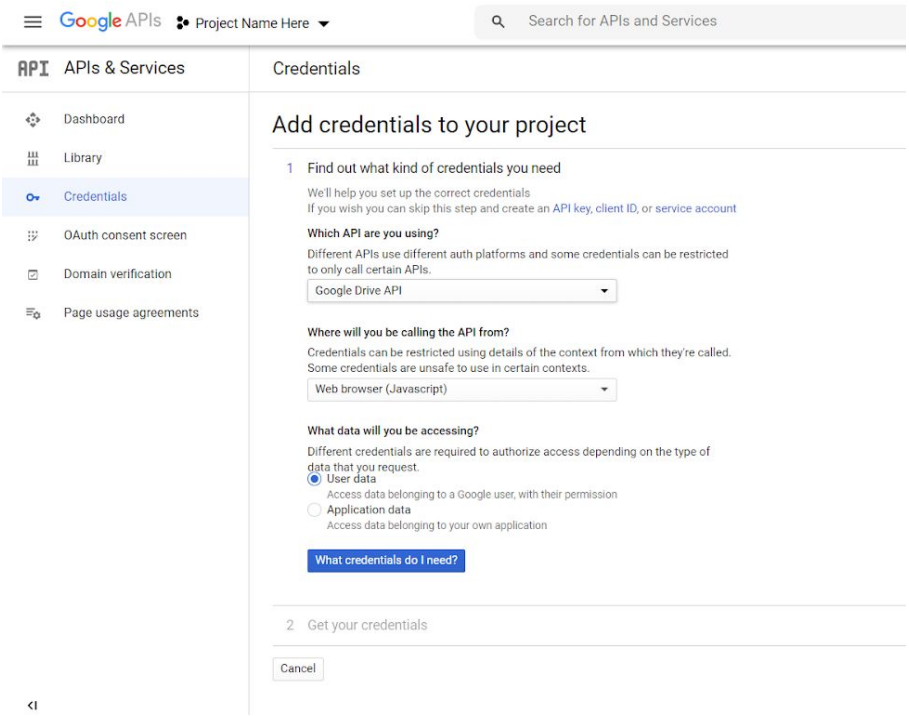


viii. Click **CREATE CREDENTIALS** to the top right side of the screen.

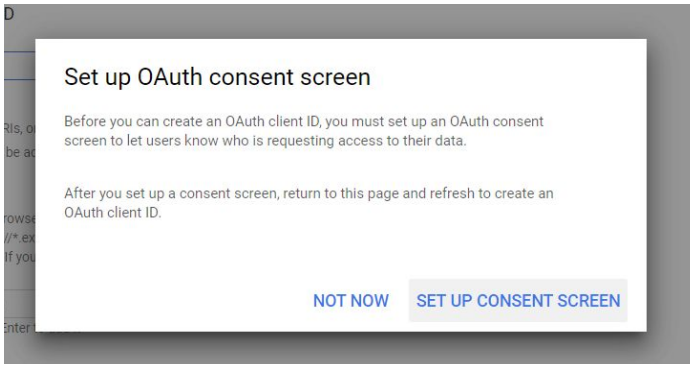


ix. Under the **Add credentials to your project** screen

1. **Which API are you using?**
    a. Select **Google Drive API**
2. **Where will you be calling the API from?**
    a. Select **Web browser (JavaScript)**
3. **What data will you be accessing?**
    a. Select **User data**
4. Then, select the **What credentials do I need?** button.

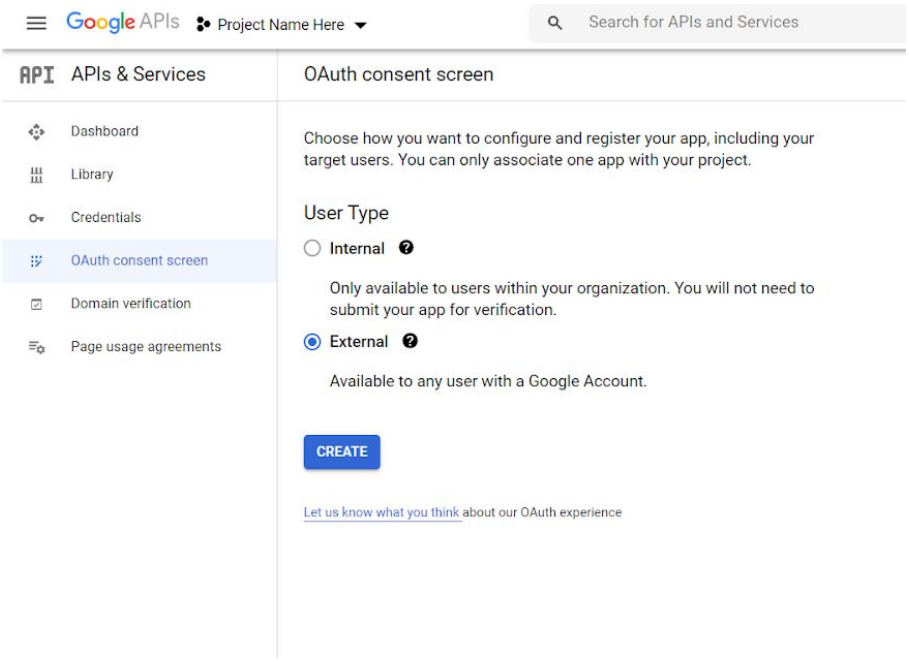


x. Select **SETUP CONSENT SCREEN**.

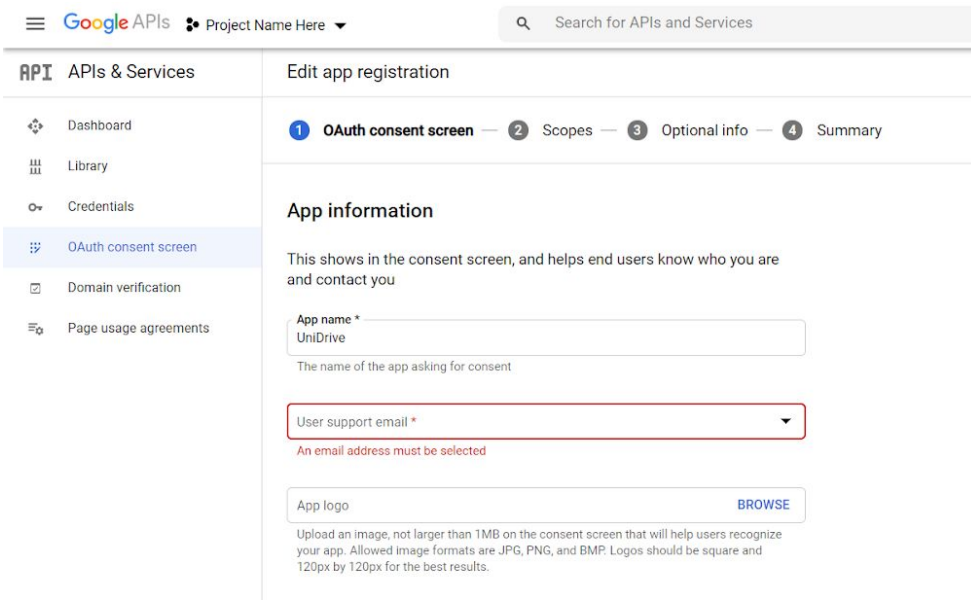


xi. Under the **OAuth consent screen**,

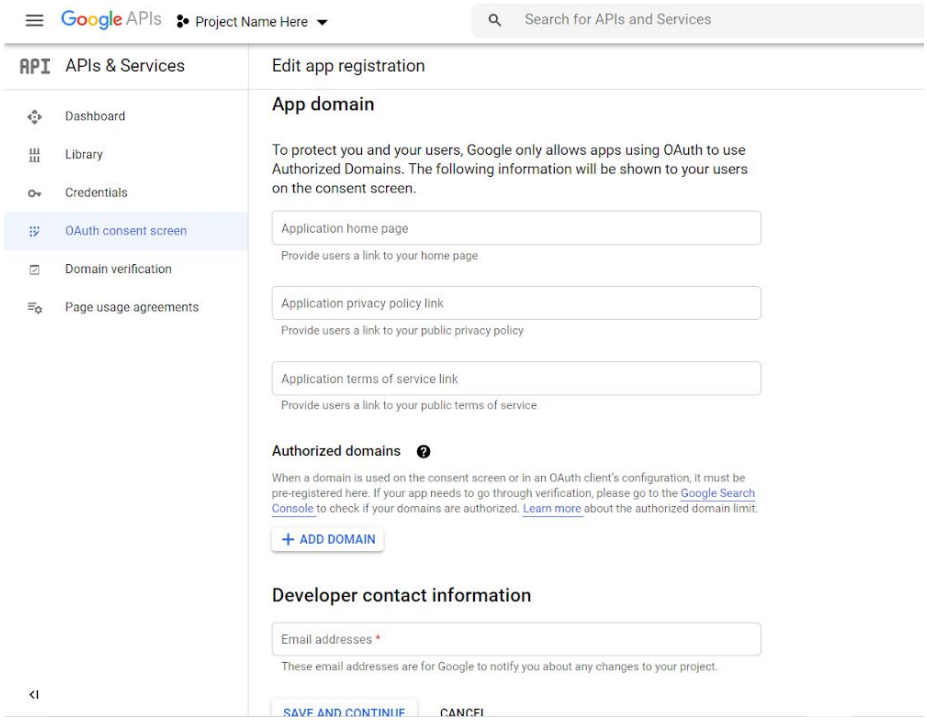
1. Select **External** as the user type
2. Then, click **CREATE**.



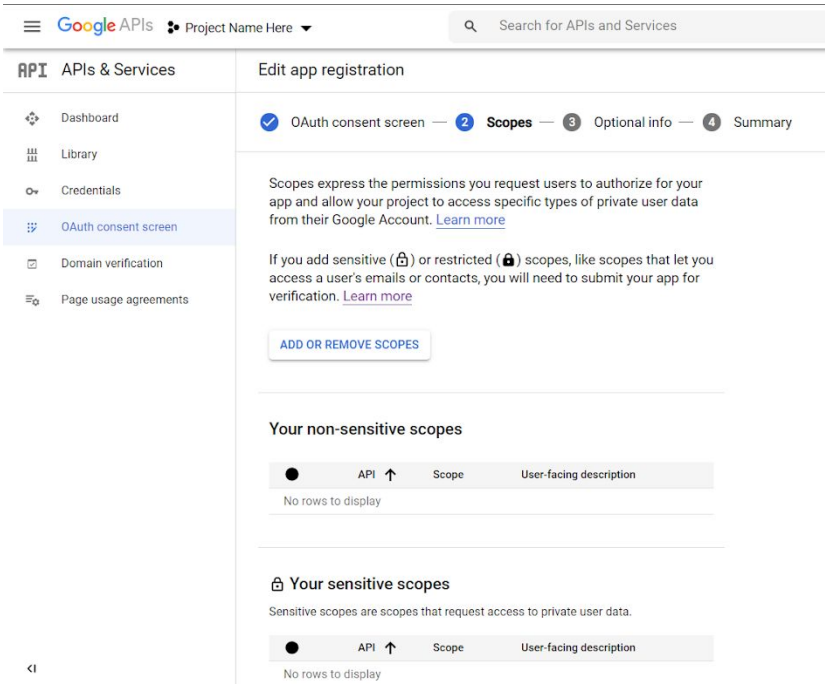
xii. Enter the **App name** and **User support email**.



xiii. Scroll down the page. Enter your email under **Developer contact information**. Then, click **SAVE AND CONTINUE**.

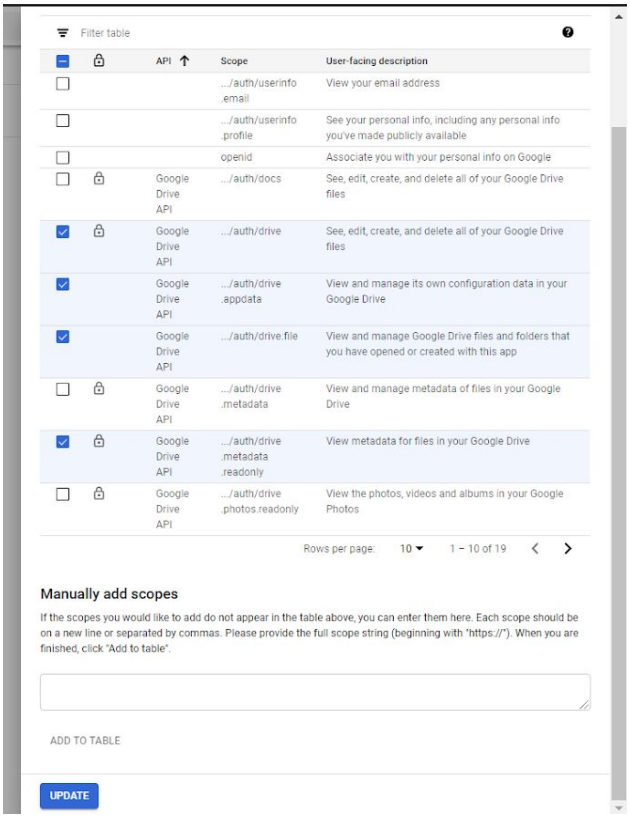


xiv. Click **ADD OR REMOVE SCOPES.**

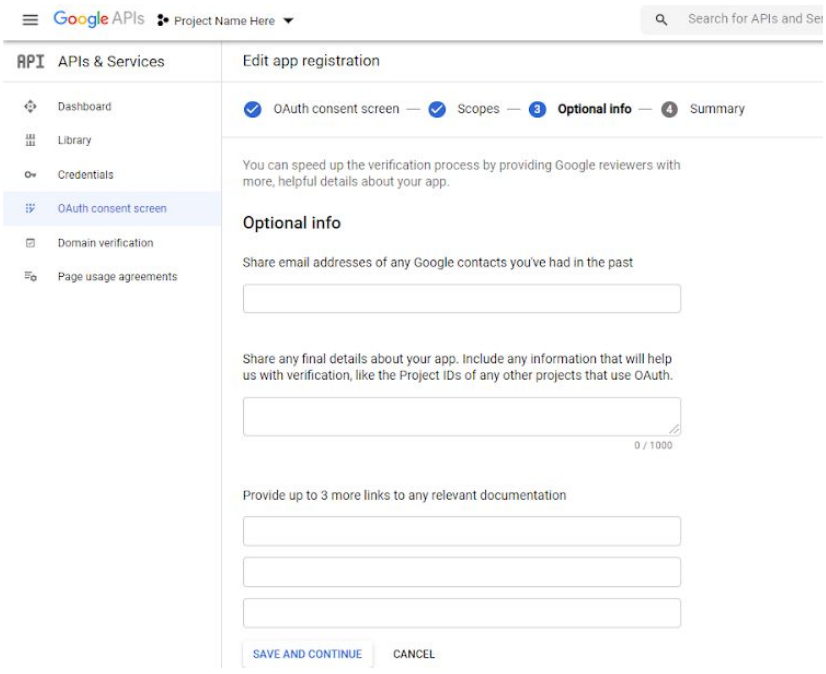


xv. Under the scope selection screen,

1. Select the following required scopes.
    a. **.../auth/drive**
    b. **.../auth/drive.appdata**
    c. **.../auth/drive.file**
    d. **.../auth/drive.metadata.readonly**
2. Double check to ensure you've selected the correct scopes. Then, click **UPDATE** at the bottom of the screen.



xvi. Click **SAVE AND CONTINUE**. This screen contains optional info you do not need to fill.

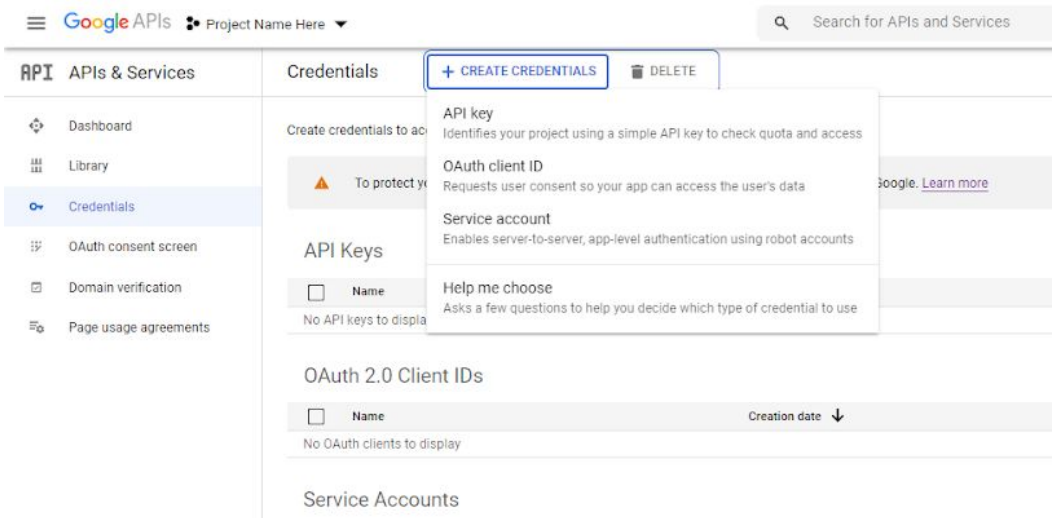


4. API and Client ID Setup:

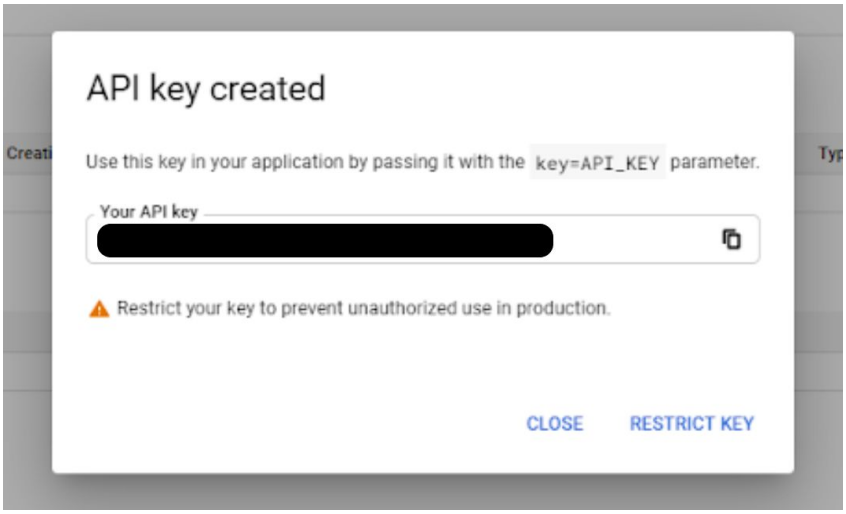
a. Setting up your API Key

i. In the **Google API Console**,

1. Click the **Credentials** tab to the left
2. Then, click **CREATE CREDENTIALS**
3. Select **API key.**

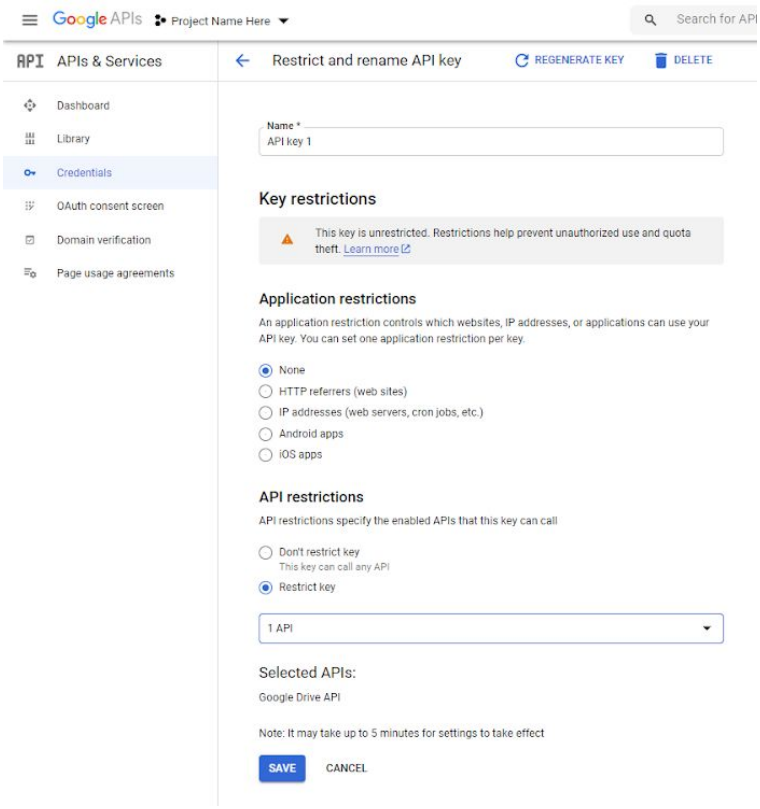


ii. Note the API key listed. We will be referring to this key later in the AWS section. Select **RESTRICT KEY**.



iii. Under the **API restrictions** towards the lower half of the page,

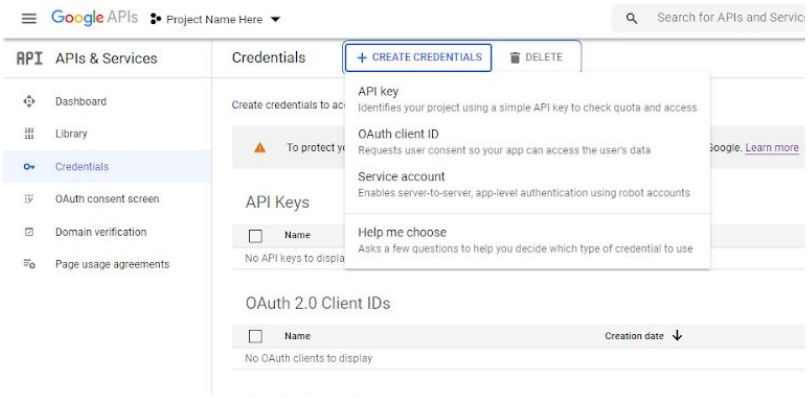
1. Select **Restrict key.**
2. Select the **Google Drive API** in the dropdown select item.
3. Note the API key listed in the top right. We will be referring to this key later in the AWS section.
4. Then, click **SAVE**.



b. Setting up your API Key

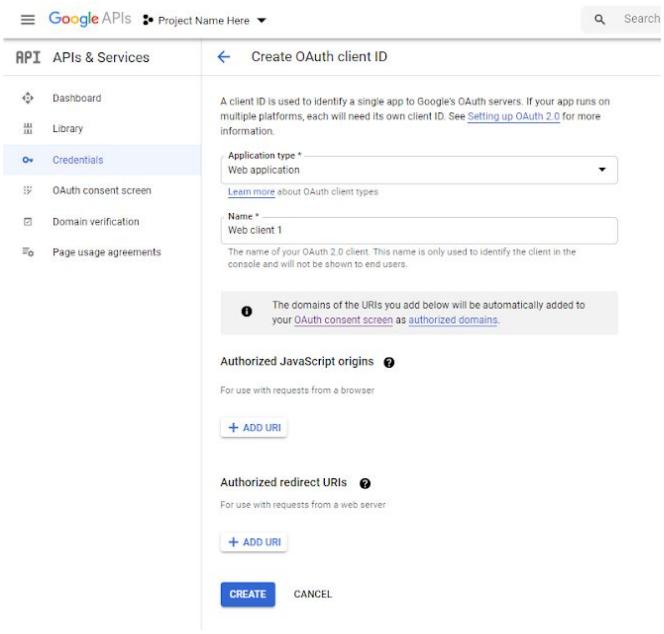
i. In the **Google API Console**,

1. Click the **Credentials** tab to the left
2. Then, click **CREATE CREDENTIALS**
3. Select **OAuth client ID.**

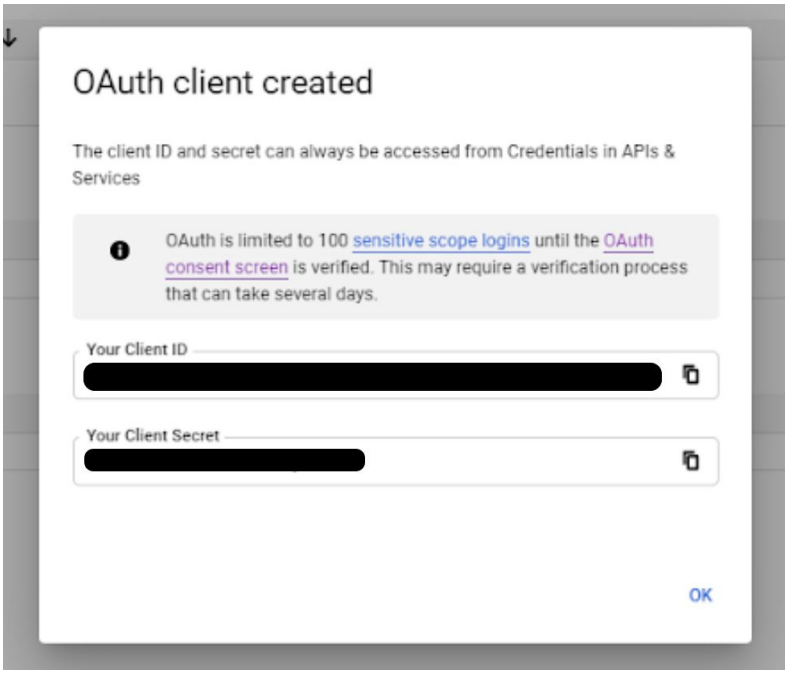


ii. Fill out the **Application type** and **Name.** Then, click **CREATE**.

- Application Type is Web Application



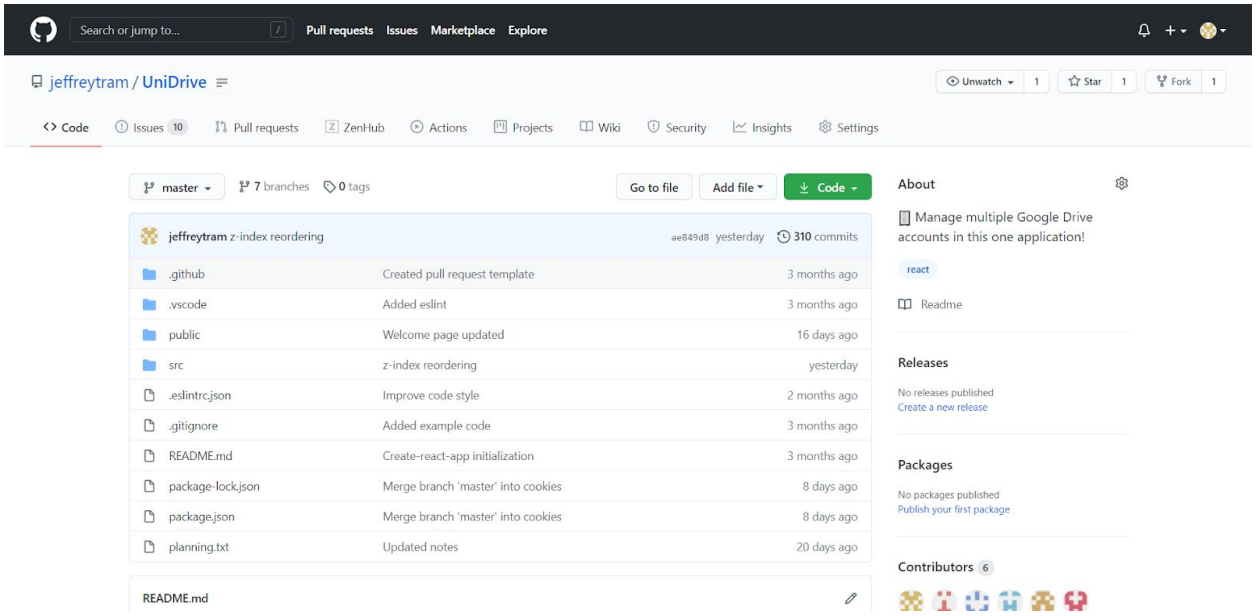
iii. Note the **Client ID** displayed. We will be referring to this client ID in the AWS section later on. Click **OK.**
Note: the client ID is the entire value listed including the .app.google.usercontent.com



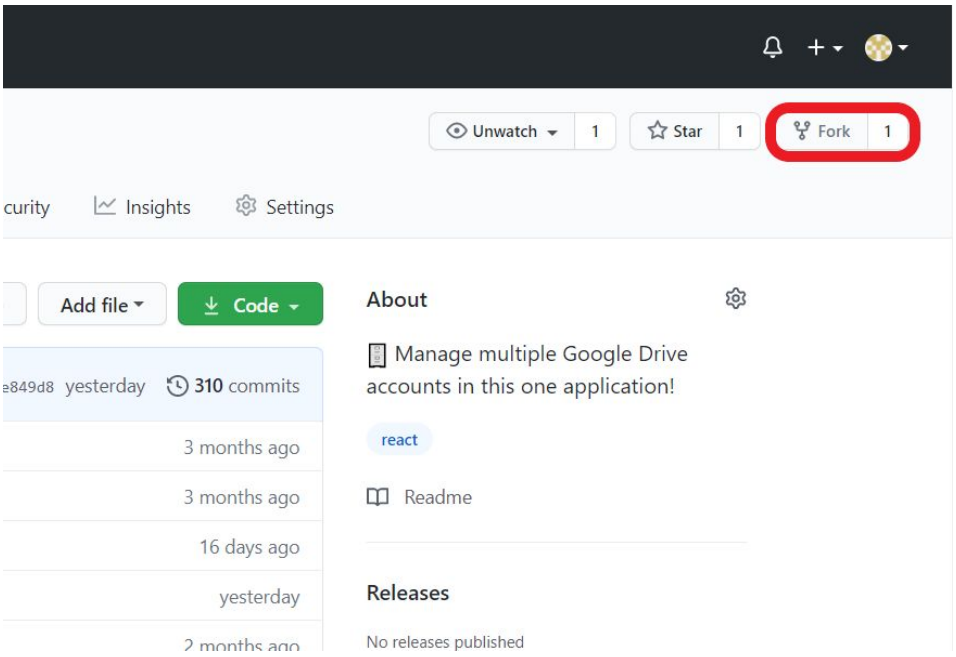
5. Build instructions (Amazon Web Services - Amplify):

a. GitHub Setup:

i. Go to the following link to the UniDrive GitHub repository https://github.com/jeffreytram/UniDrive



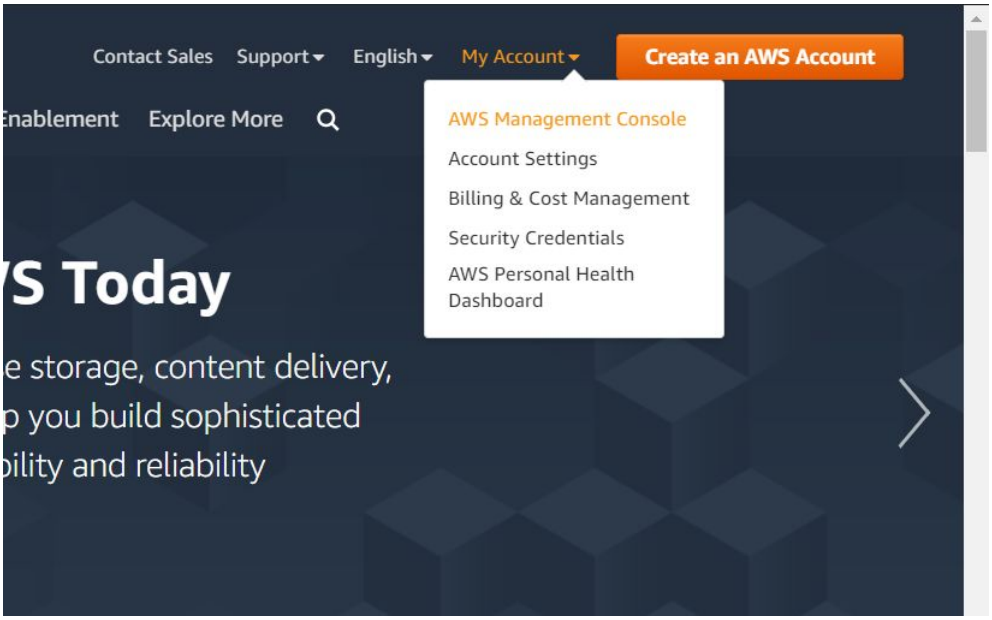
ii. Fork the repository by clicking the **Fork** button on the top right. Forking will be required since we will be linking our GitHub account in AWS to build the application later on.



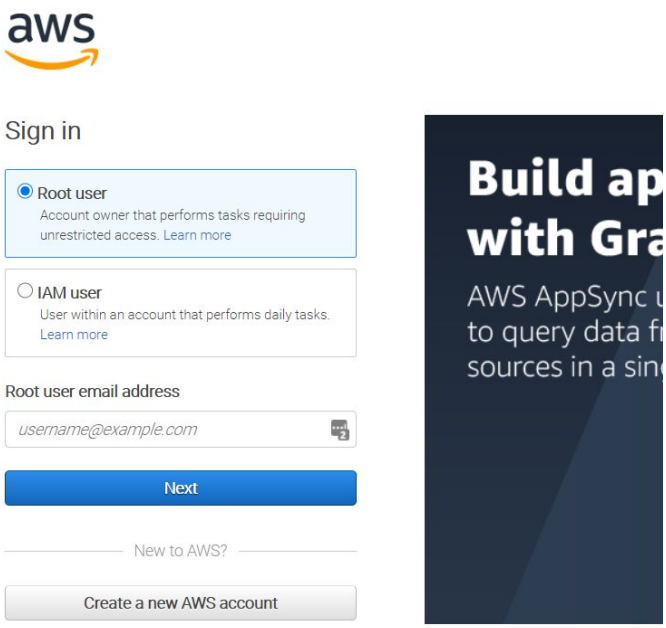
b. AWS Amplify Set Up:

i. Go to https://aws.amazon.com/

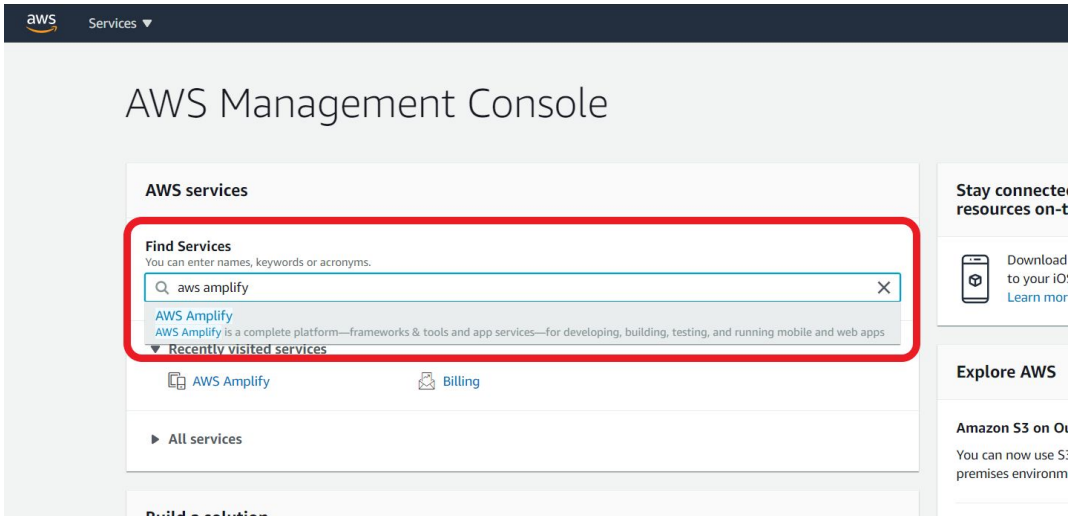
ii. At the top right, hover over **My Account**, then click **AWS Management Console**



iii. Login to your AWS account. Create an AWS account if you do not have one. You will be redirected to the AWS Management Console upon successfully logging in.

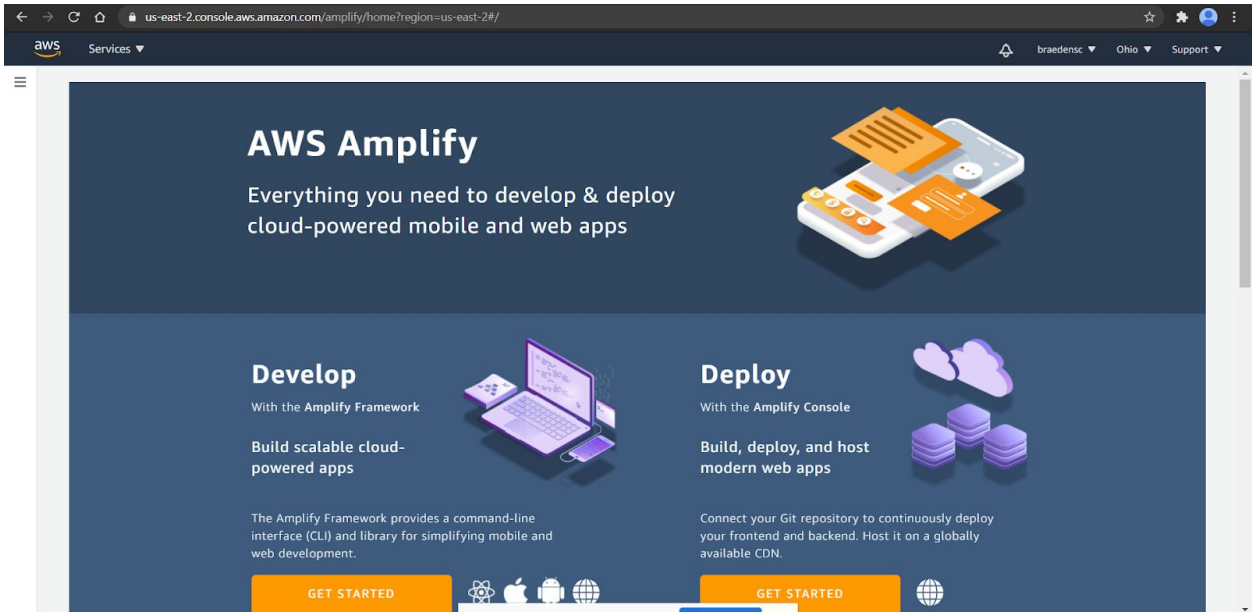


iv. Under **Find Services**, search for **AWS Amplify**. Then, select the **AWS Amplify** search suggestion that pops up.

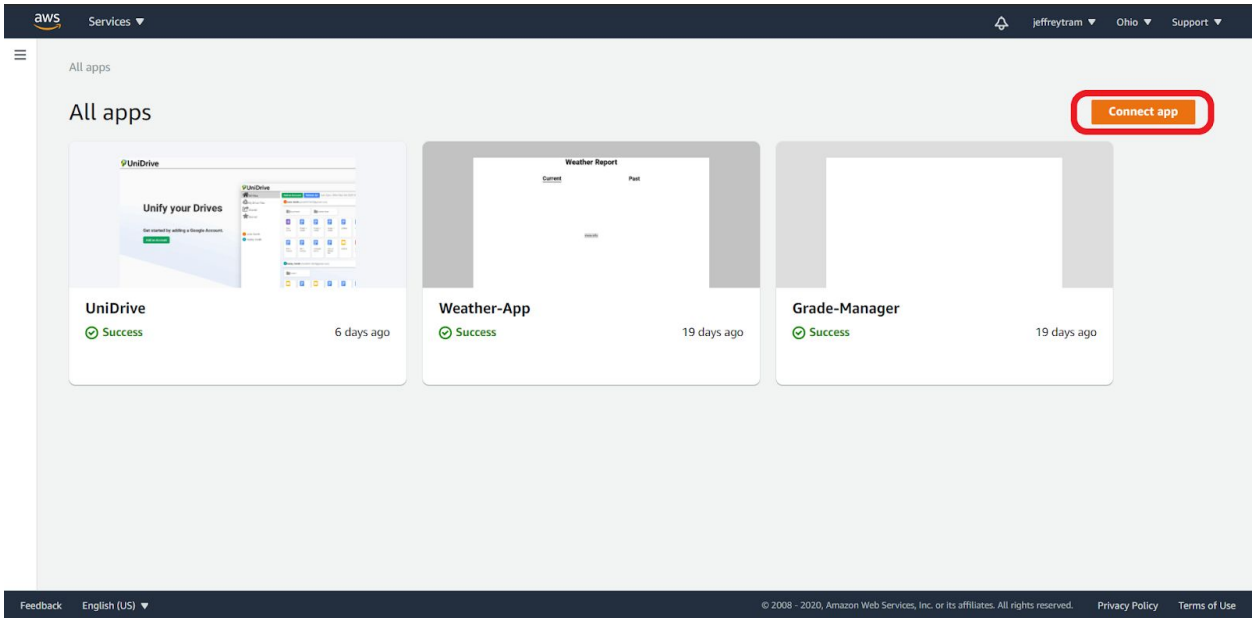


v. If this is your first time creating a AWS Amplify application

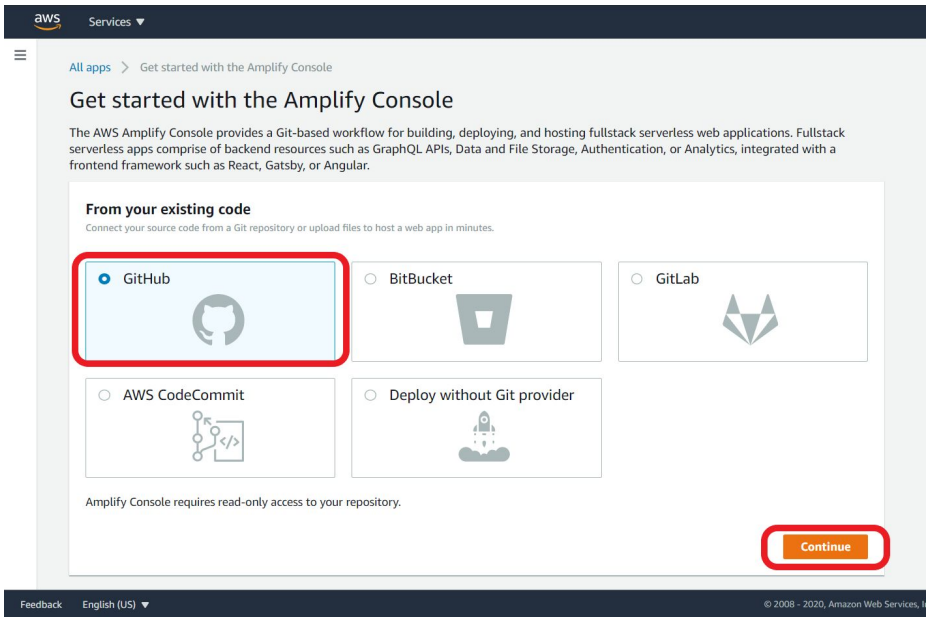
1. Under **Deploy**, click **Get Started**



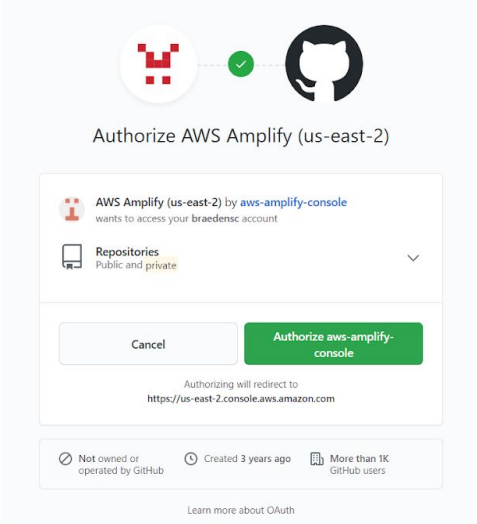
vi. If this is not your first AWS Amplify application, click **Connect App** to the top right of the screen. Otherwise, proceed to the next step.



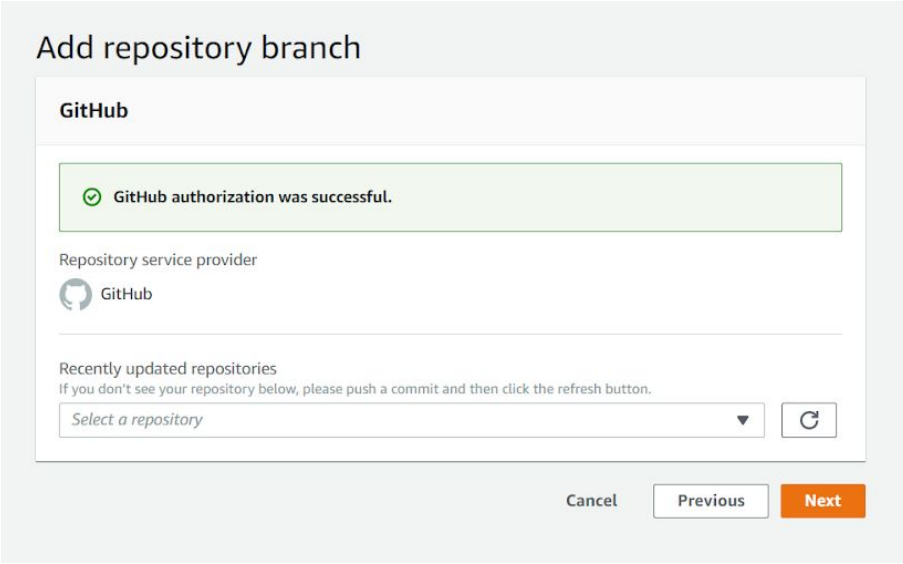
vii. Select **GitHub** as the location of the source code. Then, **click Continue.**



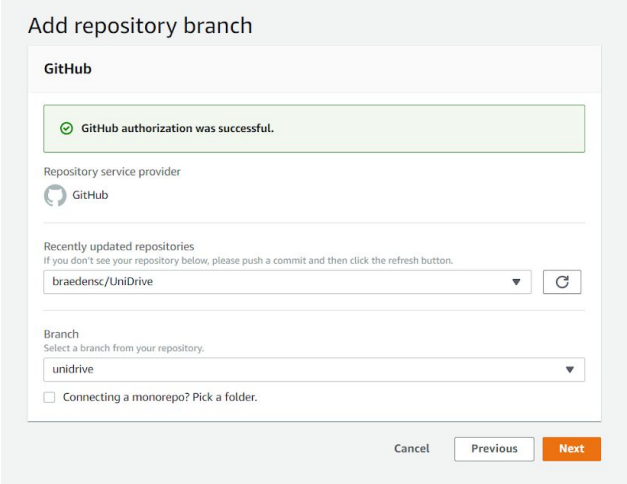
viii. **Authorize** with github.



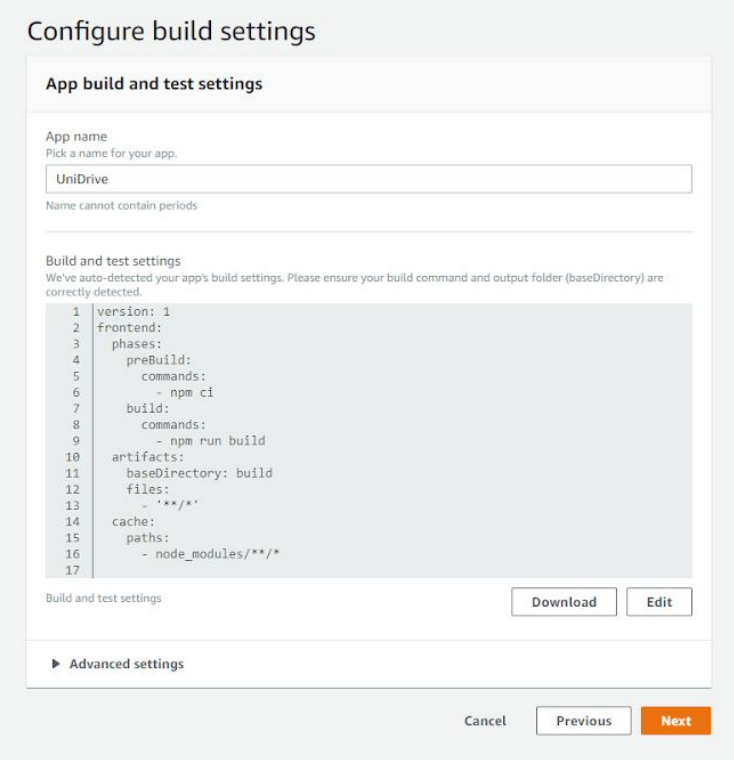
ix. Select the correct repository (the one with ***yourGitHubUserName*/UniDrive**) from the **recently updated repository** drop-down menu and then **click Next.**



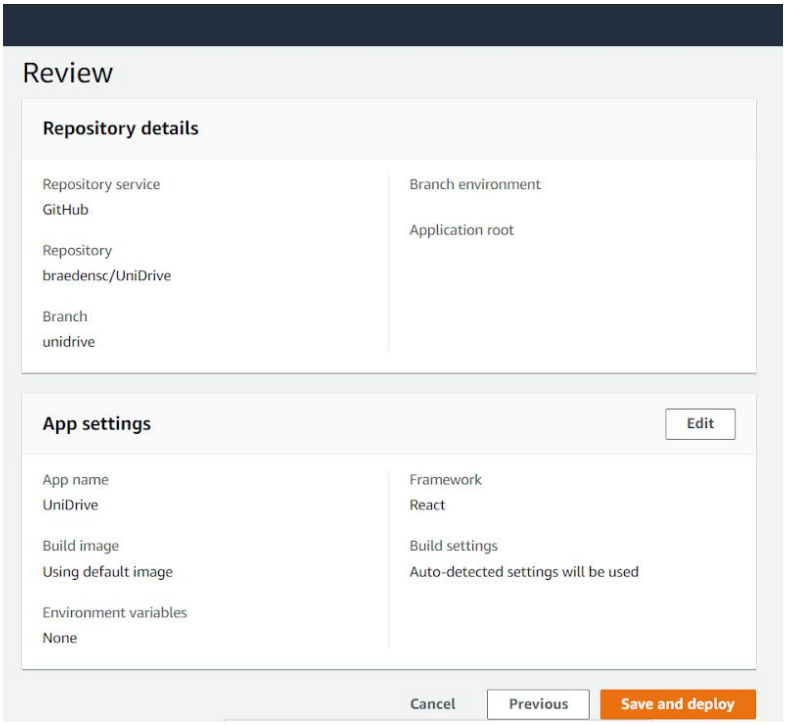
x. Select the branch you want to build. In this case, we select the **unidrive branch** since that is our build branch. Then, **click Next.**



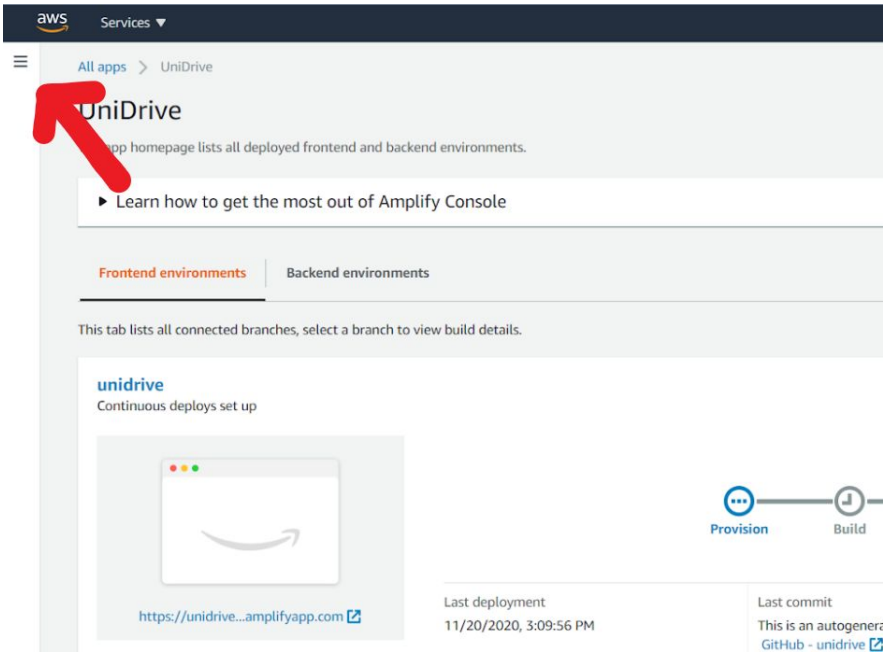
xi. Enter the **App name**. Then, **click Next**.



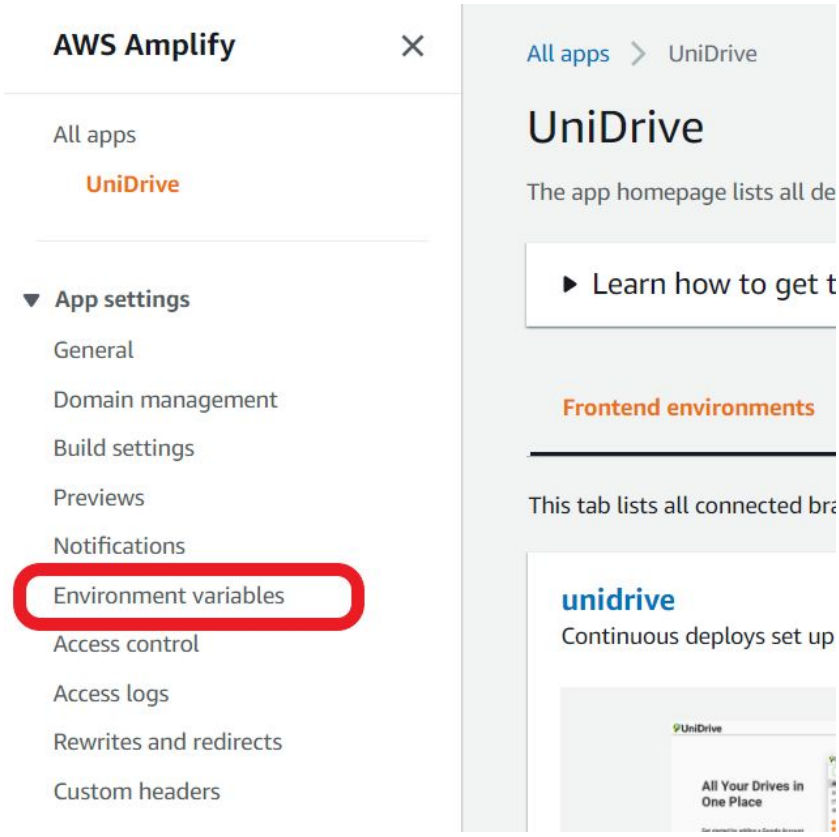
xii. Click **Save and Deploy**



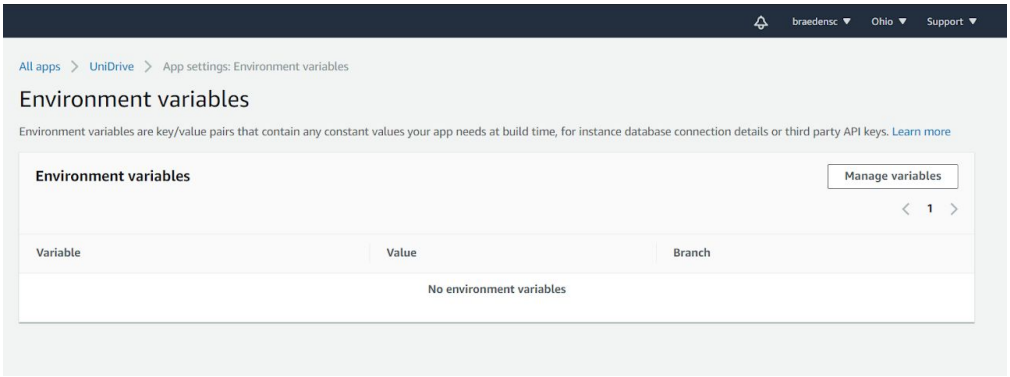
xiii. Open the sidebar menu by **clicking the 3 horizontal lines** in the top left corner of the screen if it is not already open.



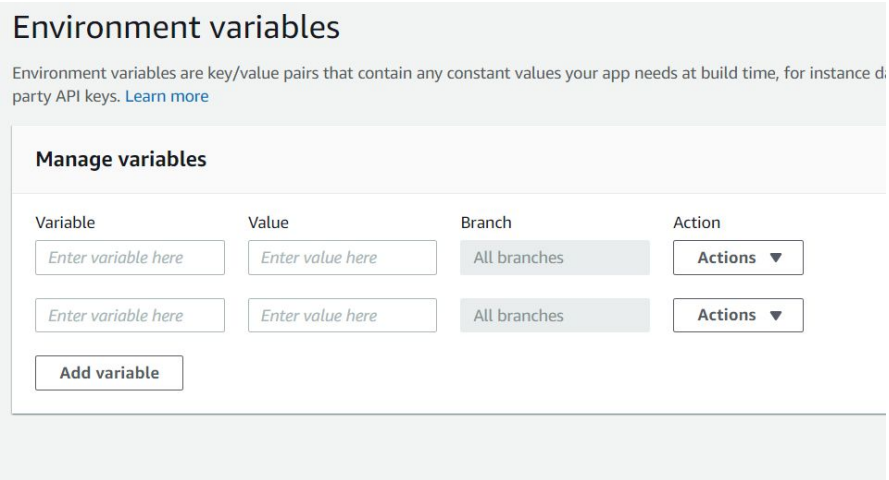
xiv. **Click Environment Variables** on the side-bar.



xv. **Click Manage Variables** at the right side of the screen.

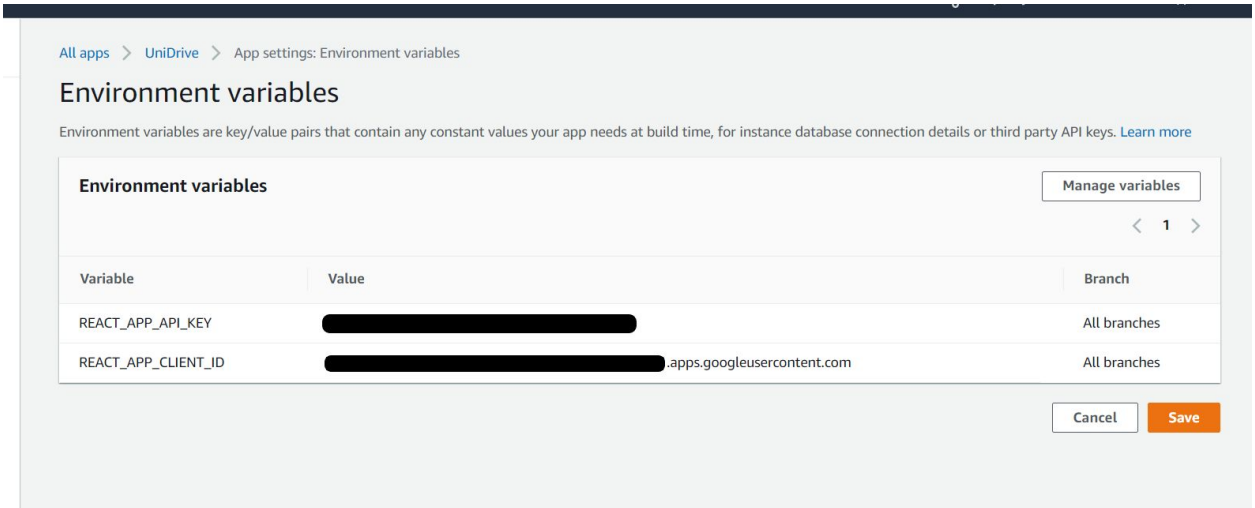


xvi. **Click add variable**, so that there are 2 total environmental variable spots.



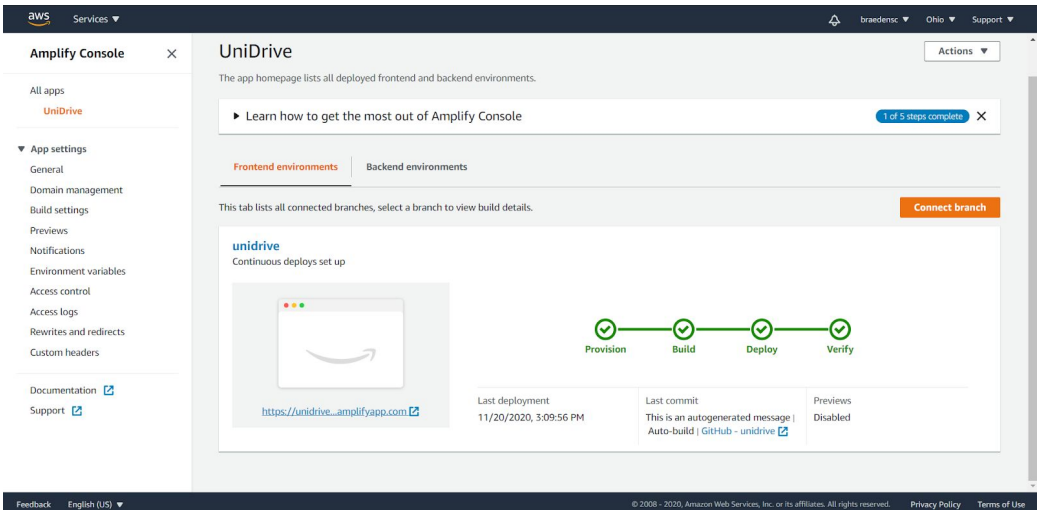
xvii. Add 2 new environment variables:

1. **For the first environment variable**:
    a. Enter **REACT_APP_API_KEY** as variable
    b. Enter the **API KEY** that you set up in the Google developer page as value
2. **For the second environment variable**:
    a. Enter **REACT_APP_CLIENT_ID** as variable
    b. Enter the **CLIENT ID** that you set up in the Google developer page as value
3. Then, **click SAVE**.



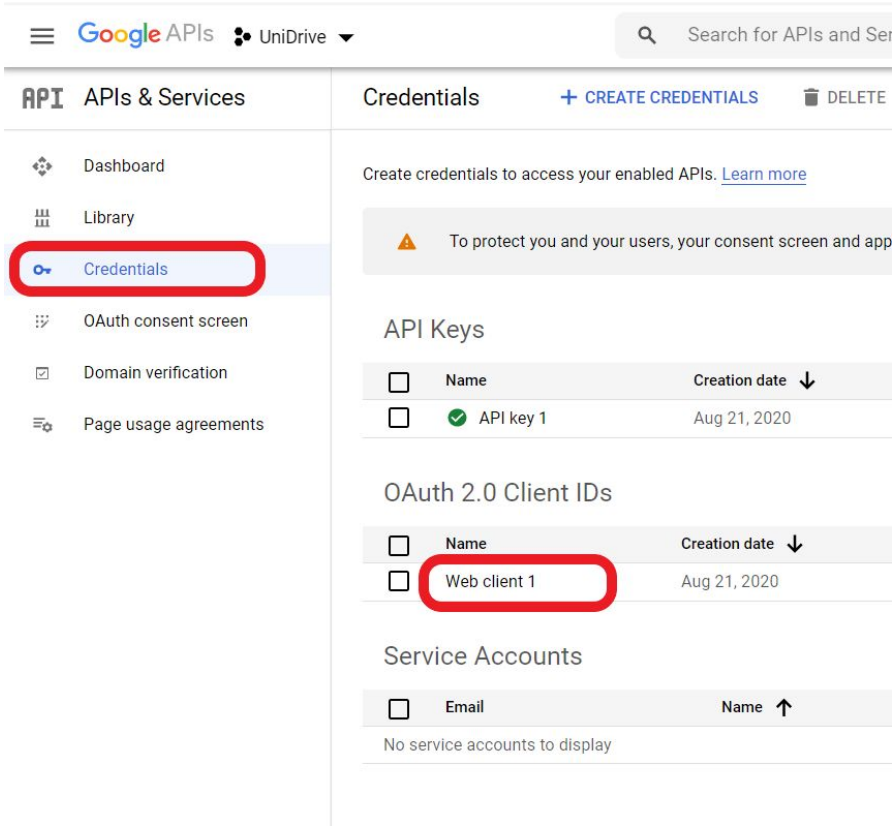
xviii. Return to the main page by **clicking UniDrive** on the side-bar.

1. You can **test** to see if you've done everything correct so far **by clicking the link** at the center of the page.
2. It should take you to the UniDrive welcome screen, but there will be no functionality, yet. Simply **the welcome screen displayed indicates that you've done everything correct so far.**

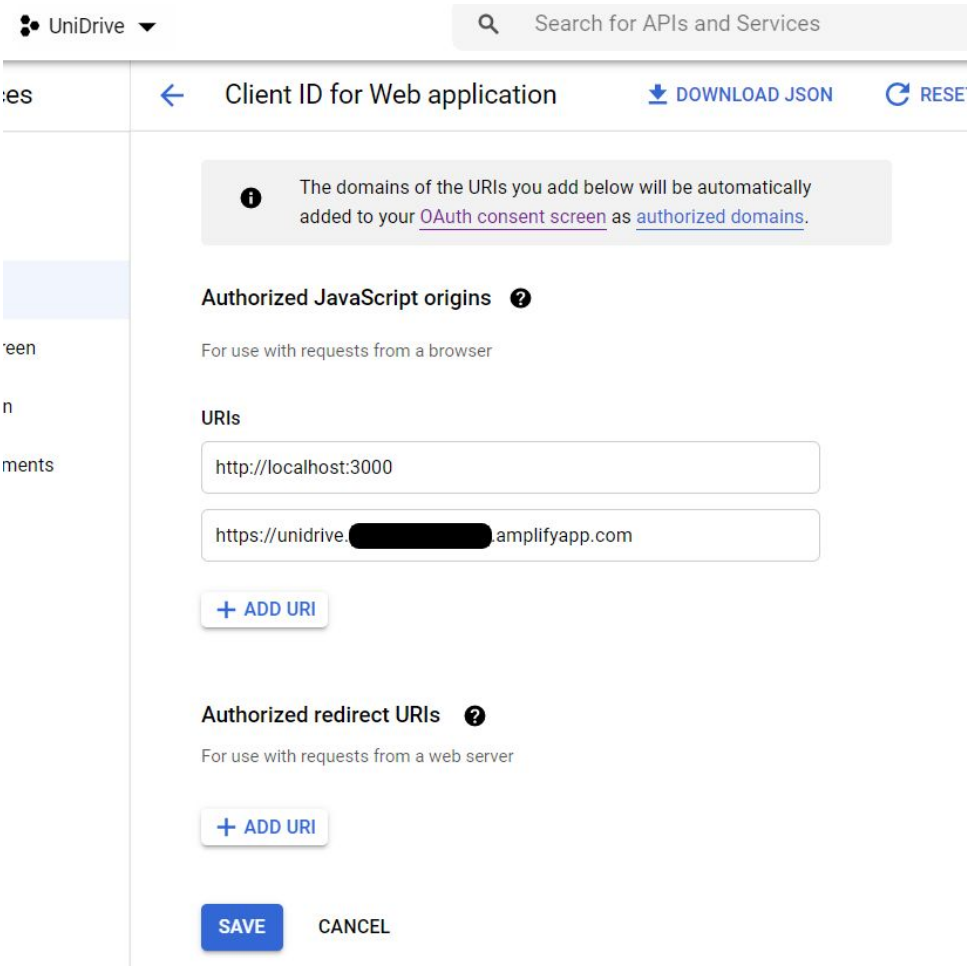


c. Adding the AWS Amplify Build Link to the Google API Console

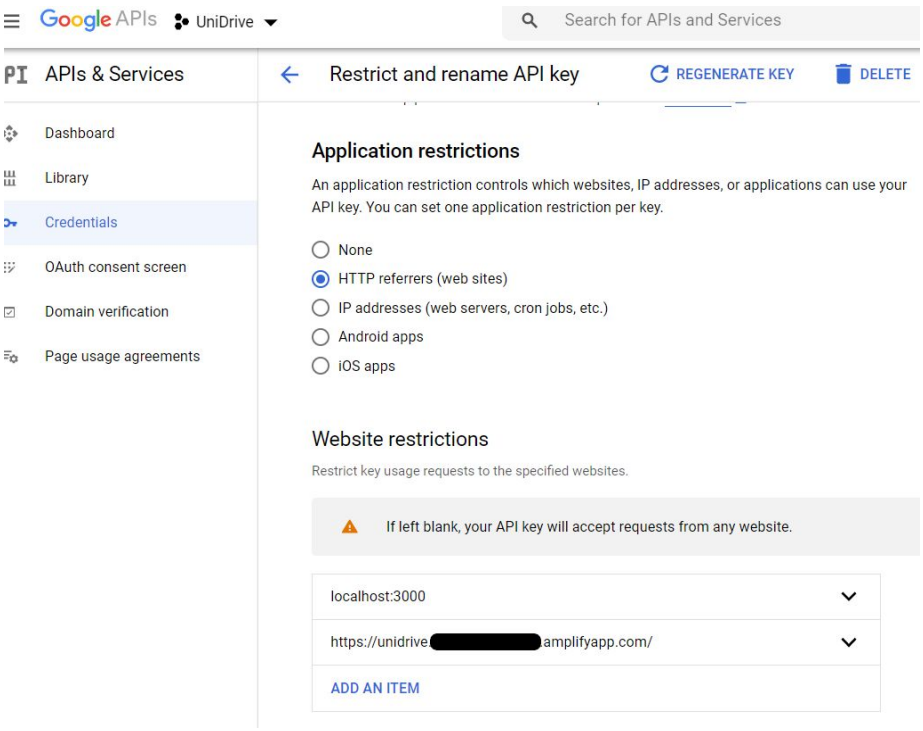
i. Now, navigate back to the **Google developer console**. Select **credentials** from the sidebar and **click Web Client 1** (or the name you gave it)**.** This is under the OAuth 2.0 Client IDs section.



ii. **Click the first Add URI** (under authorized javascript origins) and now **paste the link** that was in the UniDrive Amazon Web Server Home Page (the same link you used to test it earlier). If desired, you can also add **localhost** as a link, so that the application works when developing/testing locally.



iii. Go back to the credentials home page, and select the API key. **Under Application Restrictions, click HTTP**. Then, **enter the same website links as before into the website restrictions.**



iv. It may take around 5 minutes for the settings to take effect.

v. Your application should now be set up and functioning. You should be able to see the application's main page. Clicking **add account** should now work.

6. Installation of Application

No steps need to be taken after the software is built. No directories are required for installation.

7. Run instructions (Local Development)

This is only needed if the user wants to develop the application locally.
To get the software to execute, the user/customer have to:

a. Clone the Github Repository
b. Go to master branch
c. Get the API key and Client ID from https://console.developers.google.com/
    i. If you don't have an API key or Client ID, follow the steps in **Section 3: Google Drive API Setup**
d. Config file setup:
    i. Create Config.js file in src folder
    ii. Format the file as so. Replace the placeholder text with the necessary information. Do not remove the quotes.

```
export const config = {
    web: {
```

```
    api_key: "Paste API Key Here",
    client_id: "Paste Client ID Here",
  }
}
```

e. Running the application:
   i. Type **npm install** in the terminal at the cloned repository directory.
   ii. Type **npm start** to run the application in development mode.
f. Open http://localhost:3000 to view the application in your browser.

8. Troubleshooting

a. AWS Troubleshooting
   i. Incorrect environment variable names
      1. Ensure you are using the correct names for the variables as provided
         a. **REACT_APP_API_KEY**
         b. **REACT_APP_CLIENT_ID**
   ii. Incorrect environment variable values
      1. Ensure you are pasting the exact value that Google lists for the API key and client ID
      2. For the client ID, it includes the **.app.google.usercontent.com** at the end
   iii. Not referencing the AWS environment variable properly
      1. For every instance where you use values from the config file in the source code, you need to replace it with **process.env.*AWS_Environment_Variable_Name***
      2. For an example, we use **process.env.REACT_APP_API_KEY** for the api key, and **process.env.REACT_APP_CLIENT_ID** for the client ID.
      3. If you are using the **unidrive branch** as listed in the AWS instructions, this is already done for you.
b. Local Development Troubleshooting
   i. Ensure you have installed all the dependencies with **npm install**