

Yes, you can implement **Sign in with Google** in React Native without using Firebase by directly using the **Google OAuth 2.0 API**. This approach involves manually handling the OAuth flow and using a library like `expo-auth-session`` (for Expo) or `react-native-app-auth`` (for React Native CLI) to authenticate users.

Below is a step-by-step guide to implement Google Sign-In without Firebase:

Step 1: Set Up Google API Console

1. Go to the [Google API Console](https://console.developers.google.com/).
2. Create a new project (or use an existing one).
3. Enable the **Google Sign-In API** for your project.
4. Create OAuth 2.0 credentials:
 - Set the **Authorized Redirect URIs** to a custom URI scheme (e.g., `com.yourapp:/oauth2redirect``).
 - Note down the **Client ID** and **Client Secret**.

Step 2: Install Required Libraries

For React Native CLI, you can use the `react-native-app-auth`` library to handle the OAuth flow:

```
```bash
```

```
npm install react-native-app-auth
```

```
...
```

```
or
```

```
```bash
```

```
yarn add react-native-app-auth
```

```
```
```

For iOS, install the necessary pods:

```
```bash
```

```
cd ios && pod install && cd ..
```

```
```
```

```

```

### ### Step 3: Configure Android

1. Add the following to `android/app/src/main/AndroidManifest.xml`:

```
```xml
```

```
<activity
```

```
  android:name="net.openid.appauth.RedirectUriReceiverActivity"
```

```
  android:exported="true">
```

```
  <intent-filter>
```

```
    <action android:name="android.intent.action.VIEW" />
```

```
    <category android:name="android.intent.category.DEFAULT" />
```

```
    <category android:name="android.intent.category.BROWSABLE" />
```

```
    <data android:scheme="com.yourapp" /> <!-- Replace with your app's scheme -->
```

```
  </intent-filter>
```

```
</activity>
```

...

Step 4: Configure iOS

1. Open your project in Xcode.
2. Go to **Info** > **URL Types** and add a new URL scheme (e.g., `com.yourapp`).

Step 5: Implement Google Sign-In

Here's how you can implement the Google Sign-In flow using `react-native-app-auth`:

```
``javascript
```

```
import React from 'react';
```

```
import { Button, View, Text } from 'react-native';
```

```
import { authorize } from 'react-native-app-auth';
```

```
const config = {
```

```
  issuer: 'https://accounts.google.com',
```

```
  clientId: 'YOUR_CLIENT_ID', // From Google API Console
```

```
  redirectUrl: 'com.yourapp:/oauth2redirect', // Must match the redirect URI in Google API Console
```

```
  scopes: ['openid', 'profile', 'email'],
```

```
};
```

```

const App = () => {

  const [userInfo, setUserInfo] = React.useState(null);


  const signIn = async () => {

    try {

      const result = await authorize(config);

      console.log('Auth Result:', result);


      // Fetch user info using the access token

      const userInfoResponse = await fetch('https://www.googleapis.com/oauth2/v2/userinfo', {

        headers: { Authorization: `Bearer ${result.accessToken}` },

      });

      const userInfo = await userInfoResponse.json();

      setUserInfo(userInfo);

    } catch (error) {

      console.log('Error:', error);

    }

  };


  return (

    <View style={{ flex: 1, justifyContent: 'center', alignItems: 'center' }}>

      {userInfo ? (

        <Text>Welcome, {userInfo.name}!</Text>


```

```
    ) : (  
      <Button title="Sign in with Google" onPress={signIn} />  
    )}  
  </View>  
);  
};
```

```
export default App;
```

```
...
```

```
---
```

Step 6: Test the Implementation

1. Run your app on an Android or iOS device/emulator:

```
```bash
```

```
npx react-native run-android
```

```
...
```

or

```
```bash
```

```
npx react-native run-ios
```

```
...
```

2. Test the Google Sign-In button and ensure it works as expected.

```
---
```

Key Points

- Replace `YOUR_CLIENT_ID` with your actual client ID from the Google API Console.
- Ensure the **redirect URL** matches the one configured in the Google API Console.
- This approach does not require Firebase, and you directly interact with the Google OAuth 2.0 API.

Alternative: Use Expo (if using Expo Managed Workflow)

If you're using Expo, you can use the `expo-auth-session` library to handle Google Sign-In without Firebase. Here's a quick example:

```
````javascript
```

```
import React from 'react';
```

```
import { Button, View, Text } from 'react-native';
```

```
import * as WebBrowser from 'expo-web-browser';
```

```
import * as Google from 'expo-auth-session/providers/google';
```

```
WebBrowser.maybeCompleteAuthSession();
```

```
const App = () => {
```

```
 const [request, response, promptAsync] = Google.useAuthRequest({
```

```
 expoClientId: 'YOUR_EXPO_CLIENT_ID',
```

```
 iosClientId: 'YOUR_IOS_CLIENT_ID',
```

```

 androidClientId: 'YOUR_ANDROID_CLIENT_ID',
 });

 React.useEffect(() => {
 if (response?.type === 'success') {
 const { authentication } = response;
 console.log('Access Token:', authentication.accessToken);
 // Fetch user info using the access token
 }
 }, [response]);

 return (
 <View style={{ flex: 1, justifyContent: 'center', alignItems: 'center' }}>
 <Button
 title="Sign in with Google"
 disabled={!request}
 onPress={() => promptAsync()}
 />
 </View>
);
};

export default App;

```

---

This approach is simpler if you're using Expo, but for React Native CLI, `react-native-app-auth` is the recommended library. Let me know if you need further assistance!