**Test Case 1: Displaying Current Location Using Google Maps SUCCESS**

* **Given** that I am a logged-in user with location permissions enabled;
* **When** I navigate to the "Map" section of the application;
* **Then** the app should load the Google Map and zoom in on my current location, displaying a marker at that location.  
    
  Uma imagem com mapa, texto, captura de ecrã, atlas

  Descrição gerada automaticamente

**Test Case 2: Prompting for Google Location Permission SUCCESS**

* **Given** that I am a user who has not granted location access to the application;
* **When** I attempt to view the map;
* **Then** the app should prompt me to allow location access via a Google-powered permission request.

Uma imagem com texto, captura de ecrã, software, Ícone de computador

Descrição gerada automaticamente

**Test Case 3: Map Display Without Location Permission SUCCESS**

* **Given** that I have denied location permission;
* **When** I attempt to view my location on the map;
* **Then** the app should display the map without my current location and a message: "Location services are required to display your current location."

Uma imagem com texto, captura de ecrã, software, Sistema operativo

Descrição gerada automaticamente

**Test Case 4: Interacting with the Map (Zooming, Panning, Map Views) SUCCESS**

* **Given** that I am viewing the map with my current location displayed using Google Maps API;
* **When** I zoom, pan, or switch map views (e.g., satellite or terrain);
* **Then** the Google Maps API should allow these interactions, and the map should respond accordingly.

Uma imagem com mapa, texto, atlas, Esquema

Descrição gerada automaticamente

* using the Google Maps API.
* **Then** the system should display an error message: "Unable to retrieve current location. Please enable location services or check your internet connection."

**Test Case 5: Google Maps API Key Security and Attribution NOT USING GOOGLE**

* **Given** that the application is using the Google Maps API;
* **When** users view or interact with the map;
* **Then** the application should securely access the API key, limit usage to authorized requests, and display any required attributions in line with Google Maps' Terms of Service.