

**US 1 - As a visitor, I want to try the app without creating an account so that I can quickly see how it works.**

**Geopath Planner**

[Home](#)   [Login/Register](#)

**Waypoints**   **Obstacles**   **Parameters**

Altitude  Unit **Meters(m)** ▾

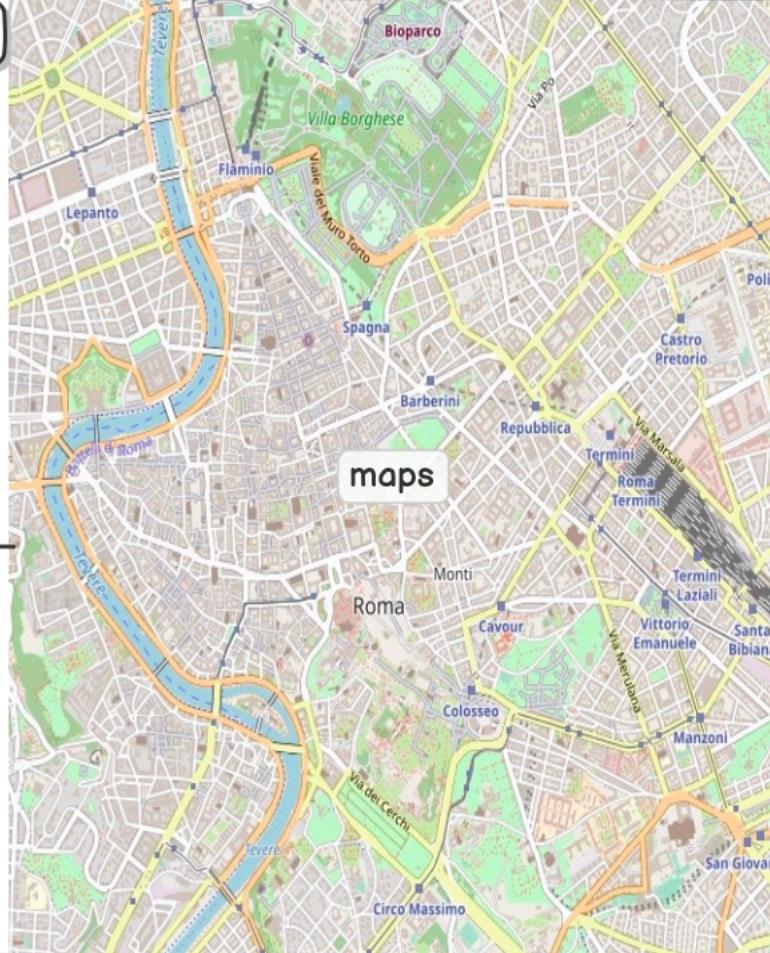
Search Position  Q name

 Geolocation

---

Import waypoints from .geojson file

**Select File**   No file selected



**US 2 - As a user, I want to set points on a map where my drone should go so that I can get a possible route.**

**Geopath Planner**

[Home](#)   [Login/Register](#)

Waypoints   Obstacles   Parameters

Altitude  Unit **Meters(m)** ▾

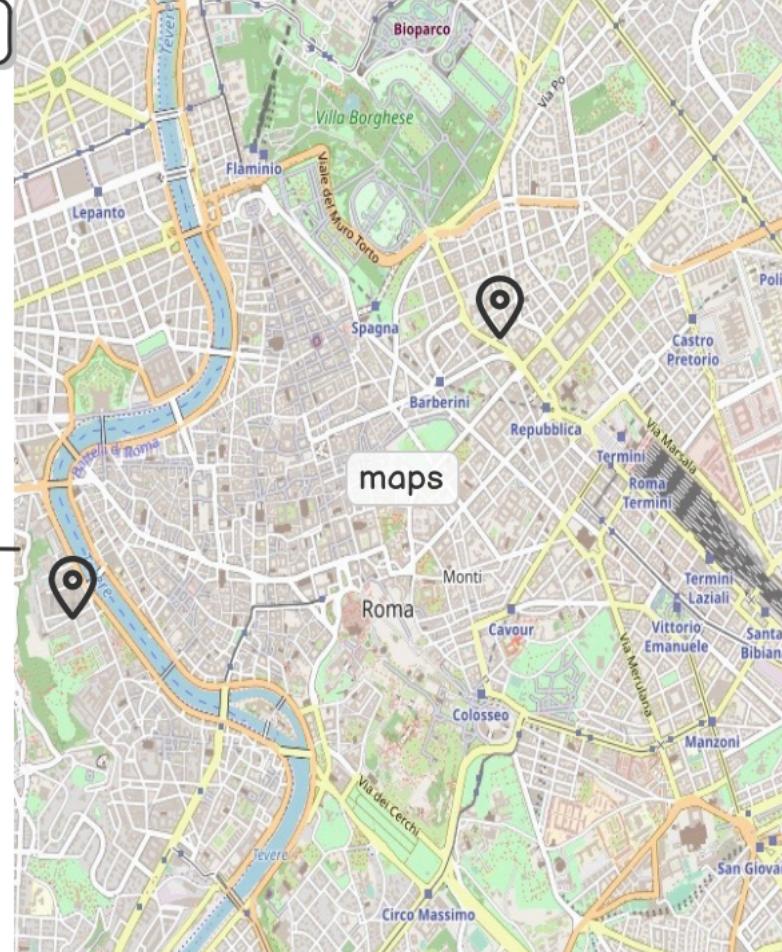
Search Position  name

 Geolocation

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Import waypoints from .geojson file

Select File **No file selected**



**US 3 - As a user, I want to mark areas that the drone should avoid so that I can plan a safe path.**

Geopath Planner

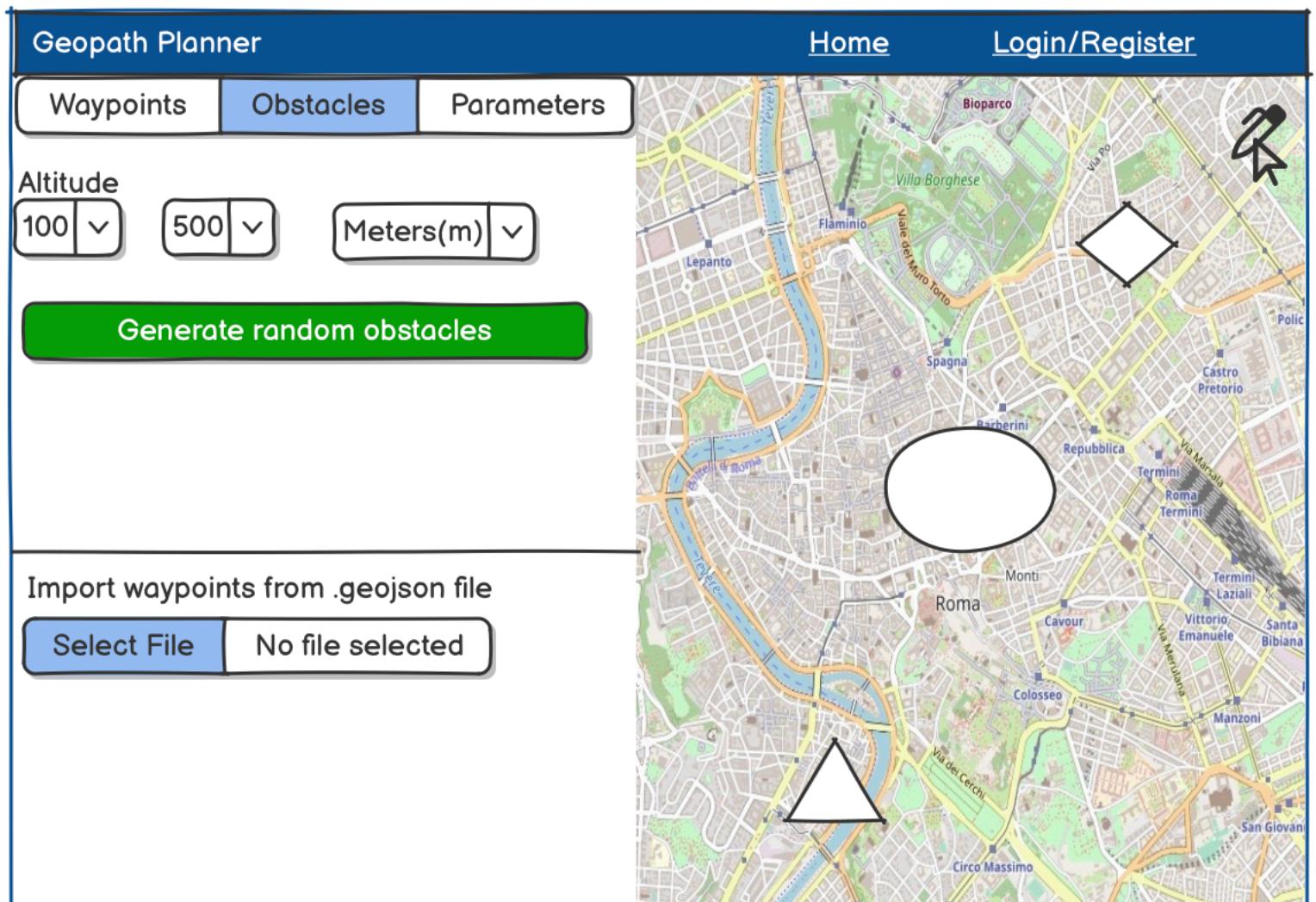
Home Login/Register

Waypoints Obstacles Parameters

Altitude  
100 ▾ 500 ▾ Meters(m) ▾

Generate random obstacles

Import waypoints from .geojson file  
Select File No file selected



**US 4 - As a user, I want to have options to customize which route to compute so to choose tradeoff between computation speed and quality of resulted route.**

Geopath Planner

Home User

Waypoints

Obstacles

Parameters

Algorithm

RRT\*

RRT  
Ant Path

Goal Bias

0.10

Max Iterations

10000

Compute

The application interface for Geopath Planner. It features a top navigation bar with 'Geopath Planner', 'Home', and 'User' options. Below the navigation is a tab bar with 'Waypoints', 'Obstacles', and 'Parameters' (the active tab). On the left side, there are three sections: 'Algorithm' (set to RRT\*), 'Goal Bias' (0.10), and 'Max Iterations' (10000). At the bottom left is a large blue 'Compute' button with a white arrow pointing to it. The main right side of the interface displays a map of Rome, Italy, showing various landmarks like Villa Borghese, Flaminio, and Colosseo. Several obstacles are represented by black geometric shapes (diamonds, circles, and triangles) placed on the map. Two specific locations are marked with black circles, indicating the start and end points for a planned route. The map also shows the Tiber River and major roads like Via del Muro Torto and Via Flaminia.

**US 5 - As a user, I want to see the proposed drone route displayed on the map so that I understand how the drone would fly.**

Geopath Planner

Error

Computation ok

Edit      Retry

Import waypoints from .geojson file

Select File      No file selected

Home      Login/Register

**US 6 - As a user, I want to download or share the proposed route so that I can reuse it outside the app.**

**Geopath Planner**

Error

Computation ok

Edit    Retry

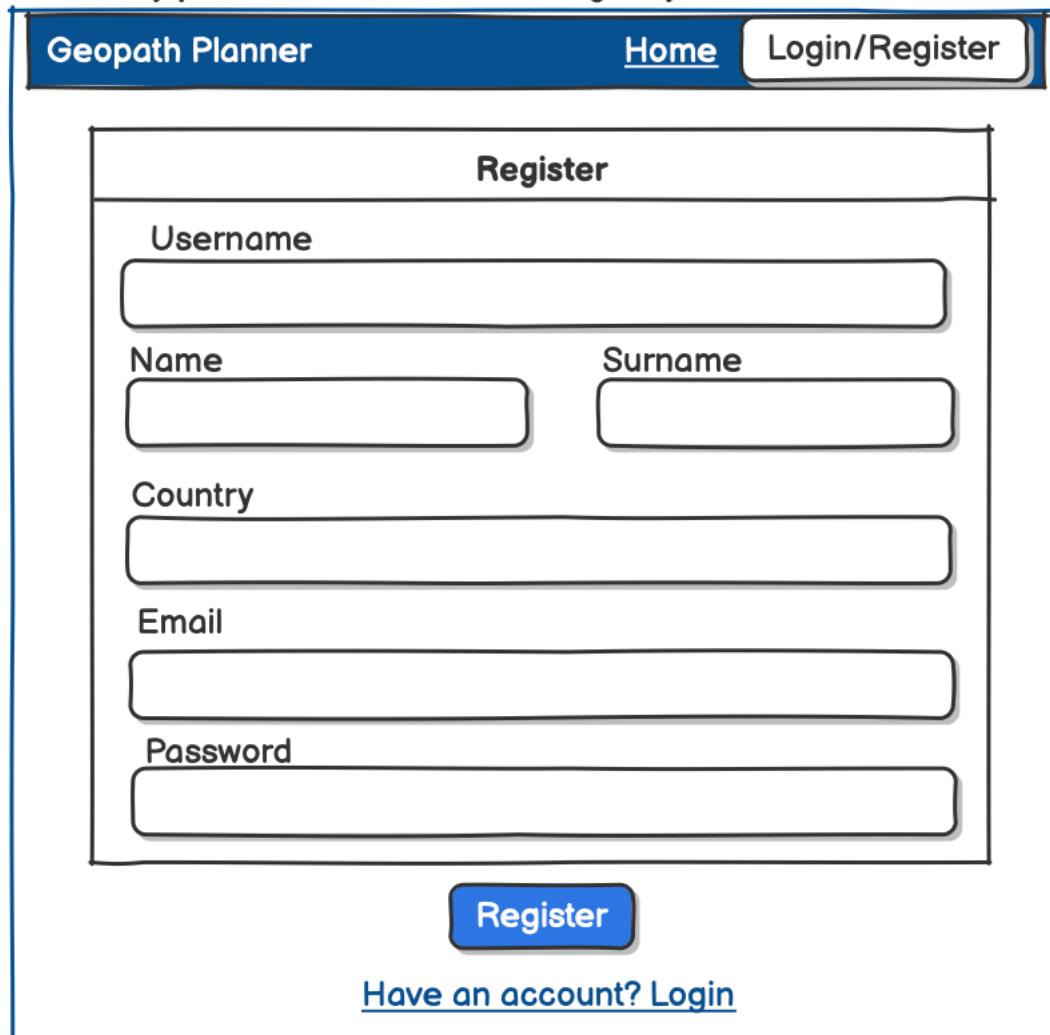
Share

Import waypoints from .geojson file

Select File    No file selected

[Home](#)    [Login/Register](#)

**US 7 - As a visitor, I want to sign up into the application so that I can create my personal account to manage my data and routes**



The image shows a registration form for the Geopath Planner application. The form is contained within a blue-bordered box. At the top left is the "Geopath Planner" logo. To its right are two buttons: "Home" and "Login/Register". The main area of the form is titled "Register". It contains six input fields: "Username", "Name", "Surname", "Country", "Email", and "Password". Below these fields is a large blue button labeled "Register". At the bottom of the form is a link "Have an account? Login".

Geopath Planner

[Home](#) [Login/Register](#)

Register

Username

Name Surname

Country

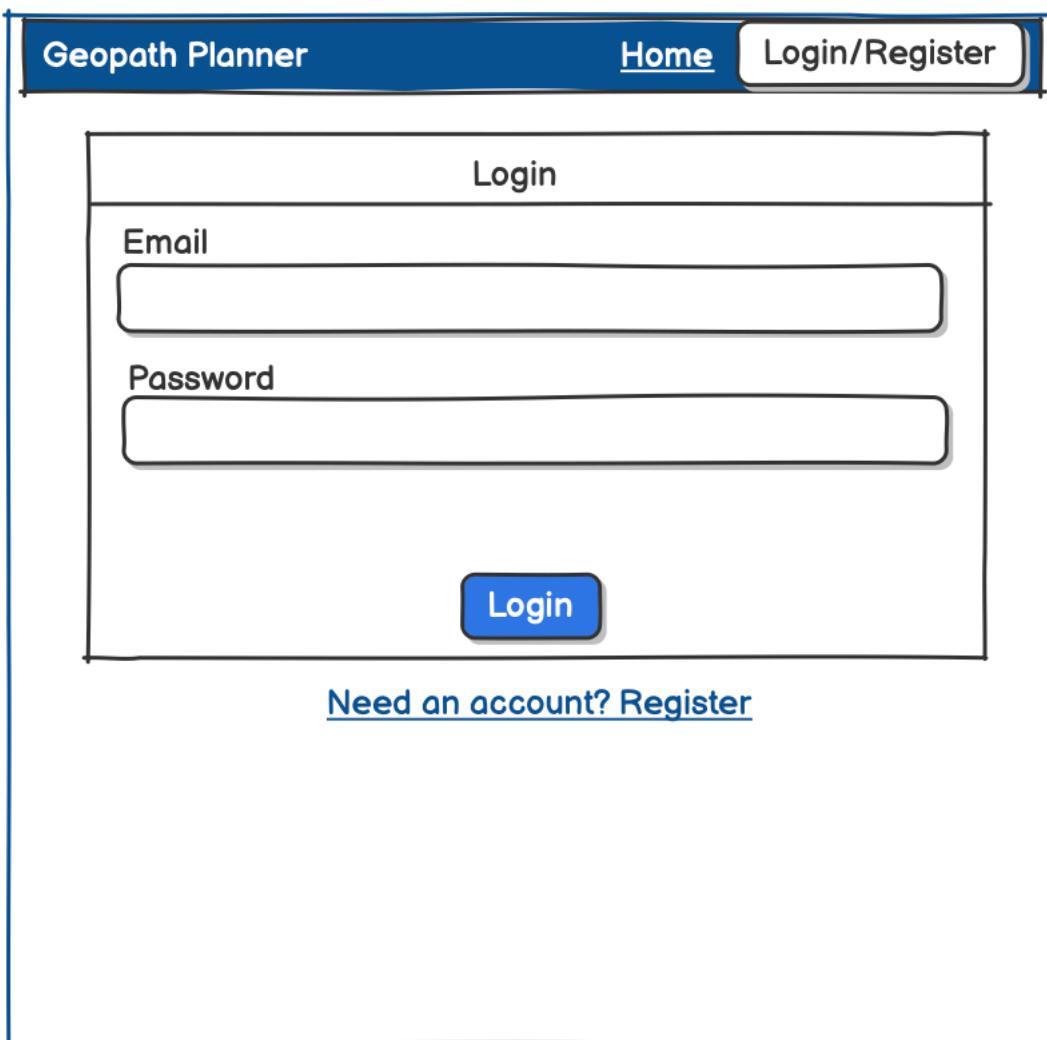
Email

Password

[Register](#)

[Have an account? Login](#)

**US 8 - As a registered user, I want to log in to my personal space so that I can manage my personal data and routes.**



The image shows a login form interface for a website called "Geopath Planner". At the top, there is a blue header bar with the text "Geopath Planner" on the left, "Home" in the center, and "Login/Register" on the right. Below the header is a large rectangular input field divided into three horizontal sections. The top section is labeled "Login" and contains a placeholder "Email" with an empty input field. The middle section is labeled "Password" and contains an empty input field. The bottom section is empty. In the center of the bottom section is a blue button with the word "Login" in white. Below the input field, there is a link "Need an account? Register" underlined in blue.

Geopath Planner

[Home](#) [Login/Register](#)

Login

Email

Password

[Login](#)

[Need an account? Register](#)

**US 9 As a registered user, I want to log out to my personal account so I can disconnect my session whenever I want.**

**Geopath Planner**

**Home**

User **Logout**

Waypoints    Obstacles    Parameters

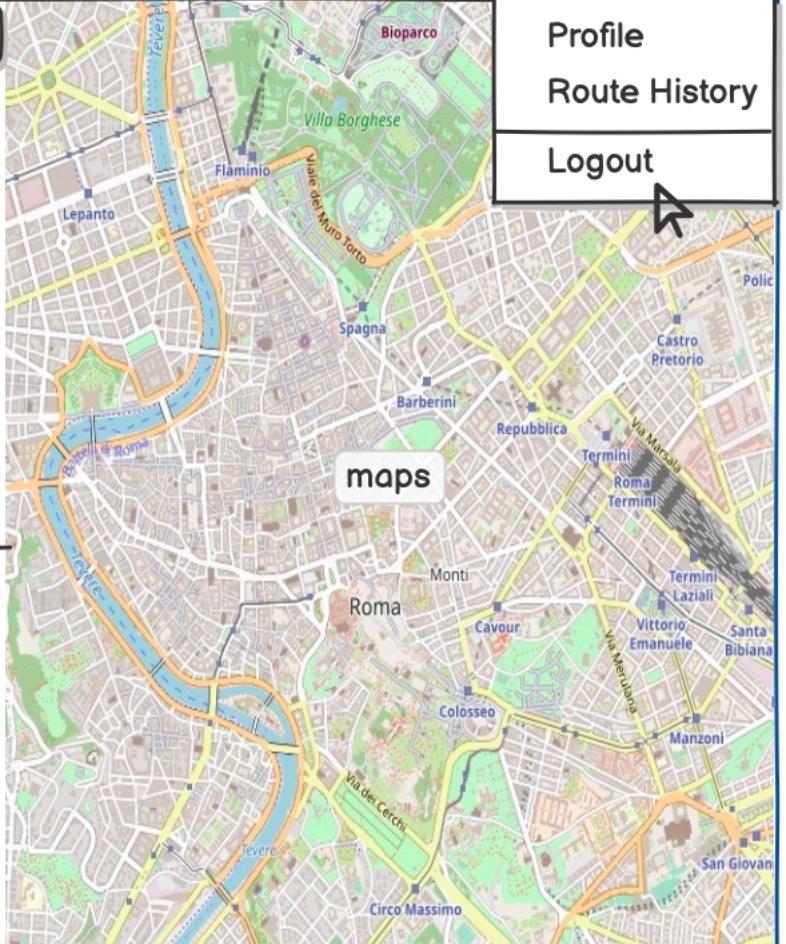
Altitude  Unit **Meters(m)**

Search Position  name

 Geolocation

Import waypoints from .geojson file

Select File **No file selected**



maps

**US 10 - As a registered user, I want to edit my profile information**

The wireframe illustrates a user profile editing interface. At the top, a blue header bar contains the text "Geopath Planner" on the left, "Home" in the center, and "Login/Register" on the right. Below the header, the main content area has a title "Your Profile". The first section, "Username", shows the value "test" in a highlighted input field, with a note below stating "Username cannot be changed". The second section, "Email", contains an empty input field. The third section, "Name", contains an empty input field, and the fourth section, "Surname", also contains an empty input field. The fifth section, "Country", contains an empty input field. A large blue button labeled "Save profile changes" is positioned at the bottom of this section. Below this, another section titled "Change Password" contains two input fields: "Current Password" and "New Password", each with its own input field. A dark grey button labeled "Change Password" is located at the bottom of this section.

Geopath Planner

Home Login/Register

Your Profile

Username

test

Username cannot be changed

Email

Name Surname

Country

Save profile changes

Change Password

Current Password

New Password

Change Password

**US 11 - As a user, I want to see a clear explanation when no route can be found so that I understand what went wrong.**

**Geopath Planner**

[Home](#)   [Login/Register](#)

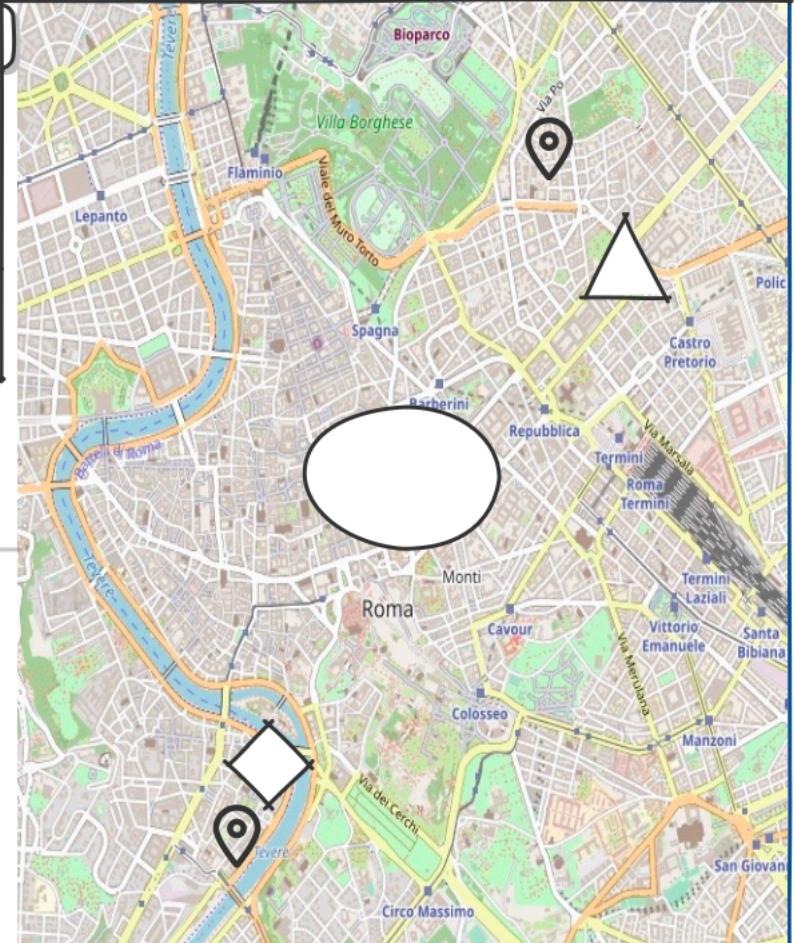
Error

**Computation Failed**  
Impossible to find route with RRT\* and 1000 iterations

[Edit](#)   [Retry](#)

Import waypoints from .geojson file

[Select File](#)   No file selected



**US 12 - As a user, I want to easily repeat my last request so that I can test it again.**

Geopath Planner

[Home](#)   [Login/Register](#)

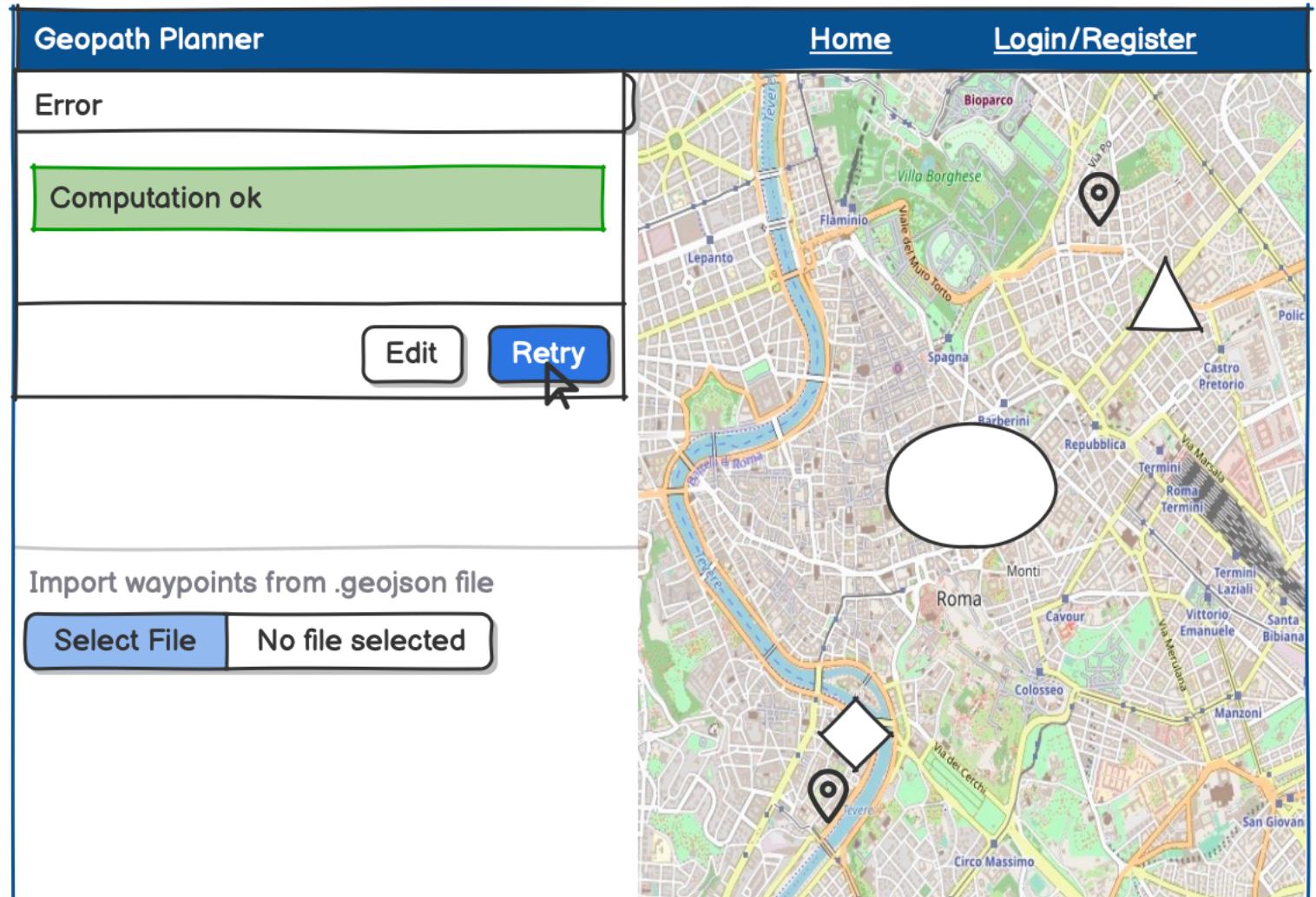
Error

Computation ok

[Edit](#)   [Retry](#)

Import waypoints from .geojson file

[Select File](#)   No file selected



**US 13 - As a user, I want the option to adjust my inputs and try again after completing or failing request so I don't have to start from scratch.**

**Geopath Planner**

Error

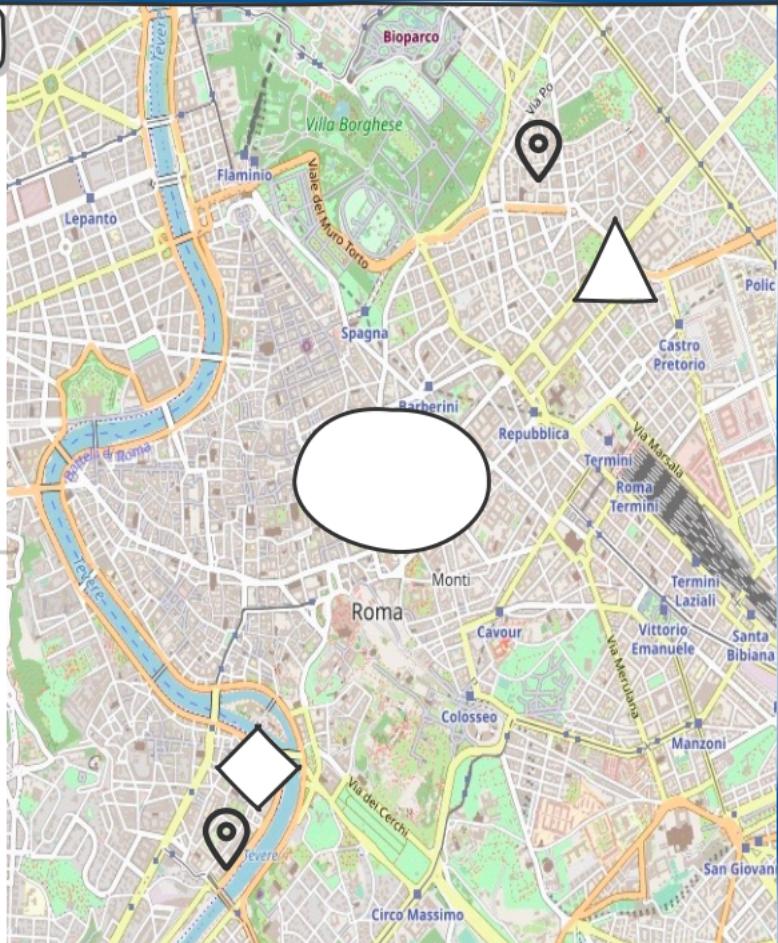
**Computation Failed**

**Edit** **Retry**

Import waypoints from .geojson file

**Select File** **No file selected**

[Home](#) [Login/Register](#)



**US 14 - As a user, I want the app to generate random no-fly areas so that I can quickly test different scenarios without having to draw them manually.**

Geopath Planner

Home Login/Register

Waypoints Obstacles Parameters

Altitude  
100 ▾ 500 ▾ Meters(m) ▾

Generate random obstacles

Import waypoints from .geojson file  
Select File No file selected

**US 15 - As a user, I want the app to provide a easy way to clean the window so that I can easily restart over.**

Geopath Planner

Home User

Waypoints

Obstacles

Parameters

Algorithm

RRT\*

RRT  
Ant Path

Goal Bias

0.10

Max Iterations

10000

Compute

Clear

The screenshot shows the Geopath Planner application's user interface. The 'Parameters' tab is selected. On the left, configuration options include 'Algorithm' set to 'RRT\*', 'Goal Bias' set to '0.10', and 'Max Iterations' set to '10000'. At the bottom left are 'Compute' and 'Clear' buttons, with the 'Clear' button being clicked. The main area is a map of Rome with a path plotted around obstacles.

**US 16 - As a registered user, I want to see a history of my past routes so that I can review or reuse them later.**

The screenshot shows the Geopath Planner application interface. At the top, there is a blue header bar with the text "Geopath Planner" on the left, and "Home" and "User" with a dropdown arrow on the right. Below the header, the main title "Route History" is displayed in a large, bold, dark font. Underneath the title is a detailed card for a specific route entry. The card has a green "Success" button at the top left. To its right is a small icon of two overlapping rectangles. Further to the right is a blue "rtt" button. The card contains the following information in rows:

- ID: 0030384-09589504ws
- Algorithm
- Waypoints 4
- Constraints 4
- Cost (km) 8000.0

At the bottom of the card are two buttons: a blue "View on map" button on the left and a red-bordered "Delete" button on the right. The entire card is set against a white background with a thin blue border around the entire page.

**US 17 - As a registered user, I want to delete past routes from my history so that I can no longer see routes that I don't want anymore.**

The screenshot shows the Geopath Planner interface. At the top, there is a blue header bar with the text "Geopath Planner", a "Home" link, a user profile icon, and a "User" dropdown menu. Below the header, the main title "Route History" is displayed in large, bold, dark gray font. To the left of the title is a green rectangular button labeled "Success". To the right of the title is a small calendar icon with the date "1 / 1" next to it. The main content area displays a route summary in a table-like format:

ID: 0030384-09589504ws	rtt
Algorithm	
Waypoints	4
Constraints	4
Cost (km)	8000.0

At the bottom of this summary section are two buttons: "View on map" (blue) and "Delete" (red). A cursor arrow is pointing at the "Delete" button. The entire "Route History" section is enclosed in a light gray rounded rectangle.

**US 18 - As a user, I want to load waypoints and constraints from geojson file, so that I can easily perform request without having to manually define it.**

**Geopath Planner**

[Home](#)    [Login/Register](#)

**Waypoints**   **Obstacles**   **Parameters**

Altitude   
Unit **Meters(m)** ▾

Search Position  **Q name**

Geolocation

Import waypoint

**Choose files to Upload** or drag and dr