

CLAIMS

1. A computer-implemented method for map interaction, the method comprising:

receiving user input specifying a map search operation from a visual map interface, the map search operation including a first location, a search criterion, and a distance determining point, wherein the first location and the distance determining point each specify a location in a set of map data representing a physical area, and wherein the first location and the distance determining point represent physical locations in the physical area;

determining a selected distance between the first location and the distance determining point, wherein the selected distance represents a physical distance between the physical locations represented by the first location and the distance determining point;

determining a demarcated range based on the first location and the selected distance, the demarcated range representing a shape in the physical area, wherein the shape is defined based on the first location and the selected distance, wherein the first location is a center of the shape and the distance determining point is located on a perimeter of the shape at a vertex of the shape;

identifying, in the demarcated range, one or more target objects matching the search criterion; and

displaying the one or more target objects in the demarcated range as a search result set in the visual map interface, each target object associated with a corresponding physical location in a subset of the physical area represented by the demarcated range.

2. The method according to claim 1, further comprising:

prior to displaying the one or more target objects:

sending a search request to a map server, the search request including the demarcated range; and

receiving a search response from the map server including the one or more target objects in the demarcated range.

3. The method according to claim 1, wherein receiving the user input specifying the map search operation comprises:

detecting a drag operation on the visual map interface, wherein the drag operation includes a start point and an end point; and

assigning the start point to the first location and the end point to the distance determining point.

4. The method according to claim 1, wherein receiving the user input specifying the map search operation comprises:

identifying a point selected by a user after the first location on the visual map interface as the distance determining point.

5. The method according to claim 1, wherein the shape is a square area, and wherein determining the demarcated range based on the first location and the selected distance comprises:

generating the square area as the demarcated range, the square area having the first location as the center of the square area and the distance determining point as the vertex of the square area.

6. The method according to claim 1, wherein receiving the user input specifying the map search operation comprises:

receiving text entered by a user in a text form, the text representing the first location and the selected distance.

7. The method according to claim 1, wherein receiving the user input specifying the map search operation includes receiving touch input representing the first location and the selected distance from the visual map interface displayed on a touchscreen display, and wherein displaying the one or more target objects in the demarcated range as a search result set comprises displaying the demarcated range on the visual map interface.

8. A non-transitory, computer-readable medium storing one or more instructions executable by a computer system to perform operations comprising:

receiving user input specifying a map search operation from a visual map interface, the map

search operation including a first location, a search criterion, and a distance determining point, wherein the first location and the distance determining point each specify a location in a set of map data representing a physical area, and wherein the first location and the distance determining point represent physical locations in the physical area;

determining a selected distance between the first location and the distance determining point, wherein the selected distance represents a physical distance between the physical locations represented by the first location and the distance determining point;

determining a demarcated range based on the first location and the selected distance, the demarcated range representing a shape in the physical area, wherein the shape is defined based on the first location and the selected distance, wherein the first location is a center of the shape and the distance determining point is located on a perimeter of the shape at a vertex of the shape;

identifying, in the demarcated range, one or more target objects matching the search criterion; and

displaying the one or more target objects in the demarcated range as a search result set in the visual map interface, each target object associated with a corresponding physical location in a subset of the physical area represented by the demarcated range.

9. The non-transitory, computer-readable medium of claim 8, the operations further comprising:

prior to displaying the one or more target objects:

sending a search request to a map server, the search request including the demarcated range;

and

receiving a search response from the map server including the one or more target objects in the demarcated range.

10. The non-transitory, computer-readable medium of claim 8, wherein receiving the user input specifying the map search operation comprises:

detecting a drag operation on the visual map interface, wherein the drag operation includes a start point and an end point; and

assigning the start point to the first location and the end point to the distance determining

point.

11. The non-transitory, computer-readable medium of claim 8, wherein receiving the user input specifying the map search operation includes identifying a point selected by a user after the first location on the visual map interface as the distance determining point.

12. The non-transitory, computer-readable medium of claim 8, wherein the shape is a square area, and wherein determining the demarcated range based on the first location and the selected distance includes generating the square area as the demarcated range, the square area having the first location as the center of the square area and the distance determining point as the vertex of the square area.

13. The non-transitory, computer-readable medium of claim 8, wherein receiving the user input specifying the map search operation includes receiving text entered by a user in a text form, the text representing the first location and the selected distance.

14. The non-transitory, computer-readable medium of claim 8, wherein receiving the user input specifying the map search operation includes receiving touch input representing the first location and the selected distance from the visual map interface displayed on a touchscreen display, and wherein displaying the one or more target objects in the demarcated range as a search result set includes displaying the demarcated range on the visual map interface.

15. A computer-implemented system, comprising:
one or more computers; and
one or more computer memory devices interoperably coupled with the one or more computers and having tangible, non-transitory, machine-readable media storing one or more instructions that, when executed by the one or more computers, perform one or more operations comprising:

receiving user input specifying a map search operation from a visual map interface, the map search operation including a first location, a search criterion, and a distance determining point,

wherein the first location and the distance determining point each specify a location in a set of map data representing a physical area, and wherein the first location and the distance determining point represent physical locations in the physical area;

determining a selected distance between the first location and the distance determining point, wherein the selected distance represents a physical distance between the physical locations represented by the first location and the distance determining point;

determining a demarcated range based on the first location and the selected distance, the demarcated range representing a shape in the physical area, wherein the shape is defined based on the first location and the selected distance, wherein the first location is a center of the shape and the distance determining point is located on a perimeter of the shape at a vertex of the shape;

identifying, in the demarcated range, one or more target objects matching the search criterion; and

displaying the one or more target objects in the demarcated range as a search result set in the visual map interface, each target object associated with a corresponding physical location in the a subset of the physical area represented by the demarcated range.

16. The computer-implemented system of claim 15, the operations further comprising:
prior to displaying the one or more target objects:
sending a search request to a map server, the search request including the demarcated range;
and
receiving a search response from the map server including the one or more target objects in the demarcated range.