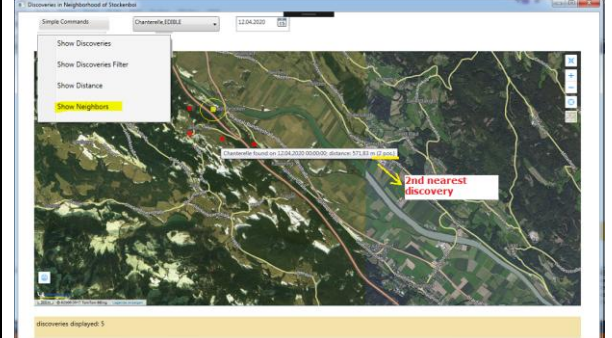## Theme

To save life of mushroom – hunters an appropriate application is needed.

Features

calculate nearest neighbors of hunter's position

User's View

	• with right mouse set hunter's position • position is displayed immediately • button "show neighbors" • displays next 5 discoveries in the neighbourhood and • their distance to hunter's position • in appropriate sequence, starting with the nearest
	Feature (to reach top 100%-FlowerPot): user can change number of displayed discoveries with a slider – GUI-control (eg between 1 and 10); discoveries are shown immediately

Developer's Hint

```sql
86  -- show nearest neighbors of geopoint id=1
87  SELECT TOP(3) A.id, B.id, A.geopoint.STDistance(B.geopoint) "distance in m"
88    FROM dbo.discoveries A , dbo.discoveries B
89    WHERE b.id = 1
90  ORDER BY  A.geopoint.STDistance(B.geopoint);
91
```

id	id	distance in m
1	1	0
2	1	3349,830458124
3	1	8147,67390087551

a. ➜ "B.geopoint" = position of hunter
b. there should be a spatial index over geographic data (performance reasons), but query works also without it