



Theme

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

Features

calculate distance between hunter's position and places of discoveries

User's View

	<ul style="list-style-type: none"> • with right mouse set hunter's position • position is displayed immediately <p>hints:</p> <ul style="list-style-type: none"> • hunter's position is not stored in db • ➔ is stored temporarily • till next hunter's position is set
	<ul style="list-style-type: none"> • button "show distance" • displays all discoveries and • their distance to hunter's position

Developer's Hint

- additional attribute

```
public class Discovery
{
    public static readonly double SIZE_OF_POINT = 10; //size of circle to display

    public int Id { get; set; }
    public DateTime? DateOfDiscovery { get; set; }
    public Position PositionOfDiscovery { get; set; }
    public Mushroom MushroomFound { get; set; }
    public string Remark { get; set; } //eg. distance to position of hunter

    public Discovery(int id, DateTime? dateFound, Position pos, Mushroom mush)
    {
        Id = id;
        DateOfDiscovery = dateFound;
        PositionOfDiscovery = pos;
        MushroomFound = mush;
    }

    public Discovery(DateTime? dateFound, Position pos, Mushroom mush) : this(-99, dateFound, pos, mush)
    {
    }

    public override string ToString()
    {
        return DateOfDiscovery + ", " + PositionOfDiscovery + ", " + MushroomFound;
    }
}
```

- how to calculate distance between 2 geopoints

```
SELECT A.id, B.id, A.geopoint.STDistance(B.geopoint) "distance in m"
FROM dbo.discoveries A, dbo.discoveries B
WHERE b.id = 1;
```

id	id	distance in m
1	1	0
2	1	3349.830458124
3	1	8147.67390087551

➔ "B.geopoint" = position of hunter