Project Radagast UML Version 3.0

+BaseMap

- +MasterSiteMarkerList:List<SiteMarker>
- +MasterHeatMarkerList:List<HeatMap>
- +GenusSiteList:List<SiteMarker>
- +GenusList:List<String>
- +AllNames:List<string>
- +DB:DataAccess
- +Opacity:double

+Overlay:Location

- +BottomLeft:Location
- +TopRight:Location
- +ImagePath:String
- +Opacity:double
- +Overlay:Overlay (Location B, Location T, Str

+GenusMarker: Location

- (+get -set) RareAnimalID:int
- (+get -set) SiteNumber:int
- (+get -set) SiteLocation:Location
- (+get -set) DateYear:int
- (+get -set) DateMonth:int
- (+get -set) DateDay:int
- (+get -set) SpeciesCode:string
- (+get -set) Genus:string
- (+get -set) Species:string
- (+get -set) CommonName:string
- (+get -set) SiteID:int
- + GenusMarker:GenusMarker (int ID, Location L

+DataAccess

- +DistinctSites:List<string>
- +DataAccess:DataAccess ()
- +GetConnectionString:string ()
- +FindDistinctSites:List<String> (List<String> csvList)
- +InsertAnimalMarker:void (string FileName)
- +InsertRespParticulates:void (string FileName)
- +RunNonQueries:void (string FileName)
- +DDL_Create:void (string FileName)
- +GetAllRespirable:List<string> ()
- +InsertRespParticulates:string (string Facility, Location
- +GetAllSites:List<SiteMarker> ()
- +AnimalsByMarkerAndGenus:List<AnimalSightings> (
- +SiteMarkerByGenus:List<SiteMarker> (string Genus
- +GetAllAnimals:List<string> ()
- +DeleteSiteByID:void (int ID)
- +SiteSightings:List<AnimalSightings> (int ID)
- +DeleteAnimalMarkerByID:void (int ID)
- +AnimalInfo:List<AnimalSightings>(string CommonNa
- +InsertNewAnimalMarker:string (bool InserChoice, do
- +UpdateAnimalMarker:string (bool InserChoice, int ID
- +GetDistinctGenus:List<string> ()
- +DeleteSiteByID:void (int ID)
- +SetConnectionStringAndBuildDatabase:void (int i)
- +SetConnectionString:void (int i)
- +BuildDatabase:void ()
- +PathFinder:string (string file)

+Heatmap:Location

- (+get -set) ID:int
- (+get -set) FacilityName:string
- (+get -set) Loc:Location
- (+get -set) Year:int
- (+get -set) Month:int
- (+get -set) Day:int
- (+get -set) Emissions:double
- + Weight:double
- +HeatMap:Heatmap(int Id, string FN, Location

+AnimalSightings: Location

- +SiteNumber:int
- +DateYear:int
- +DateMonth:int
- +DateDay:int
- +SpeciesCode:string
- +Genus:string
- +Species:string
- +CommonName:string
- +ClosestEmissionID:int
- +SiteID:int
- (+get -set)SiteLocation:Location
- +AnimalSightings:AnimalSightings (string Speci
- +AnimalSightings:AnimalSightings (int AnimalID
- +AnimalSightings:AnimalSightings (int AnimalID
- +AnimalSightings:AnimalSightings (int AnimalID

+HabitatShape:GenusMarker

- +ShapePath:List<GenusMarker>
- +IsPolyline:bool
- +IsPolygon:bool
- +ID:int
- (+get -set) FillColour:string
- +SetColour:void (String)
- +GetLength (Double)
- +Shape:Shape ()
- +Shape:Shape (List<GenusMarker>, bool IsPoly

+SiteMarker

- (+get -set) SiteID:int
- (+get -set) SiteNumber:int
- (+get -set) SiteLocation:Location
- (+get -set) Genus:string
- (+get -set) Sightings:List<AnimalSightings>
- (+get -set) GenusMarkings:List<GenusMarker
- +SiteMarker:SiteMarker (int ID, int S, Location
- +SiteMarker:SiteMarker (int ID, int S, Location
- +SiteMarker:SiteMarker (int ID, int S, Location
- +SiteMarker:SiteMarker (int ID, int S, Location

+Location

- (+get -set) Latitude: double
- (+get - set) Longitude: double
- +Location:Location (double Lat, double Long)

1...1   1...1   0...1   0...*   0...*   0...*   0...1   0...*