

-serialVersionUID: long -model: RegionModel -continentPanel: ListAndButtonPanel

-countryPanel: ListAndButtonPanel -CityPanel: ListAndButtonPanel -pointPanel: ListAndButtonPanel -placePanel: ListAndButtonPanel <u>-menu</u>: Menu +SelectionView() +actionPerformed(e: ActionEvent): void +setModel(model: RegionModel): void +getModel(): RegionModel get methods for all Class variables AddEditDeletePanel -serialVersionUID: long -ibtAdd: JButton -jbtEdit: JButton -jbtDelete: JButton +AddEditDeletePanel(regionType: String) +aetJBTAdd(): JButton +getJBTEdit(): JButton +aetJBTDelete(): JButton Menu -serialVersionUID: long -imiLoad: JMenultem -jmiSave: JMenuItem -jmilmport: JMenultem -imiExport: JMenuItem -imiCitiesWithinCountries: JMenuItem -imiCitiesWorldWide: JMenuItem -imiPOIWithinCities: JMenuItem -jmiPOIWithinCountries: JMenuItem -imiPOIWithinContinents: JMenuItem -imiPOIWorldwide: JMenultem -imiAreaBarContinent: JMenuItem -jmiAreaBarCounry: JMenuItem -imiAreaBarCity: JMenuItem -imiAreaBarPlacesOfInterest: JMenuItem -jmiPopBarContinent: JMenuItem -jmiPopBarCountry: JMenuItem -jmiPopBarCity: JMenuItem -jmiStackedAreaCou_Con: JMenuItem -imiStackedAreaCit Con: JMenuItem -jmiStackedAreaPoi_Con: JMenuItem -jmiStackedAreaPoi_Cou: JMenuItem imiStackedAreaPoi Cit: JMenuItem -jmiStackedPopCou_Con: JMenuItem jmiStackedPopCit_Cou: JMenuItem -jmiNeighborhoodList -jmiRecNeighborhoodList -jmiNeighborhoodCheck -jmiRecNeighborhoodCheck -jmiNeighborhoodMap -jmiRecNeighborhoodMap +Menu() ~ get Methods for all class variables RecursiveGNMapView

SelectionView

-IMAGE LOCATION: String

-model: RegionModel +GeoNeighborhoodMapView(region: Mappable, breadth: int, length: int, model: RegionModel) -convertLongitude(region: Mappable): int -convertLatitude(region: Mappable): int -generateRecursiveGeoNeighbors(region: Mappable, breadth: int, length: int, visitedRegions: ArrayList<Mappable>): ArrayList<Mappable> -getNumberLatValue(latitude: String): double -getNumberLongValue(longitude: String): double -generateAllCoordinateRegions():

RegionController -model: RegionModel -inputView: SelectionView -addContinentView: AddEditContinentView -editContinentViews: ArrayList<AddEditContiner -addCountryView: AddEditCountryView -editCountryViews: ArrayList<AddEditCountryViews -addCityView: AddEditCityView -editCityViews: ArrayList<AddEditCityView> -addPlaceView: AddEditPlaceView -editPlaceViews: ArravList<AddEditPlaceView> -addPointView: AddEditPointView -editPointViews: ArrayList<AddEditPointView> +RegionController() +setModel(model: RegionModel): void +getModel(): RegionModel +setInputView(selectionView: SelectionView): +getInputView(): SelectionView +setContinentAddView(continentView: AddEditContinentView): void +setContinentEditView(editContinent: AddEditContinentView): void +setCountryAddView(countryView: AddEditCountryView): void +setCountryEditView(editCountry: AddEditCountryView): void +setCityAddView(cityView: AddEditCityyView): void +setCityEditView(editCity: AddEditCityView): void +setPointAddView(pointView: AddEditPointView): void +setPlaceEditView(editPlace: AddEditPlaceView): void +setPointAddView(pointView: AddEditPointView): void +setPointEditView(editPoint:

RecursiveGNListView

-geoNeighborModel: DefaultListModel<String> -jlGeoNeighbors: JList<String> -model: RegionModel

-Also includes ALL ActionListener Classes ~

AddEditPointView): void

+GeoNeighborhoodListView(region: Mappable, breadth: int, length: int, model: RegionModel) -populateGeoNeighborModel(region: Mappable, breadth: int, length: int): void -generateRecursiveGeoNeighbors(region: Mappable, breadth: int, length: int, visitedRegions: ArrayList<Mappable>): ArrayList<Mappable> -getNumberLatValue(latitude: String): double -getNumberLongValue(longitude: String): double -generateAllCoordinateRegions():

RecursiveGNCheckView

-model: RegionMode -geoNeighbors: ArrayList<Mappable>

Arrayl ist<Mannable>

+RecursiveCheckView(region1: Mappable, region2: Mappable, breadth: int, length: int model: RegionModel) -generateRecursiveGeoNeighbors(region: Mappable,

breadth: int, length: int, visitedRegions: ArrayList<Mappable>): ArrayList<Mappable> -getNumberLatValue(latitude: String): double -getNumberLongValue(longitude: String): double

-generateAllCoordinateRegions():