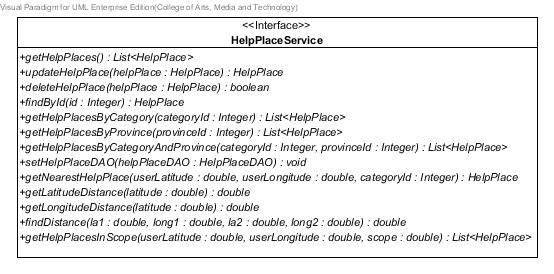


1. HelpPlaceService



**Figure 9** HelpPlaceService **class**

**Method details**

1. getHelpPlaces

public List<HelpPlace> getHelpPlaces ()

**Description:** Get list of all help places from the database.

**Return:** List of all help places in database.

1. findById

public HelpPlace findById (Integer id)

**Description:** Get help place by id from the database.

**Parameter:** id-Integer uses for getting the help place.

**Return:** The help place in database.

1. updateHelpPlace

public HelpPlace updateHelpPlace(HelpPlace helpPlace)

**Description:** Update information of the help place to database.

**Parameter:** helpPlace-HelpPlace uses for update information of the help place to database.

**Return:** Help place object that needs to update.

1. deleteHelpPlace

public boolean deleteHelpPlace(HelpPlace helpPlace)

**Description:** Delete the help place in the database.

**Parameter:** helpPlace-HelpPlace uses for delete the help place from database.

**Return:** Boolean, if the help place has been deleted, will return true.

1. getHelpPlacesByCategory

public List<HelpPlace> getHelpPlacesByCategory(Integer categoryId)

**Description:** Get help places from the database by the selected category id.

**Parameter:** categoryId-Integer uses for getting the help place from database.

**Return:** List of help places that contain the selected category, in the database.

1. getHelpPlacesByProvince

public List<HelpPlace> getHelpPlacesByProvince(Integer provinceId)

**Description:** Get help places from the database by the selected province id.

**Parameter:** provinceId-Integer uses for getting the help place from database.

**Return:** List of help places that contain the selected province, in the database.

1. getHelpPlacesByCategoryAndProvince

public List<HelpPlace> getHelpPlacesByCategoryAndProvince (Integer categoryId, Integer provinceId)

**Description:** Get help places from the database by the selected category id and province id.

**Parameter:** provinceId–Integer and categoryId-Integer use for getting the help place from database.

**Return:** List of help places that contain the selected category and province, in database.

1. setHelpPlaceDAO

public void setHelpPlaceDAO(HelpPlaceDAO helpPlaceDAO)

**Description:** Set HelpPlaceDAO value into help place’s attribute.

**Parameter:** helpPlaceDAO–HelpPlaceDAO use for setting help place DAO.

XXX: getNearestHelpPlace

public HelpPlace getNearestHelpPlace(double userLatitude, double userLongitude, Integer categoryId)

**Description:** Get nearest help place from the database by the selected category id.

**Parameter:** userLatitude-double use for finding nearest help place.

userLongitude-double use for finding nearest help place.

categoryId-Integer use for getting the help place from database.

**Return:** Nearest help place by the selected category.

XXX: getLatitudeDistance

public double getLatitudeDistance(double latitude)

**Description:** Get surface distance per 1 degree change in latitude (meter).

**Parameter:** latitude-double use for finding surface distance per 1 degree change in latitude.

**Return:** Surface distance per 1 degree change in latitude in unit meter.

XXX: getLongitudeDistance

public double getLongitudeDistance(double latitude)

**Description:** Get surface distance per 1 degree change in longitude (meter).

**Parameter:** latitude-double use for finding surface distance per 1 degree change in longitude.

**Return:** Surface distance per 1 degree change in longitude in unit meter.

XXX: findDistance

public double findDistance(double la1, double long1,double la2, double long2)

**Description:** Get distance between two difference locations measures in unit meter.

**Parameter:** la1-double use for indicate latitude of location one.

long1-double use for indicate longitude of location one.

la2-double use for indicate latitude of location two.

long2-double use for indicate longitude of location two.

**Return:** Distance between two locations in unit meter.

XXX: getHelpPlacesInScope

public List<HelpPlace> getHelpPlacesInScope(double userLatitude, double userLongitude, double scope)

**Description:** Get list of help places in the setting area scope.

**Parameter:** userLatitude-double use for indicate user current location.

userLongitude-double use for indicate user current location.

scope-double use to define the scope for getting help places.

**Return:** List of help places locate in the selected scope.

1. HelpPlaceServiceImpl



**Figure 10** HelpPlaceServiceImpl **class**

**Entities**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Description** | **Type** |
| 1 | helpPlaceDAO | Contained HelpPlaceDAO object | HelpPlaceDAO |

**Method details**

1. getHelpPlaces

public List<HelpPlace> getHelpPlaces()

**Description:** Get help places from the database through getHelpPlaces method of HelpPlaceDAO class.

**Flow:**

1. Use method getHelpPlaces()of HelpPlaceDAO class to get all help places.
2. Return list of all help places.

**Return:** List all help places in the database.

1. updateHelpPlace

public HelpPlace updateHelpPlace(HelpPlace helpPlace)

**Description:** Update information of the help place to the database through updateHelpPlace method of HelpPlaceDAO class.

**Parameter:** helpPlace-HelpPlace uses for update information of the help place to the database.

**Flow:**

1. Use method updateHelpPlace(helpPlace)of HelpPlaceDAO class to update help place.

**Return:** Help place object that needs to update.

1. deleteHelpPlace

public boolean deleteHelpPlace(HelpPlace helpPlace)

**Description:** Delete the help place from database through deleteHelpPlace method of HelpPlaceDAO class.

**Parameter:** helpPlace-HelpPlace uses for delete the help place from database.

**Flow:**

1. Use method deleteHelpPlace(helpPlace)of HelpPlaceDAO class to delete help place.

**Return:** Boolean, if the help place has been deleted, will return true.

1. findById

public HelpPlace findById(Integer id)

**Description:** Get help place from the database through findById method of HelpPlaceDAO class.

**Parameter:** id-Integer uses for getting the help place.

**Flow:**

1. Use method findById(id)of HelpPlaceDAO class to find the help place by using its id.

**Return:** The help place in the database.

1. getHelpPlacesByCategory

public List<HelpPlace> getHelpPlacesByCategory(Integer categoryId)

**Description:** Get help places from the database by selected category id through getHelpPlacesByCategory method of HelpPlaceDAO class.

**Parameter:** categoryId-Integer uses for getting the help place from database.

**Flow:**

1. Use method getHelpPlacesByCategory(categoryId)of HelpPlaceDAO class to get list of help places.
2. Return list of help places.

**Return:** List of help places in the database.

1. getHelpPlacesByProvince

public List<HelpPlace> getHelpPlacesByProvince(Integer provinceId)

**Description:** Get help places from the database by selected province id through getHelpPlacesByProvince method of HelpPlaceDAO class.

**Parameter:** provinceId-Integer uses for getting the help place from database.

**Flow:**

1. Use method getHelpPlacesByProvince(provinceId) of HelpPlaceDAO class to get list of help places.
2. Return the list of help places.

**Return:** List of help places in the database.

1. getHelpPlacesByCategoryAndProvince

public List<HelpPlace> getHelpPlacesByCategoryAndProvince (Integer categoryId,Integer provinceId)

**Description:** Get help places from the database by selected category id and province id through getHelpPlacesByCategoryAndProvince method of HelpPlaceDAO class.

**Parameter:** provinceId–Integer and categoryId-Integer uses for getting the help place from database.

**Flow:**

1. Use method getHelpPlacesByCategoryAndProvince(categoryId,provinceId)of HelpPlaceDAO class to get list of help places.
2. Return the list of help places.

**Return:** List of help places in the database.

1. setHelpPlaceDAO

public void setHelpPlaceDAO(HelpPlaceDAO helpPlaceDAO)

**Description:** Set HelpPlaceDAO value into help place’s attribute.

**Flow:**

1. Get parameter to set value of helpPlaceDAO attribute.

**Parameter:** helpPlaceDAO–HelpPlaceDAO use for setting help place DAO.