[[egovframework:mcom: Location Information Connection]]

EGOVFRAME

Show pagesource

Old revisions

Print view

Recent changes

Search

Table of Contents

Cooperation–Location information connection

Summary

The location information connection is a component of attaining current location of users (altitude and latitude) which can be used in various location based services.
In attaining the current location of users, the GeoLocation API of HTML5 is used.

It searches location information of near buildings based on current location of the user and the manager manages the location information.

* Function Flow

기능명	기능 흐름
건물 위치정보 관리 (관리자)	관리자 로그인 → 건물 위치 정보 조회 → 건물 위치 정보 등록 → 건물 위치 정보 수정 → 건물 위치 정보 삭제
위치정보 조회 (서비스 사용자)	위치정보 조회

The development and testing of the mobile screen of this component is completed. It is also noted in development since the supports on HTML5 and CSS3 vary between the PC browser and mobile browser in the same brand.

The tested device and browsers are GalaxyS2, GalaxyS, iPad2, iPhone4, GalaxyTab1 and the web browsers, Firefox, Safari, Opera Mobile.

The test results are as following.

Android
The operation of HTML5, CSS3 and components of the Firefox(6.xx) and opera mobile was stable in android OS 2.3 (gengerbread).
However, in the lower version browsers, android 2.1, 2.2, the operation of components was unstable and UI realization was not smooth due to insufficient HTML5 and CSS3 supports.

For Opera Mobile, it caused problems in colors and event processing in UI. Therefore, it was excluded from the subject. Galaxy, GalxyS2 and GalaxyTab1 were chosen as test mobile devices.
iOS
The iOS is one of three supported browsers and was tested in versions 4.2 and 4.3. The support for HTML5 and CSS3 were relatively smooth.
iPhone4 and iPad2 were chosen as test mobile devices.

Prerequisites

In order to use two maps provided as samples of Mobile location information connection service, apply for the map API authentication key separately.
- National Spatial Data Infrastructure map : http://www.nsdi.go.kr/use/openapi/key/ahUseOpenAPIKey010.do)
- Daummap : https://apis.daum.net/register/myapi.daum)

All authorities to use National Spatial Data Infrastructureand Daummaps are owned by those organizations
Check the 'Daummap Open API service terms and conditions before using Daummap.
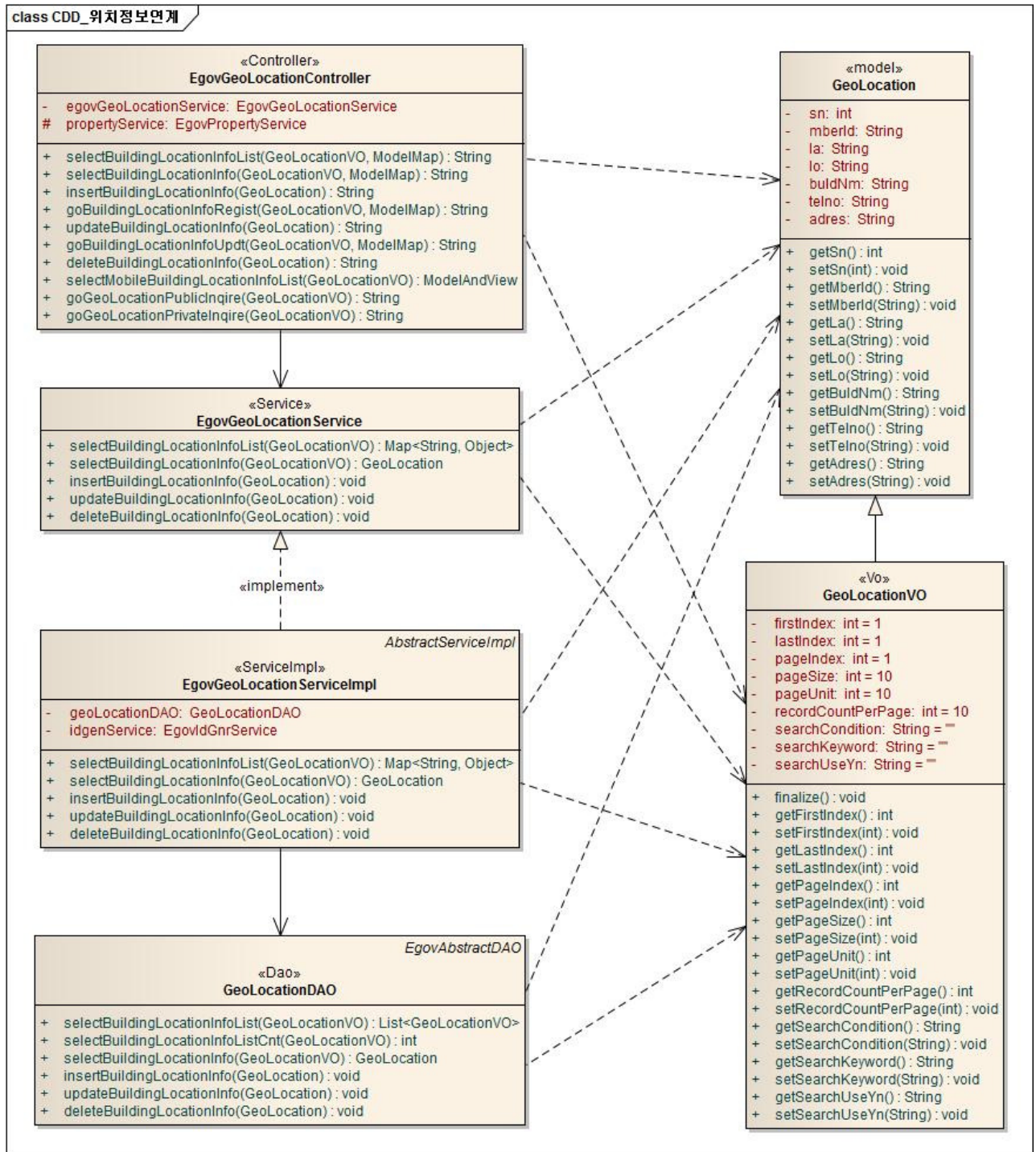(Daummap Open API service terms and conditions: http://dna.daum.net/apis/mapagreement)

In addition to the sample maps, you can connect the service according to other map API terms and standards.

Description

Mobile location information connection is largely composed of buildinglocation information management (**buildinglocation informationlist inquiry, detail inquiry, registration, modification and deletion) andlocation informationinquiry** based on the current user location.(refer to the related functions)

Class diagram

class CDD_위치정보연계

«Controller» EgovGeoLocationController
- egovGeoLocationService: EgovGeoLocationService
propertyService: EgovPropertyService
+ selectBuildingLocationInfoList(GeoLocationVO, ModelMap) : String
+ selectBuildingLocationInfo(GeoLocationVO, ModelMap) : String
+ insertBuildingLocationInfo(GeoLocation) : String
+ goBuildingLocationInfoRegist(GeoLocationVO, ModelMap) : String
+ updateBuildingLocationInfo(GeoLocation) : String
+ goBuildingLocationInfoUpdt(GeoLocationVO, ModelMap) : String
+ deleteBuildingLocationInfo(GeoLocation) : String
+ selectMobileBuildingLocationInfoList(GeoLocationVO) : ModelAndView
+ goGeoLocationPublicInqire(GeoLocationVO) : String
+ goGeoLocationPrivateInqire(GeoLocationVO) : String

«Service» EgovGeoLocationService
+ selectBuildingLocationInfoList(GeoLocationVO) : Map<String, Object>
+ selectBuildingLocationInfo(GeoLocationVO) : GeoLocation
+ insertBuildingLocationInfo(GeoLocation) : void
+ updateBuildingLocationInfo(GeoLocation) : void
+ deleteBuildingLocationInfo(GeoLocation) : void

«implement»

AbstractServiceImpl
«ServiceImpl» EgovGeoLocationServiceImpl
- geoLocationDAO: GeoLocationDAO
- idgenService: EgovIdGnrService
+ selectBuildingLocationInfoList(GeoLocationVO) : Map<String, Object>
+ selectBuildingLocationInfo(GeoLocationVO) : GeoLocation
+ insertBuildingLocationInfo(GeoLocation) : void
+ updateBuildingLocationInfo(GeoLocation) : void
+ deleteBuildingLocationInfo(GeoLocation) : void

EgovAbstractDAO
«Dao» GeoLocationDAO
+ selectBuildingLocationInfoList(GeoLocationVO) : List<GeoLocationVO>
+ selectBuildingLocationInfoListCnt(GeoLocationVO) : int
+ selectBuildingLocationInfo(GeoLocationVO) : GeoLocation
+ insertBuildingLocationInfo(GeoLocation) : void
+ updateBuildingLocationInfo(GeoLocation) : void
+ deleteBuildingLocationInfo(GeoLocation) : void

«model» GeoLocation
- sn: int
- mberId: String
- la: String
- lo: String
- buldNm: String
- telno: String
- adres: String
+ getSn() : int
+ setSn(int) : void
+ getMberId() : String
+ setMberId(String) : void
+ getLa() : String
+ setLa(String) : void
+ getLo() : String
+ setLo(String) : void
+ getBuldNm() : String
+ setBuldNm(String) : void
+ getTelno() : String
+ setTelno(String) : void
+ getAdres() : String
+ setAdres(String) : void

«Vo» GeoLocationVO
- firstIndex: int = 1
- lastIndex: int = 1
- pageIndex: int = 1
- pageSize: int = 10
- pageUnit: int = 10
- recordCountPerPage: int = 10
- searchCondition: String = ""
- searchKeyword: String = ""
- searchUseYn: String = ""
+ finalize() : void
+ getFirstIndex() : int
+ setFirstIndex(int) : void
+ getLastIndex() : int
+ setLastIndex(int) : void
+ getPageIndex() : int
+ setPageIndex(int) : void
+ getPageSize() : int
+ setPageSize(int) : void
+ getPageUnit() : int
+ setPageUnit(int) : void
+ getRecordCountPerPage() : int
+ setRecordCountPerPage(int) : void
+ getSearchCondition() : String
+ setSearchCondition(String) : void
+ getSearchKeyword() : String
+ setSearchKeyword(String) : void
+ getSearchUseYn() : String
+ setSearchUseYn(String) : void

Related sources

Type	Target source name	Notes
Controller	egovframework.mbl.com.geo.web.EgovGeoLocationController.java	location information connection Controller Class
Service	egovframework.mbl.com.geo.service.EgovGeoLocationService.java	location information connection Service Class
ServiceImpl	egovframework.mbl.com.geo.service.impl.EgovGeoLocationServiceImpl.java	location information connection ServiceImpl Class
Model	egovframework.mbl.com.geo.service.GeoLocation.java	location information connection Model Class
VO	egovframework.mbl.com.geo.service.GeoLocationVO.java	location information connection content VO Class
DAO	egovframework.mbl.com.geo.service.impl.GeoLocationDAO.java	location information connection Dao Class
JSP	/WEB-INF/jsp/egovframework/mbl/com/geo/EgovBuildingLocationInfoList.jsp	Building location informationlist inquirypage
JSP	/WEB-INF/jsp/egovframework/mbl/com/geo/EgovBuildingLocationInfoRegist.jsp	Building location informationregistrationpage
JSP	/WEB-INF/jsp/egovframework/mbl/com/geo/EgovBuildingLocationInfoUpdt.jsp	Building location informationmodificationpage
JSP	/WEB-INF/jsp/egovframework/mbl/com/geo/EgovBuildingLocationInfoDetail.jsp	Building location informationdetail inquirypage
JSP	/WEB-INF/jsp/egovframework/mbl/com/geo/EgovMobileGeoLocationPublicInqire.jsp	Mobileadjacentlocation information(public map) inquirypage
JSP	/WEB-INF/jsp/egovframework/mbl/com/geo/EgovMobileGeoLocationPrivateInqire.jsp	Mobileadjacentlocation information(private map) inquirypage
QUERY XML	resources/egovframework/sqlmap/mbl/com/geo/EgovGeoLocation_SQL_XXX.xml	location information connection QUERY XML
Validator Rule XML	resources/egovframework/validator/validator- rules.xml	XML that defines Validator Rule
Validator	resources/egovframework/validator/mbl/com/geo/EgovGeoL	location information

XML	ocation.xml	connection Validator XML
Message properties	resources/egovframework/message/message-common_ko_KR.properties	location information connection Message properties
Idgen XML	resources/egovframework/spring/com/context- idgen.xml	Building location information Id generationIdgen XML

ID Generation

- In order to use ID Generation Service, add GEO_ID (buildinglocation informationID) to COMTECOPSEQ, the sequence storing page.

Related Tables

Table name	Table name (English)	Notes
location information	COMTNGEOLOCATION	Manage buildinglocation information

Login / membership management / permission management

location information connection requires in the administrator authentication in **buildinginformationlist inquiry, detail inquiry, registration, modification and deletion**.

For authentication, you can connect with login, membership management and permission management components. If you use Spring Security for authentication, make change as in the followings.

src/main/java/resources/egovframework/spring/com/context-egovuserdetailshelper.xml

```xml
<!--Service class that can check the authenticated user's LoginVO, permissions and authentication-->
<beanid="egovUserDetailsHelper"class="egovframework.com.cmm.util.EgovUserDetailsHelper">
<propertyname="egovUserDetailsService">
<refbean="egovUserDetailsSecurityService"/>
</property>
</bean>

<!-- Bean that will use Security-based authentication-->
<beanid="egovUserDetailsSecurityService"class="egovframework.com.sec.ram.service.impl.EgovUserDetailsSecurityServiceImpl"/>
```

web.xml

```xml
<!-- 2. Spring Security Setup-->
<filter>
<filter-name>springSecurityFilterChain</filter-name>
<filter-class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>
</filter>
<filter-mapping>
<filter-name>springSecurityFilterChain</filter-name>
<url-pattern>/*</url-pattern>
</filter-mapping>

<listener>
<listener-class>org.springframework.security.ui.session.HttpSessionEventPublisher</listener-class>
</listener>
<!-- security end -->

<!-- 4. Filter setup for Spring Security logout setup-->
<filter>
        <filter-name>EgovSpringSecurityLogoutFilter</filter-name>
        <filter-class>egovframework.com.sec.security.filter.EgovSpringSecurityLogoutFilter</filter-class>
</filter>
```

```
<filter-mapping>
            <filter-name>EgovSpringSecurityLogoutFilter</filter-name>
            <url-pattern>/uat/uia/actionLogout.do</url-pattern>
</filter-mapping>

<!-- 4. Filter setup for Spring Security login setup -->
<filter>
            <filter-name>EgovSpringSecurityLoginFilter</filter-name>
            <filter-class>egovframework.com.sec.security.filter.EgovSpringSecurityLoginFilter</filter-class>
</filter>
<filter-mapping>
            <filter-name>EgovSpringSecurityLoginFilter</filter-name>
            <url-pattern>*.do</url-pattern>
</filter-mapping>
```

As in the above, add Spring Security filter to web.xml.

For details on login/membership management/permission management, refer to the followings.

- login: general login
- Membership management: user management
- Permission management: Permission management

The following pages need the user/administrator permissions.

Permission type	pagepath	description
Administrator	/mbl/com/syn/selectBuildingLocationInfoList.mdo	buildinginformationlist inquiryscreen
Administrator	/mbl/com/syn/selectBuildingLocationInfo.mdo	buildinginformationdetail inquiryscreen
Administrator	/mbl/com/syn/goBuildingLocationInfoRegist.mdo	buildinginformationregistrationscreen
Administrator	/mbl/com/syn/insertBuildingLocationInfo.mdo	buildinginformationregistration
Administrator	/mbl/com/syn/goBuildingLocationInfoUpdt.mdo	buildinginformationmodificationscreen
Administrator	/mbl/com/syn/updateBuildingLocationInfo.mdo	buildinginformationmodification
Administrator	/mbl/com/syn/deleteBuildingLocationInfo.mdo	buildinginformationdeletion

Settings and Notes

* The currently distributed mobile common component adopts HTML5 and CSS3 and this means that it doesn't support the standards for mobile web site validity check of Mobile OK and W3C. For details on correct validity check, please contact the competent professional institute.

* The currently distributed mobile component V 2.0 has completed the security verification.

Related functions

Mobile location information connection service is largely composed of **Mobilelocation informationinquiry** for users and **buildinglocation informationlist inquiry**, **buildinglocation informationdetail inquiry**, **buildinglocation informationregistration**, **buildinglocation informationmodification**, **buildinglocation informationdeletion** for administrators.

Mobilelocation informationinquiry

Business rules

You can retrieve the location information of neighboring buildings based on the current user location.

To use this, you need to set up as in the page in the following.

```
<scripttype="text/javascript"src="http://www.nsdi.go.kr/use/openapi/key/certifyKey.do?oap_key=issued    authentication key"charset="utf-8"></script>
```

or

```
<scripttype="text/javascript"src="http//apis.daum.net/maps/maps3.js?apikey=issued authentication key"></script>
```

Input the previously issued authentication key to the **"issued authentication key"** in the above code.

To use another map API, you can modify the following to suit the map API.

```
<!-- Map API* -->

Modify below

 // Set up ZoomLevelbased on the inquiry scope.*

Modify below

 // Current location coordinates*

Modify below

 // set up a map*

Modify below

 // create a map*

Modify below

 // Display current location marker*

Modify below

 // Create information window*

Modify below

 // buildingicon*

Modify below

 // Display buildingmarker within the inquiry scope*

Modify below
```

```
 // Draw the inquiry scope circle *

Modify below
```

Related codes

N/A

Screen and execution manual

Action	URL	Controller method	QueryID
Change inquiry scope	/mbl/com/geo/selectMobileBuildingLocationInfoList.mdo	selectMobileBuildingLocationInfoList	"GeoLocationDAO.selectBuildingLocationInfoList"

Change inquiry scope: every time the inquiry scope is changed, thebuildinglocation information within the inquiry scope is retrieved.

Buildinglocation informationlist inquiry

Business rules

You can use the inquiry conditions to retrieve lists, or click the Register button to move to the buildinglocation informationregistrationscreen to registerbuildinglocation information.

Related codes

N/A

Screen and execution manual

Action	URL	Controller method	QueryID
Inquiry	/mbl/com/geo/selectBuildingLocationInfoList.mdo	selectBuildingLocationInfoList	"GeoLocationDAO.selectBuildingLocationInfoList"
	/mbl/com/geo/selectBuildingLocationInfoList.mdo	selectBuildingLocationInfoListCnt	"GeoLocationDAO.selectBuildingLocationInfoListCnt"
Register	/mbl/com/geo/goBuildingLocationInfoRegist.mdo	goBuildingLocationInfoRegist	
Click list	/mbl/com/geo/selectBuildingLocationInfo.mdo	selectBuildingLocationInfo	"GeoLocationDAO.selectBuildingLocationInfo"

10 buildinglocation informationlistspageare retrieved per page and paging is carried out on 10 page basis.The search conditions are building name, telephone number and address.

To change the search range per page, modify pageUnit and pageSize in context-properties.xml (This setting have an influence on the entire common service functions.).

Inquiry: in order to retrieve the buildinglocation information, select search conditions in the top, enter a key word and click the Inquiry button.

Register: to register buildinglocation information, use the Register button in the top to move to buildinglocation informationregistrationscreen.

Click the list: moves to the **buildinglocation informationdetail inquiry** screen.

Buildinglocation informationdetail inquiry

Business rules

By clicking a list on buildinglocation informationlist inquiry, you can move to this screen, which shows details on the buildinglocation information.

Related codes

N/A

Screen and execution manual

Action	URL	Controller method	QueryID

modify	/mbl/com/geo/goBuildingLocatio nInfoUpdt.mdo	goBuildingLocationIn foUpdt	
delete	/mbl/com/geo/deleteBuildingLoc ationInfo.mdo	deleteBuildingLocati onInfo	"GeoLocationDAO.deleteBuildingLo cationInfo"
list	/mbl/com/geo/selectBuildingLoc ationInfoList.mdo	selectBuildingLocatio nInfoList	"GeoLocationDAO.selectBuildingLo cationInfoList"

On the buildinglocation informationdetail inquiry screen, you can carry out buildinglocation informationmodification, buildinglocation informationdeletion andbuildinglocation informationlist inquiry.

Modify: click the Modify button to move to the screen for modifying the buildinglocation information.

Delete: Click the Delete button to delete information after being prompted to select whether to delete.

List: moves to the **buildinglocation informationlist inquiry** screen.

buildinglocation informationregistration

Business rules

- The red * at the right of input entry indicates the required item..

- When stored, GEO_ID column is automatically granted through "egovframework.rte.fdl.idgnr.impl.EgovTableIdGnrService".

```
Primary Key => GEO_ID :a serial number is automatically granted.

<bean name="egovGeoLocationIdGnrService"

        class="egovframework.rte.fdl.idgnr.impl.EgovTableIdGnrService"

        destroy-method="destroy">

        <property name="dataSource" ref="dataSource" />

        <property name="blockSize"          value="10"/>

        <property name="table"              value="COMTECOPSEQ"/>

        <property name="tableName"          value="GEO_ID"/>

</bean>
```

Related codes

N/A

Screen and execution manual

Action	URL	Controller method	QueryID
Register	/mbl/com/geo/insertBuildingLocationInfo.mdo	insertBuildingLocationInfo	"GeoLocationDAO.insertBuildingLocationInfo"
List	/mbl/com/geo/selectBuildingLocationInfoList.mdo	selectBuildingLocationInfoList	"GeoLocationDAO.selectBuildingLocationInfoList"

The basic data on buildinglocation information is inputted and stored.

Register: stores the inputted buildinglocation information.

List: moves to the **buildinglocation informationlist inquiry** screen.

buildinglocation informationmodification

Business rules

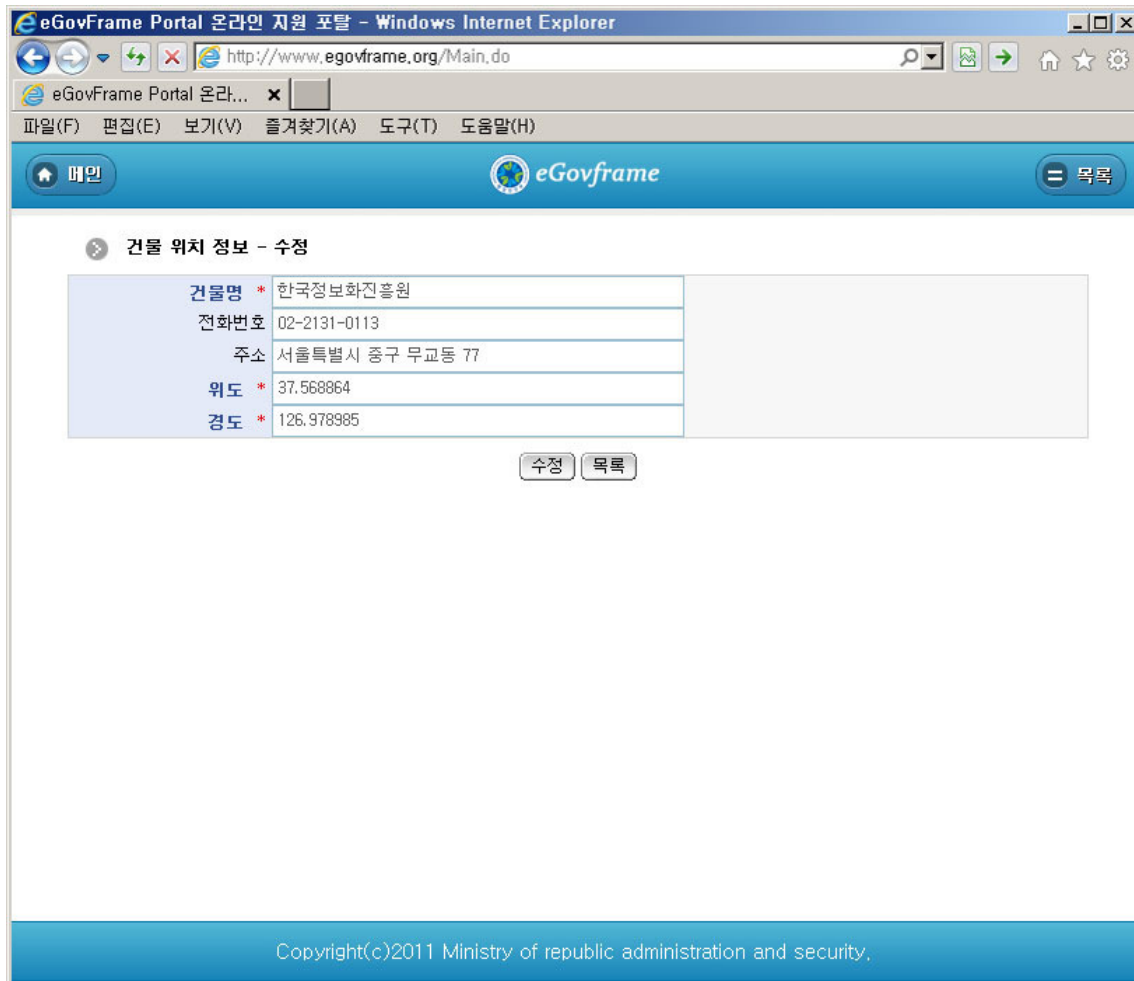- The red * at the right of input entry indicates the required item..

Related codes

N/A

Screen and execution manual

Action	URL	Controller method	QueryID
modify	/mbl/com/geo/updateBuildingLocationInfo.mdo	updateBuildingLocationInfo	"GeoLocationDAO.updateBuildingLocationInfo"
List	/mbl/com/geo/selectBuildingLocationInfoList.mdo	selectBuildingLocationInfoList	"GeoLocationDAO.selectBuildingLocationInfoList"

The inputted buildinglocation information is stored.

Modify: stores the modifiedbuildinglocation information.

List: moves to the **buildinglocation informationlist inquiry** screen.

References

- Refer to execution environment: <u>ID Generation Service</u>
- Distribution and test: <u>Mobile Common Component System</u> and <u>distribution package plan</u>
- Related database structure and schema: <u>Related database structure and schema</u>

Show pagesource

Old revisions

Login

Index

Except where otherwise noted, content on this wiki is licensed under the following license:CC Attribution-Noncommercial-Share Alike 3.0 Unported