

Vibrator Device API Guide Program

Outline

VibratorAPI guide program is a guide application for eGov Device API, using the mobile device API framework to be used as a tool and a reference when developing hybrid applications. It supports the inquiry of notification related functions of mobile smart devices through JavaScript-based Vibrator DeviceAPI.

Also, it is comprised of a feature to send and inquire notification information within the Device, in conjunction with eGovFramework based web server application.

Feature

This Guide Program provides **notify with sound** , **notify with vibration** , **view notification list** features.

Using Notification API, it displays notificatio information at the time of user's designation.

Assumptions

Category	Description
Local Device Environments	Xcode 6.3.2, PhoneGap 4.3.0
Server-side Developmental Environment	eGov Standard Framework Development Environment 3.5
Works in sync with Mash up Open API	N/A
Test Device	iPhone4, iPhone6
Test Platform	iOS 7.1.2, iOS 8.3
Libraries Added	N/A

Restriction

Supported devices and platforms

For iPhone devices, there may be issues due to device's processing power.

- Problem: PhoneGap error.
- Solution: delay PhoneGap loading sequence with setTimeout() function.

```
document.addEventListener('DOMContentLoaded', function () { setTimeout(loaded, 200); }, false);
```

- Problem: iScroll5 content height calculation error.

- Solution: use setTimeout() to ensure iscroll is generated after css application to contents is complete.

```
setTimeout(function()  
  {  
    myScroll = new iScroll(thisPage,  
                          {  
                            checkDOMChanges: true,  
                            onBeforeScrollStart:function(e)  
                            {  
                            }  
                          });  
  },  
  500);
```

Notification time is to be set minimum of 10 seconds. (validation condition)

Using cross domain

When using certain outside domains or its subdomains on PhoneGap, add such domains on <access origin="ExternalHosts"/> at [Project_Name]/Supporting/config.xml

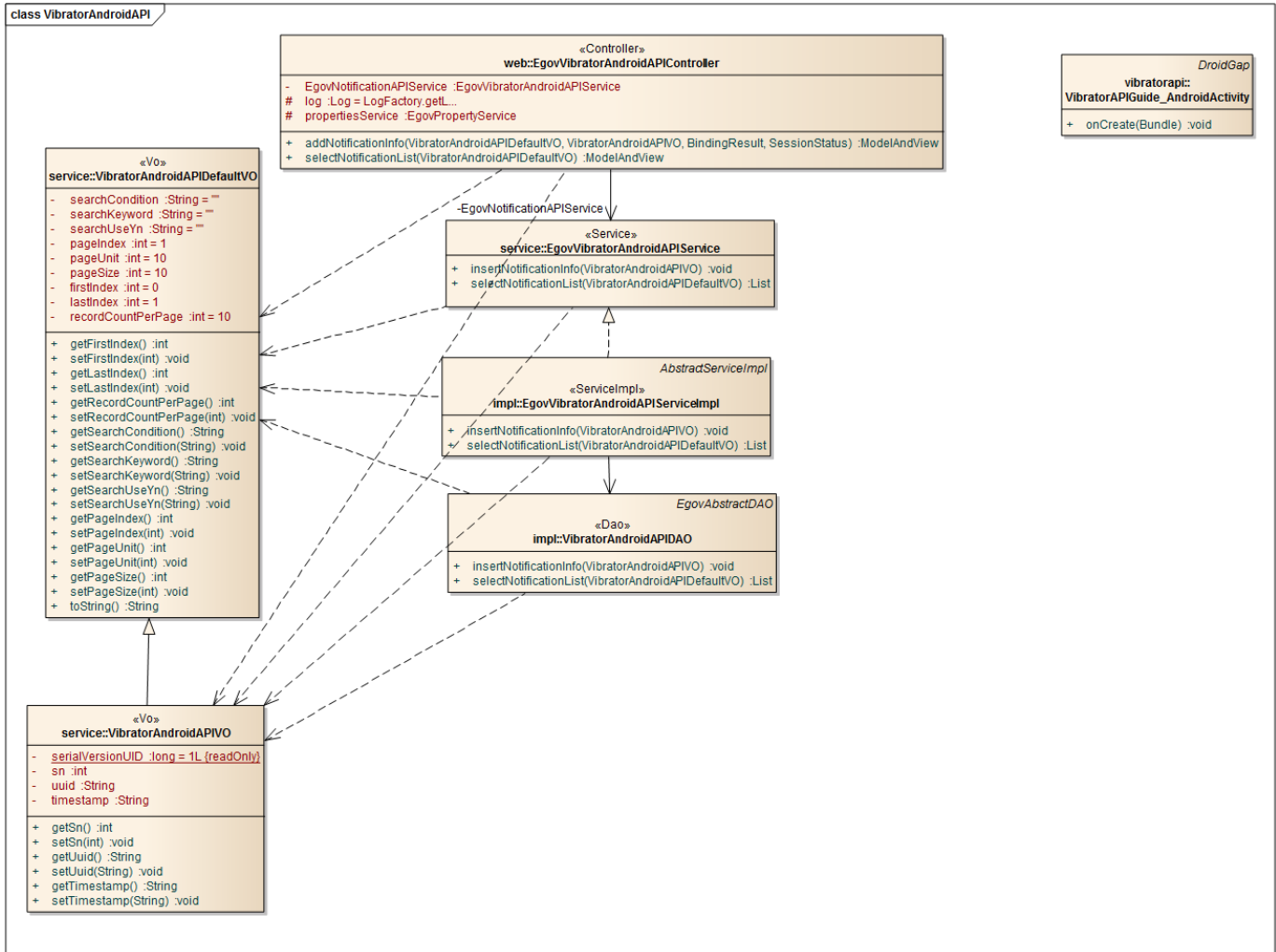
License

N/A

Description

Vibrator Device API Guide Program is comprised of features that a) sets and displays notification information and b) sends and inquires set notification information to web application. (refer to related functions section)

Class Diagram



Device Application

Source

Type	Title	Remark
CSS	www/css/egovframework/mbl/hyb/VibratorAPI.css	VibratorAPI Guide Program main Cascading Style Sheets
IMAGE	www/images/egovframework/mbl/hyb/	VibratorAPI Guide Program main Image folder
JS	www/js/egovframework/mbl/hyb/VibratorAPI.js	VibratorAPI Guide Program main JavaScript
HTML	www/VibratorAPI.html	VibratorAPI main page
HTML	www/license.html	VibratorAPI license page
HTML	www/overview.html	VibratorAPI feature description page

APIs Used

notification.beep

- Notifies beep in the device
- times: Beep counts repeted

```
navigator.notification.beep(times);  
notification.vibrate
```

- Vibrates the device for the pre-determined period of time
- Lasting of vibration in milliseconds

```
navigator.notification.vibrate(milliseconds);  
Server Application
```

Source

Type	Title	Remark
Controller	egovframework.hyb.ios.vbr.web.EgovVibratorIOSAPIController.java	VibratorAPI Guide Program Controller Class
Service	egovframework.hyb.ios.vbr.service.EgovVibratorIOSAPIService.java	VibratorAPI Guide Program Service Class
ServiceImpl	egovframework.hyb.ios.vbr.service.impl.EgovVibratorIOSAPIServiceImpl.java	VibratorAPI Guide Program ServiceImpl Class
VO	egovframework.hyb.ios.vbr.service.VibratorIOSAPIDefaultVO.java	VibratorAPI Guide Program VO Class
VO	egovframework.hyb.ios.vbr.service.VibratorIOSAPIVO.java	VibratorAPI Guide Program VO Class
VO	egovframework.hyb.ios.vbr.service.VibratorIOSAPIXmlVO.java	VibratorAPI Guide Program XML related VO Class
DAO	egovframework.hyb.ios.vbr.service.impl.VibratorIOSAPIDAO.java	VibratorAPI Guide Program Dao Class
QUERY XML	resources/egovframework/sqlmap/hyb/ios/vbr/EgovVibratorIOSAPIGuide_iOS_mysql.xml	VibratorAPI Guide Program QUERY XML
Idgen XML	resources/egovframework/spring/com/context-idgen.xml	VibratorAPI Guide Program ID generation Idgen XML

Related Tables

Title

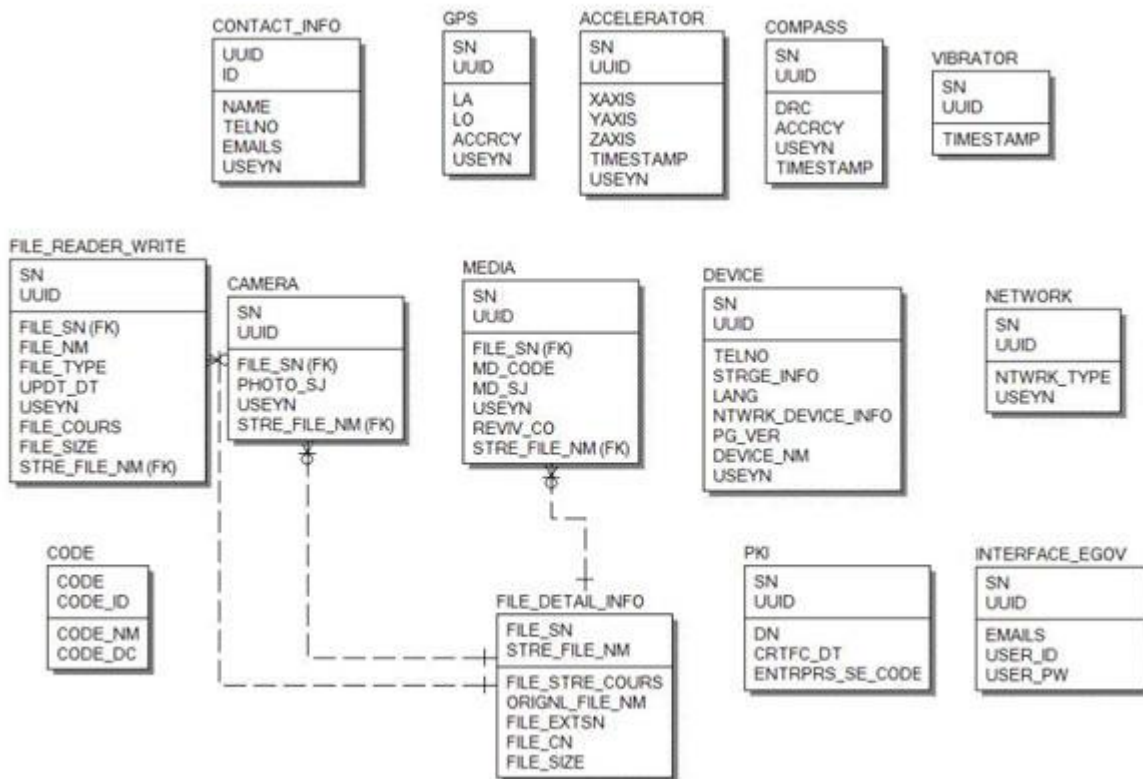
Title	Table	Remark
VIBRATOR	Manages notification information	

Tables Breakdown

Vibrator

No.	Column	Title of Column	Type	Length	Null	KEY
1	SN	Serial No.	NUMERIC	6	NotNull	pk
2	UUID	UUID	VARCHAR	50	NotNull	pk
3	TIMESTAMP	Time value	VARCHAR	20	Null	

ERD



Configuration Settings

Necessary sections and settings for using alarm related features of mobile device, provided by Vibrator Device API Guide Program, are as follows.

Device Application

config.xml

Plugins

```
<featurename="Notification">
```

```
<paramname="ios-package" value="CDVNotification"/>
</feature>
```

ExternalHosts

```
<accessorigin="ExternalHosts"/>
Server Application
```

resource/egovframework/sqlmap/sql-map-config_[DB NAME].xml

```
<sqlMapresource="egovframework/sqlmap/hyb/ios/vbr/EgovVibratoriOSAPIGuide_SQL_[DB
NAME].xml"/>
```

Related features

Notify with sound

Business Logic

Notifies the user using beeps at the set notification time.

Related Code

```
function fn_egov_save_notificationConfig() {
    ...
    var setTime = $("#txtNotification").val();
    if(fn_egov_network_check(true)) {
        setTimeout ( "fn_egov_set_alam()", setTime * 1000);
        jAlert("Alarm is set for " + setTime + " seconds.", "Alert", "b");
    }
    ...
}
function fn_egov_set_alam() {
    console.log("DeviceAPIGuide fn_egov_set_alam Success");
    if($("#swchBeep").val() === "on") {
        navigator.notification.beep(3);
    }
    ...
    fn_egov_insert_data();
    jAlert("Alarm", "Alert", "b");
}
```

Related Screen and Implementation Manual

Action	URL	Controller method	QueryID
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Send notification information /vbr/addVibratoriOSInfo.do insertVibrator

“vibratoriOSAPIDAO.insertVibrator”



Set "notify with sound" button to "On," set the notification time, and click "OK."

Note, however, that you need to validate the input data. Error messages are out in the event of insufficient condition.

Feature description: moves to **feature description** page.

License: moves to **License** page.

Notify with sound : set to "On" for "notify with sound" feature.

Notification list: move to notification list inquiry screen.

OK: set notification based on current settings.

Notify with vibration

Business Logic

Notifies the user using vibrations at the set notification time.

Related Code

```
function fn_egov_save_notificationConfig() {  
    ...  
    var setTime = $("#txtNotification").val();  
    if(fn_egov_network_check(true)) {  
        setTimeout ( "fn_egov_set_alam()", setTime * 1000);  
        jAlert("Alarm is set for “ + setTime + “ second.", "Alert", "b");  
    }  
    ...  
}  
function fn_egov_set_alam() {  
    console.log("DeviceAPIGuide fn_egov_set_alam Success");  
    ...  
    if($("#swchVibration").val() === "on") {  
        navigator.notification.vibrate(3000);  
    }  
    ...  
    fn_egov_insert_data();  
    jAlert("Alarm", "Alert", "b");  
}
```

Related Screen and Implementation Manual

Action	URL	Controller method	QueryID
Send notification information	/vbr/addVibratorIOSInfo.do	insertVibrator	“vibratorIOSAPIDAO.insertVibrator”



Set "notify with vibration" button to "On," set the notification time, and click "OK."
Note, however, that you need to validate the input data. Error messages are out in the event of insufficient condition.

Feature description: moves to **feature description** page.

License: moves to **License** page.

Notify with vibration : set to "On" for "notify with vibration" feature.

Notification list: move to notification list inquiry screen.

OK: set notification based on current settings.

View notification list

Business Logic

Displays notification setting information saved in server.

Related Code

```
function fn_egov_select_data() {
    var url = "/vbr/VibratorIOSInfoList.do";
    var acceptType = "xml";

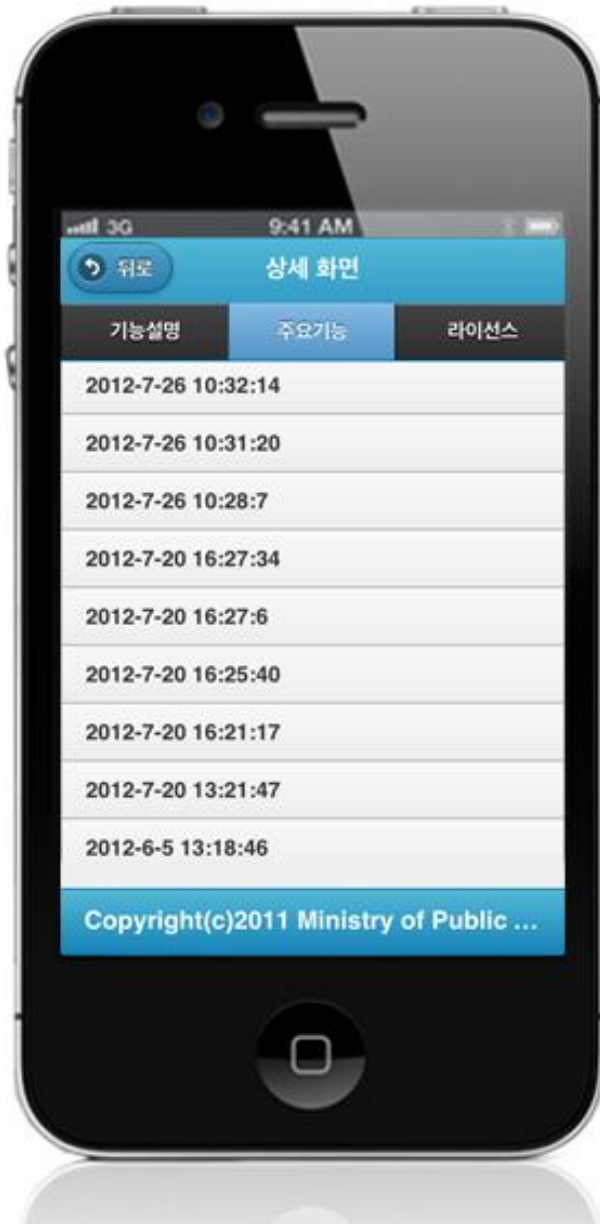
    $.mobile.showPageLoadingMsg();
    egovHyb.post(url, acceptType, {}, function(xmldata) {

        console.log("DeviceAPIGuide fn_egov_select_data request Completed");

        fn_egov_go_detailPage(xmldata);
    });
}
```

Related Screen and Implementation Manual

Action	URL	Controller method	QueryID
Notification information inquiry	/vbr/VibratorIOSInfoList.do	selectVibratorInfoList	“vibratorIOSAPIDAO.selectVibratorList”



Displays notification information list saved in server.

Feature description: moves to **feature description** page.
License: moves to **License** page.

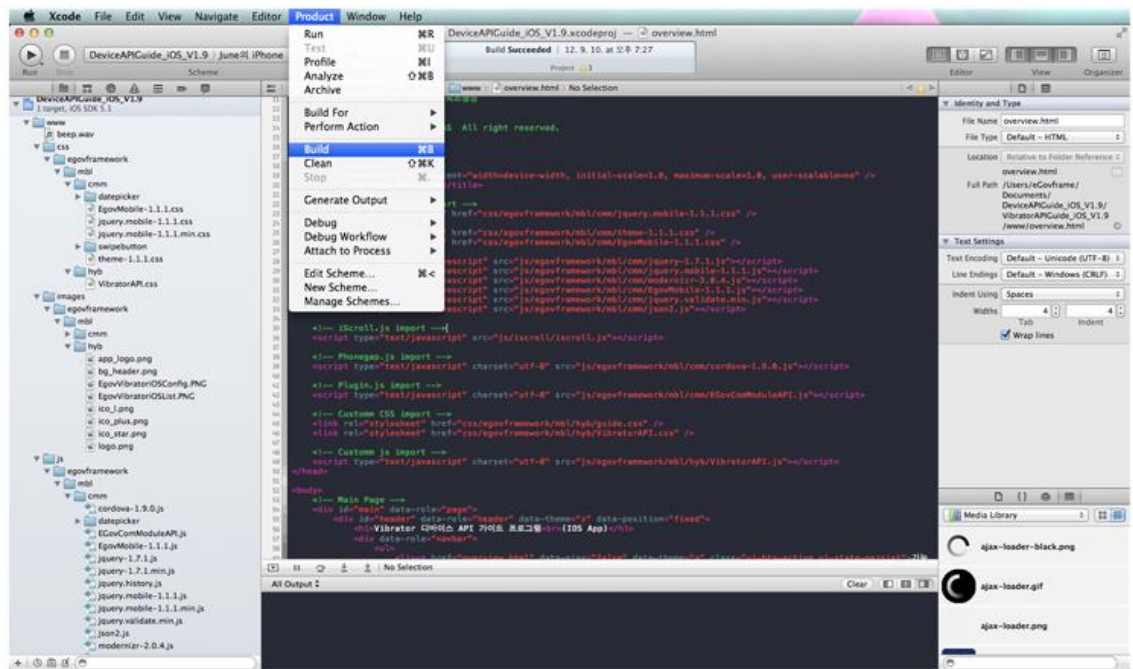
Compiling, debugging, distributing

Compiling

Device Application

1. [VibratorAPI installation link](#)

2. Click on "build" after checking VibratorAPI project's installation status.



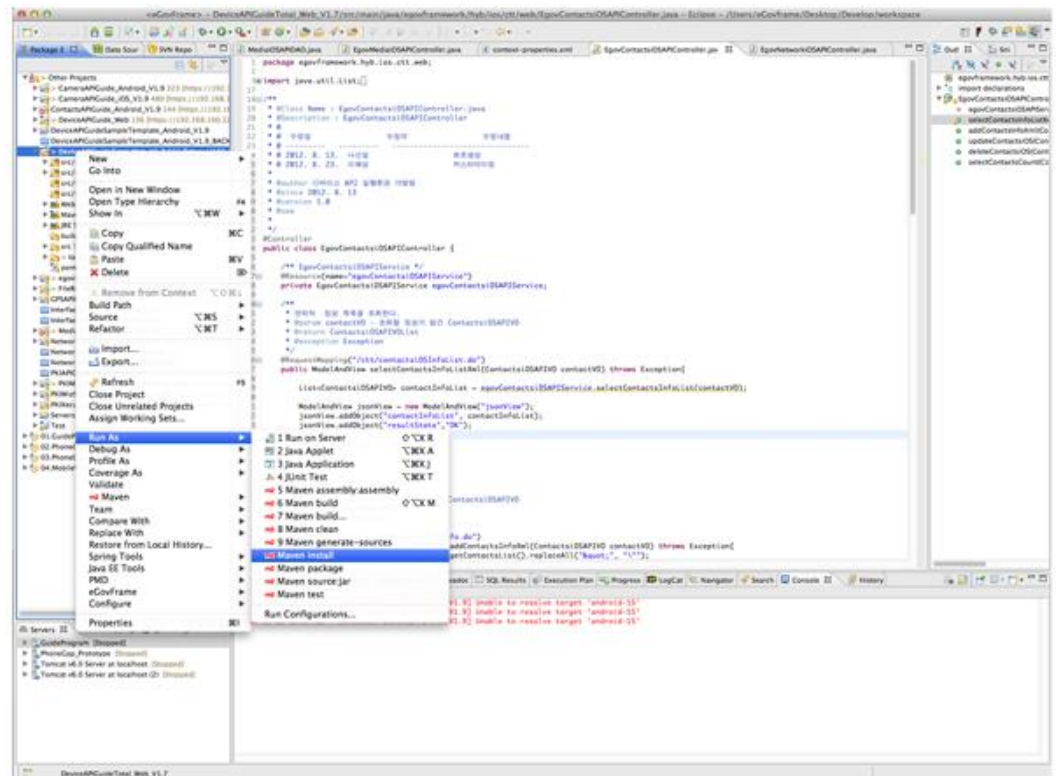
- The following screen will appear upon successful build.



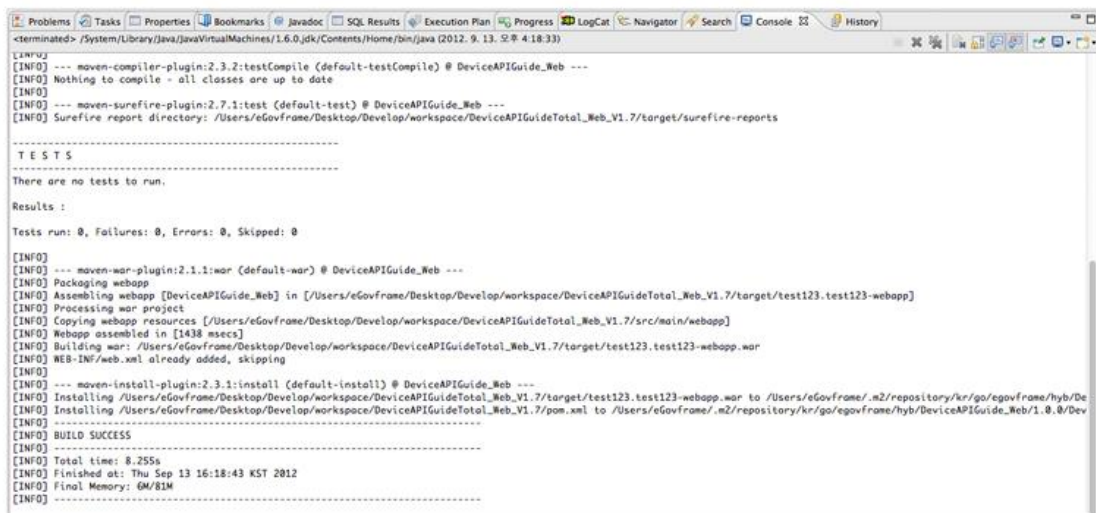
Server Application

1. [Web Server installation link](#)

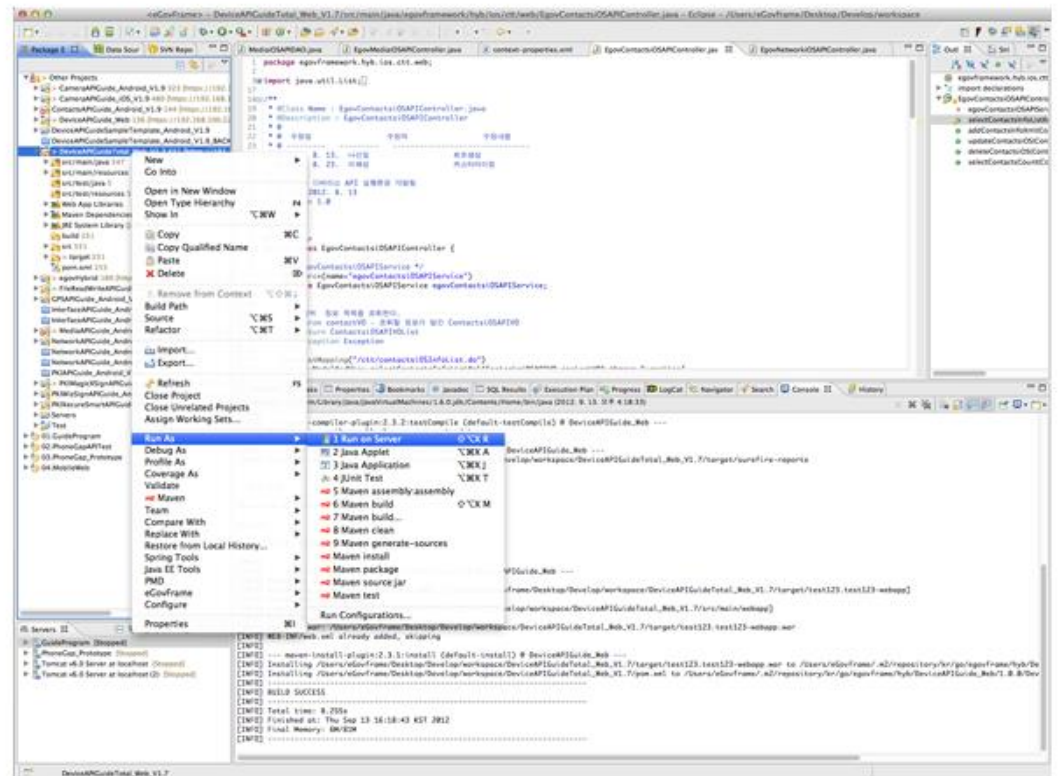
- Right-click on the project > Run as > Maven install to build.



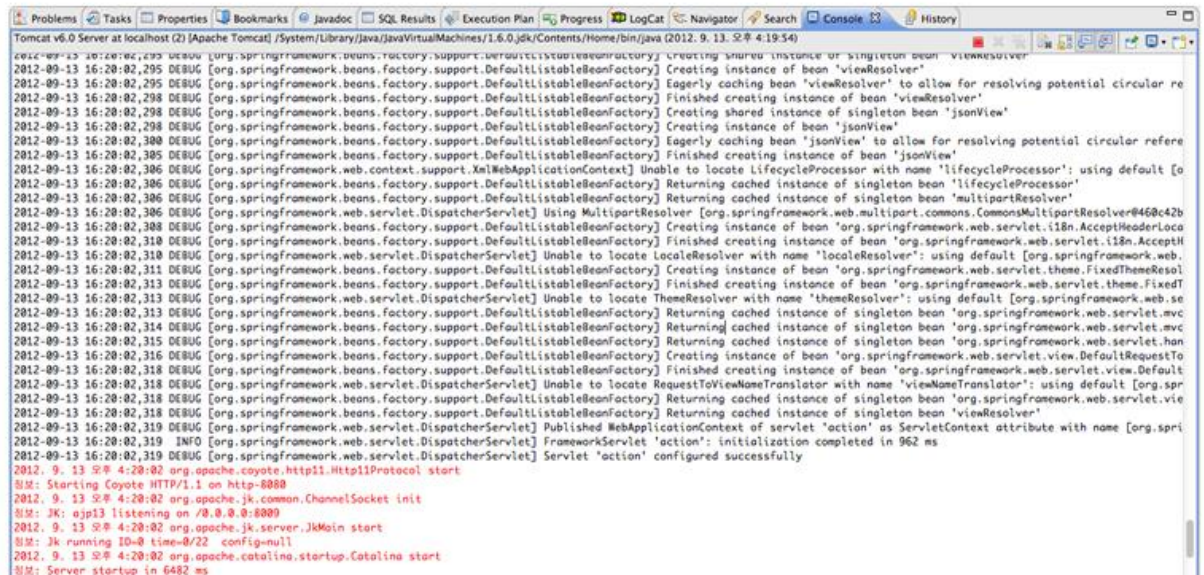
- Build successful (check console information)



- Right-click on project>Run as>Run on Server to execute.



- Check to see if project is successfully executed.



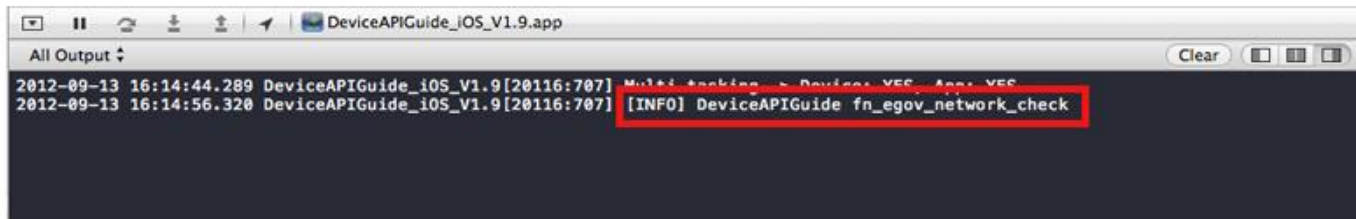
Debugging

Use console.log in order to check the details on any errors on the device application, and to conduct debugging. Debug codes in console.log are available in JavaScript syntaxes that you can use in both Eclipse and Xcode.

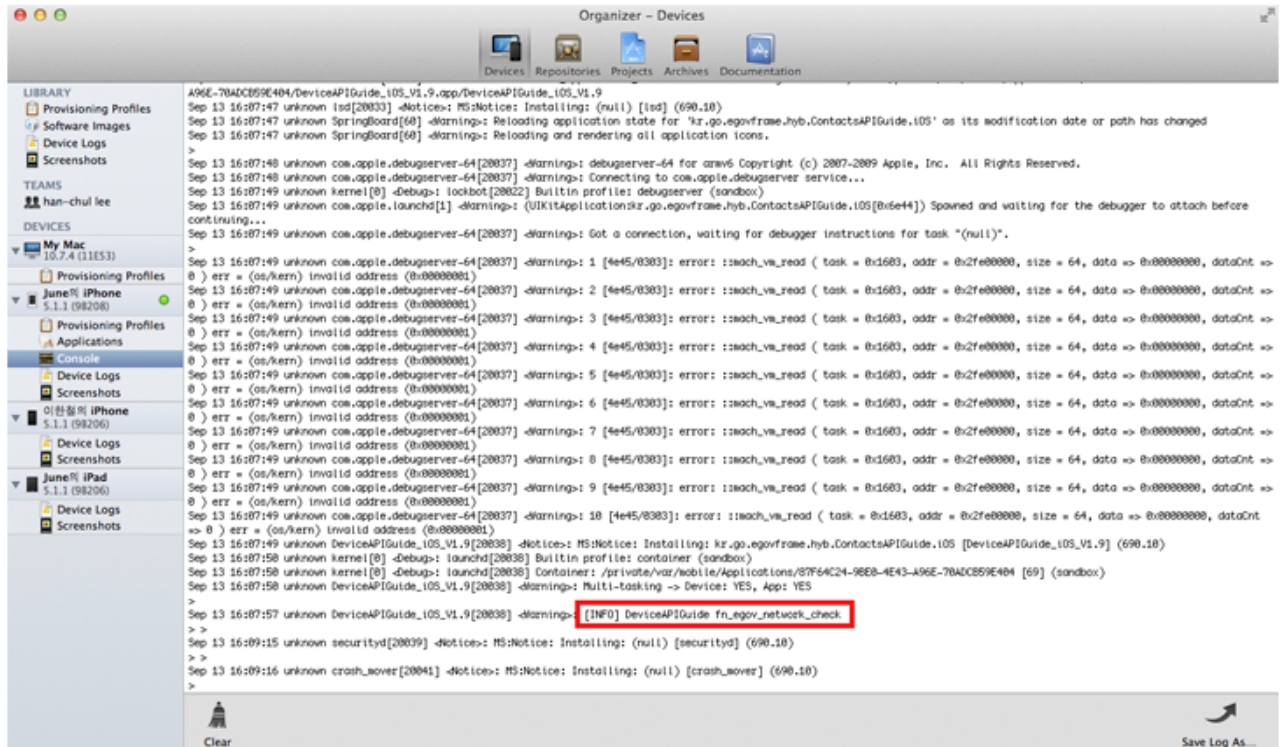
- Example of actual console log

```
function fn_egov_network_check(doCheck)
{
    console.log('DeviceAPIGuide fn_egov_network_check');
    var networkState = navigator.network.connection.type;
    ...
}
```

- xCode console window



- Organizer log window



Log message	Value	Remark
DeviceAPIGuide fn_egov_network_check		Checks network condition
DeviceAPIGuide fn_egov_sendto_server	Response Completed	Request to server successfully processed
DeviceAPIGuide fn_egov_sendto_server	Response Failed	Internal server process error
DeviceAPIGuide fn_egov_sendto_server	Request Failed	Communications error

Distribution

Download Vibrator Device API Guide: [Click](#)

References

- UX/UI library : jQuery Mobile [Click](#)
- Phonegap 4.3.0 : [Click](#)