

http://www.egovframe.go.kr/wiki/doku.php?id=egovframework:mrte:html5etc:html5_css3.0_javascript_module_app_framework_work_%EA%B8%B0%EB%B3%B8_%ED%99%9C%EC%9A%A9

egovframework:mrte:html5etc:html5_css3.0_javascript_module_app_framework Basics

Outline

eGovFramework offers the user an experience to enjoy one of the most efficient smart eGovSystem ever, thanks to the UX layers such as UI/UX Controller Component, JavaScript Module App Framework, HTML5 and CSS3 JavaScript Module App Framework.

eGovFramework runs based upon the opensource JQuery Mobile that is compatible with html5, CSS3 and javascript. Customization of the open source uses UI Layer by which the touch-optimized UI controller component is made available to better adopt to the UI/UX Controller Component mobile web user environment (UX/UI).

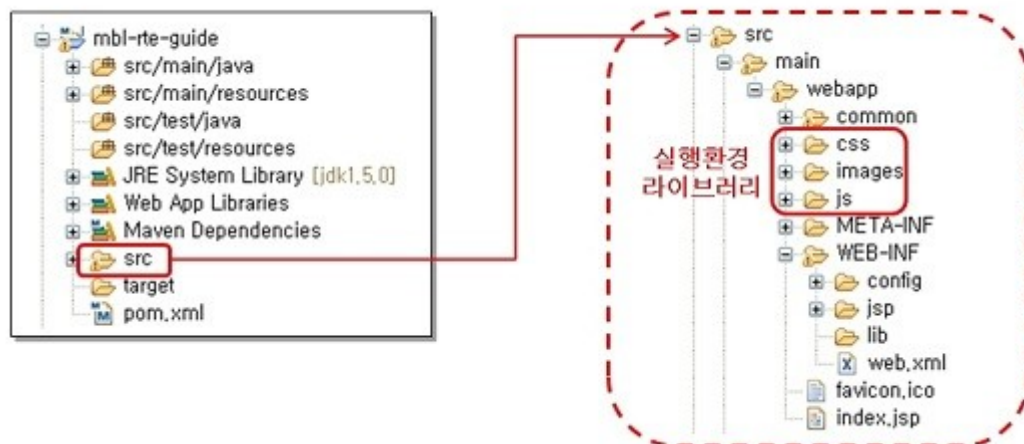
HTML5 is a mark-up protocol by which the mobile tag device API is provided. CSS3 allows the user to view the component in a way that fits the concerned mobile device and browser. Also provided is Json and Javascript structures that guarantee the efficient operation of JavaScript Module App Framework UX/UI controller component.

Description

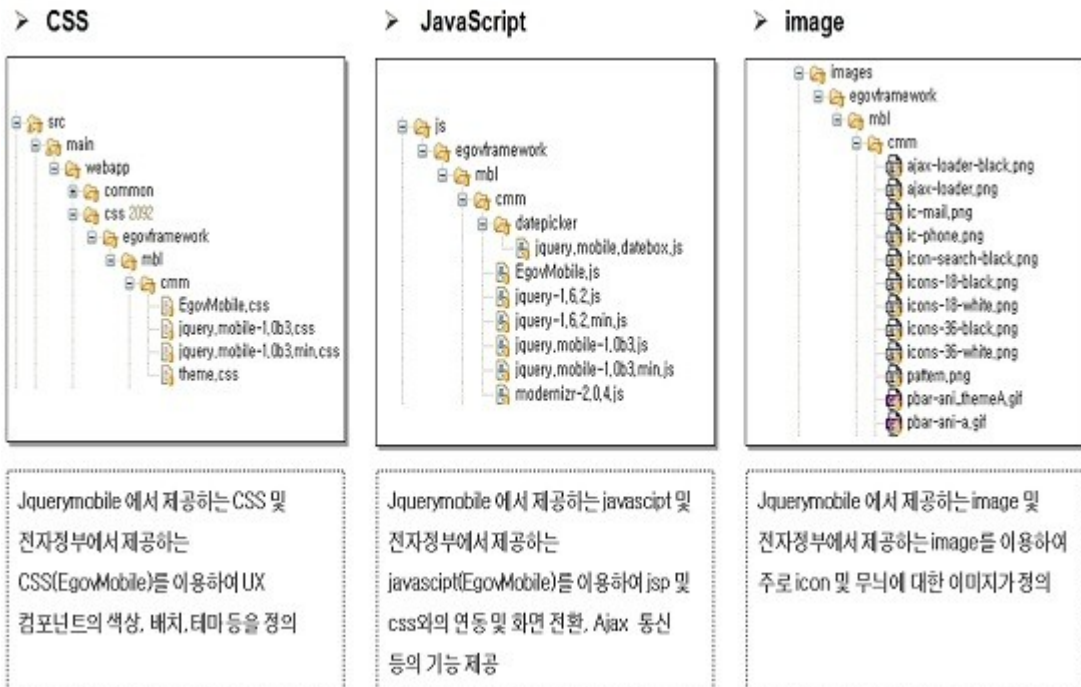
Structural Basics

eGovFramework Mobile abides by the conventional eGovFramework directory and governing standards and comprises the directories structured as follows.

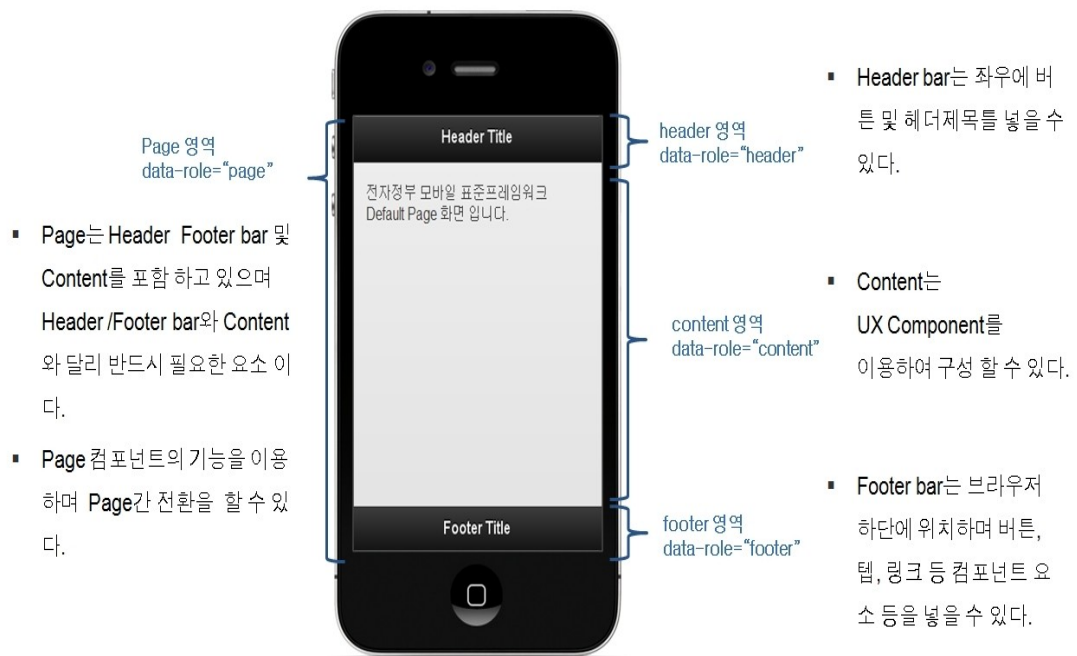
- Note that the sub-directory 'src' contains libraries and JSP files that supports runtime environment. Please also note that the library comprises CSS, JavaScript and image files:



- eGovFramework Mobile offers the user the seamless runtime environment using CSS, JavaScript and image interlocked with each other.



- The property 'data-role' being the pattern of HTML5 <Tag> comprises the sections Page, Header, Content and Footer.

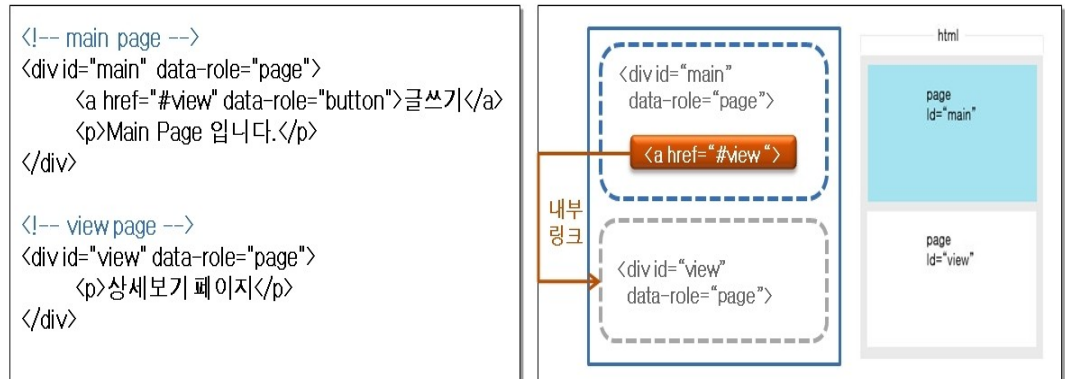


Javascript Structure and Ajax Processing

Mobile pages are browsed through Ajax. Ajax provides the user with the optimized viewing experience by wisely change the display orientation.

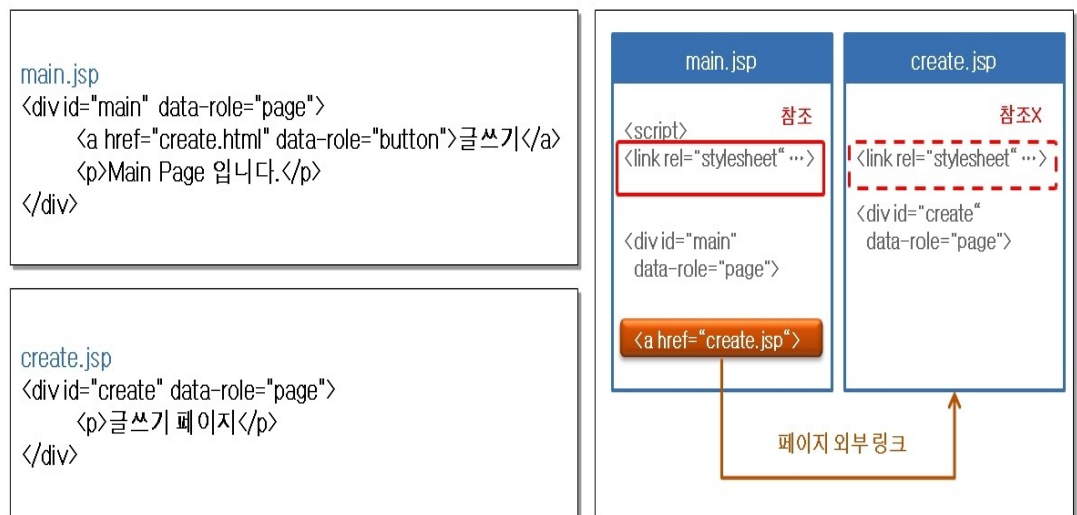
- In-page Browsing

- In-page browsing is the very basis of how mobile page is comprised. You can have multiple pages declared within the single HTML file. In-page browsing also uses Ajax communication, whereby ID of the tag DIV for the pages declared are applied to use the link's href property value (#pageId). (Ajax recognizes the page on the top when multiple pages within a single HTML are declared.)
- When in-page browsing fails to load the object DOM, it is advised that you work on out-page browsing.



- Out-page Browsing

- Ajax communication is also involved in Out-page browsing. The Ajax-called HTML load data-role="page" to add to the HTML page of DOM factor. (DOM factor administration resembles that of in-page browsing)
- JavaScript and CSS should exist within the Ajax-called HTML concerned.
- If Ajax communication is no longer necessary, the user may modify the configuration by referring to Internal / External UX Component.



- How to configure Mobileinit and Basic Properties

- eGovFramework Mobile allows user to modify basic properties by way of Mobileinit to allow pre-commencement initializations.
- With Mobileinit implemented for the first initialization, the user may apply a number of other events inside the function.

- `$(document).bind("mobileinit", function(){`
 - `//apply overrides here`
 - `});`
 - Keep in mind Mobileinit is actuated immediately after execution and shall thus be bound before jquerymobile.js is loaded. This signifies that Mobileinit shall always be situated between the libraries of jquery and jquerymobile.
 - `<script src="jquery.js"></script>`
 - `<script src="custom-scripting.js"></script>`
 - `<script src="jquery-mobile.js"></script>`
- See the following properties re-configurable using the object \$.mobile:

Basic Properties	Description
loadingMessage (string, default: "loading")	Configures the text appearing when load is in progress. No message appears when configured for 'false'.
pageLoadErrorMessage (string, default: "Error Loading Page")	Configures the error message texts when Ajax-based page loading is failed.
defaultDialogTransition (string, default: 'pop')	The user should re-configure the basic properties that contribute to Ajax-based conversion of page in dialog. Note that the display conversion does not apply when the option defaultDialogTransition is 'none'.
defaultPageTransition (string, default: 'slide')	The user should re-configure the basic properties that contribute to Ajax-based conversion of page. Note that the display conversion does not apply when the option defaultPageTransition is 'none'.
ajaxEnabled (boolean, default: true)	Ajax communication applies to Inter-link transfer and submission of form as well. If you do not want Ajax communication coming into play, input 'false'.

- Event
 - eGovFramework Mobile picks up the events optimized for mobile environment. However, these events are available in both mobile and desktop as they are compatible with various means of input, including touch, mouse and window area. Methods live() and bind() are available for you to use multiple events at the same time.
 - Supportive Touch Event

Touch Event	Description
tap	Tap occurs on an immediate basis when the device senses touch-based input.
taphold	Taphold occurs when the tap is held for given amount of time.
swipe	Swipe occurs when horizontal or vertical drag in excess of 30pixels and 20pixels take place.

swipeleft Swipeleft occurs when the user swipes leftward.

swiperight Swiperight occurs when the user swipes rightward.

- Change of orientation and scrolling event

Change of orientation and scrolling event	Description
orientationChange	OrientationChange occurs when the device orientation is changed. The event Resize is automatically bound when OrientationChange is not available.
scrollstart	Scrollstart occurs when scroll takes place. (iOS-based devices does not modify DOM until the scrolling is concluded.)
scrollstop	Scrollstop occurs when the scroll ends.

- Supportive Page Event

Page Event	Description
pagebeforecreate	Pagebeforecreate occurs immediately prior to initialization of the page and is the event that commence the page loading process. Note that Pagebeforecreate only occurs when the page is created.
pagecreate	Occurs when page initialization is complete. Only occurs when page creation is complete.
pagebeforeshow	Occurs before the page is shown.
pageshow	Occurs when the page conversion is complete or after page is shown.
pagebeforehide	Occurs before the page gets hidden.

- Visual Mouse event

Page Event	Description
vmouseover	Occurs when touch or mouseover takes place.
vmousedown	Occurs when touch or mousedown takes place.
vmousemove	Occurs when touch or mousemove takes place.
vmouseup	Occurs when touch or mouseup takes place.

- Method & Utility
 - eGovFramework Mobile provides the user with the methods and properties of the object \$.mobile.

Method	Description
	Allows the user to move between pages in the program code.
<code>\$.mobile.changePage(method)</code>	Majorly used for clicking of the link and submission of form where conversion of display and page loading are supported.
<code>\$.mobile.loadPage(method)</code>	Loads pages and add pages to DOM. Internally called, via <code>changePage()</code> , when the first factor loaded is a URL format. The activated page is left unaffected by <code>changePage()</code> which is used only for loading the page background.
<code>\$.mobile.loading("show")</code>	Shows loading message.
<code>\$.mobile.loading("hide")</code>	Hides loading message.

References

- [HTML5](#)
- [CSS3](#)
- [JavaScript Module App Framework](#)