

Generic Description of User Interface for Universal Access

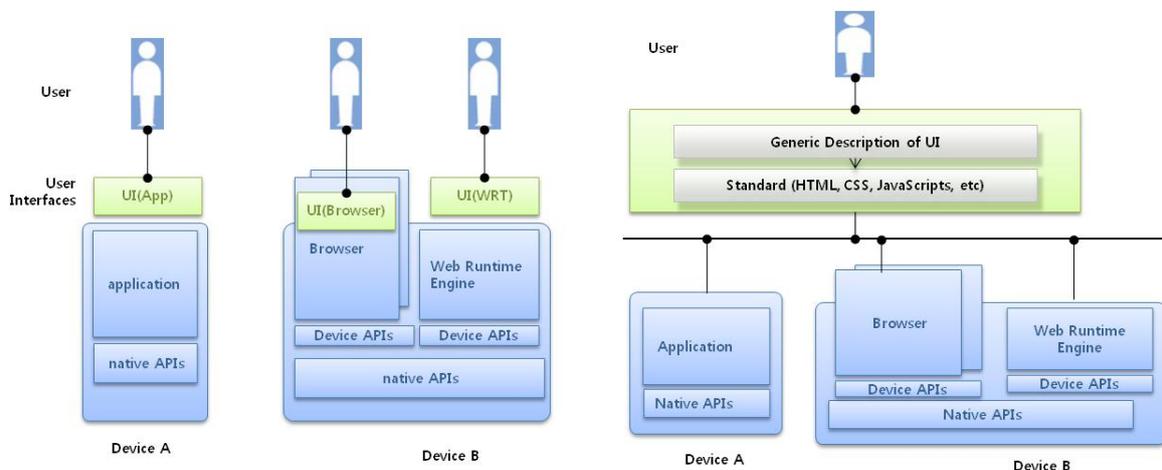
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According to the wide spread of Mobile platform, such as iPhone(Apple), Android(Google), Windows Mobile(Microsoft), Bada(Samsung Electronics) and etc, the user has a preference for the user interface of Mobile Web such as navigational menu, vender dependent user interface. For example, because iPhone users hope to use Web application and to browse web site with iPhone-style user interface, so, application developer have to investigate iPhone optimized user interface.

Already, some solutions which are support framework consisting of a JavaScript library, CSS, and images for developing mobile Web applications for specific devices are announced. But this solution for the user interface supports specific Web browser, and cannot support universal access from various kinds of Web browsers.

So, users (or application developers) should develop the interface with different manner for the Web browsers. In terms of interoperability of the user interface for the Web application, such a vender specific solutions for the user interface make the fragmentation of it. In addition, if Web application can use in other device such as TV, eBook device, and etc, the number of considerations for the user interface will be increased rapidly.

To avoid the problem of user interface fragmentation, it is required to develop the common model for the user interface like figure 1 for the various kinds of device, and it will be support the unified manner for the generic description of user interface in terms of standardization. And then, the solution provider can make vender specific user interface based on the generic description of user interface.



(A) Conventional UI Approach

(B) Generic Description UI Approach

Figure 1. Conventional UI vs. Generic Description UI

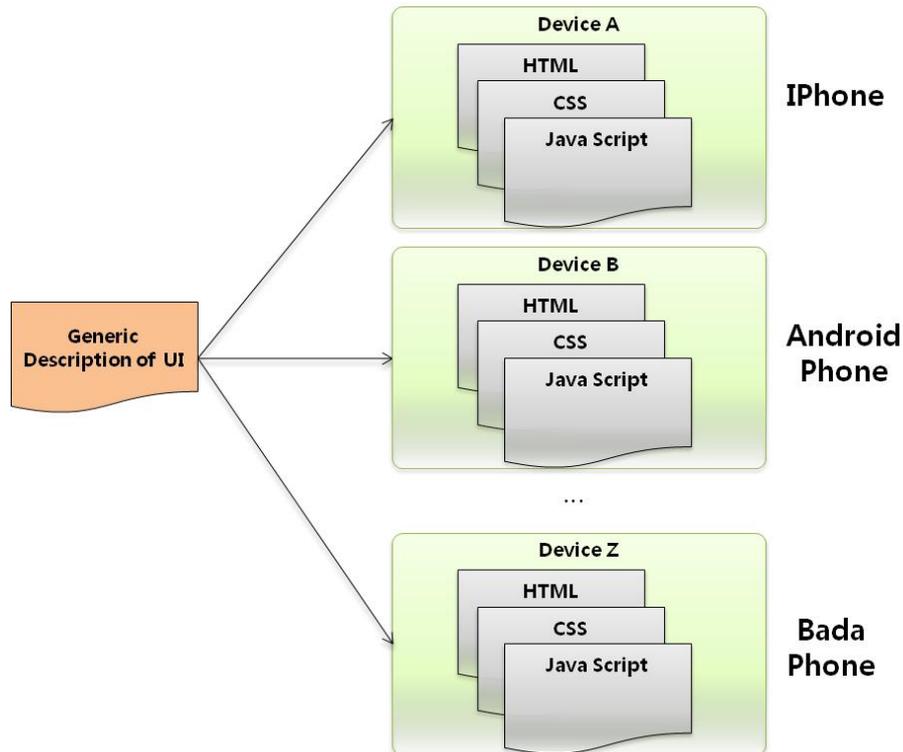


Figure 2. Generic Description of User Interface converted to Web Standard formats

Figure 2 shows that generic description of user interface can be converted to Web standard formats such as HTML, CSS, JavaScript, and etc. Without the generic description of user interface, it is expected that the proprietary solution way to support vender specific user interface will be spread.

Then, there is no standard way to describe the generic description of user interface, in a view point of ETRI's position, generic description of user interface (e.g. Model-Based User Interfaces) for the various kinds of device that can be used in Web environments, is essential for the universal access, and it is required to make it as W3C standardization activities.

References

- [1] iUI: iPhone User Interface Framework, Available at <http://code.google.com/p/iui/>