System And Method For Interactive Wireless Applications With Conditional UI Controls and Screen Navigation

Abstract

A wireless application GUI is described as a set of atomic screen components. The application screens are defined through a structured language such as XML, HTML or XHTML and are expressed as a collection of nested layouts and UI controls. Representation of these visual components is facilitated through the use of an intelligent Device Runtime framework that provides a set of services for screen presentation, management and user interaction. The designation of the screen components provides for an interactive and dynamic UI, and provides for delegation of some of the user interface management to the intelligent Device Runtime framework. The screen components utilize conditional controls in the wireless application definition. Conditional controls are dynamic screen elements that determine their appearance or behavior by virtue of satisfying a particular condition. Conditional controls include so-called driving (primary) and dependent (secondary) controls that modify application runtime screen behavior.

Figure 1