

SmartScribo Blog Client for Windows-based Mobile Devices

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Abstract

SmartScribo is an application that provides advanced access to the blogosphere using smart spaces [1]. SmartScribo users can interact with multiple blogs at many blog services using their (mobile) devices as clients. Blog-related data and knowledge about the person and her/his current interests are stored in blogger's personal smart space, which is shared (partially) with other user's devices and applications as well as with other users.

The initial version of SmartScribo provides blog clients only for Maemo-based devices like Nokia N900. We develop a new SmartScribo client for Windows devices. Our focus is on tablets with Windows 7 (desktops are also supported) and smartphones with Windows Phone 7.

The client code is divided into the following three folders: Logic, GUI for Windows 7 and GUI for Windows Phone 7, see Figure 1. This code structure simplifies the development: different GUIs are constructed for different Windows-based platforms while any client uses the same logic.

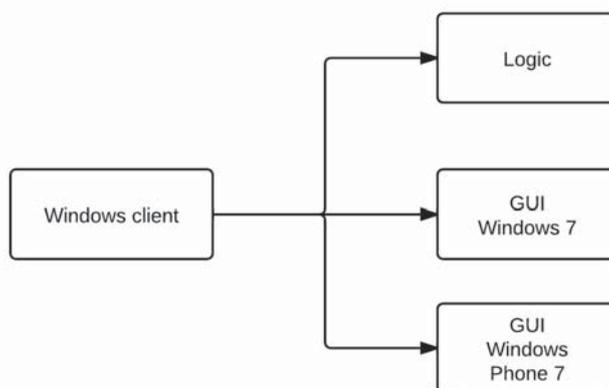


Fig. 1. Code structure: separation of GUI-aware platform specifics from the client logic.

The client logic is written in .NET Framework 4 using C# language. It accesses the smart space implementing basic operations with blog accounts, posts, and commentaries. We use the SmartSlog ADK [2] for representing the blogosphere ontology in code and for communication primitives from the client to the smart space.

The client GUI for Windows 7 uses Windows Presentation Foundation GUI build system, which is a basic tool for fast GUI construction [3]. It separates graphical representation from source application code and provides features for the touch-screen GUI development. Figure 2 (a) shows an example screenshot of the main client window.

The same solution is used for implementing the client GUI for Windows Phone 7. The GUI design style is, however, different; it follows the Metro UI rules [4]. We have to take into account such properties as smaller screen size and special control elements. Figure 2 (b) shows an example screenshot.



Fig. 2. SmartScribo client GUI for Windows-based devices: (a) Windows 7; (b) Windows Phone 7

The GUI is implemented in accordance with the touch screens specification and has a convenient arrangement of large-size elements. It provides an easy control by fingers. Our GUI also supports touch- and multi-touch gestures, which are available both on Windows 7 and Windows Phone 7 [3]. For example, while viewing text messages the user can increase or decrease the text size moving apart or shifting thumb and forefinger, respectively. For the future development, we also consider the appearance of Windows 8, which also utilizes Metro UI.

Index Terms: Smart-M3, Windows mobile devices, Mobile multi-blogging, SmartSlog.

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