WebKit integration in NetBeans IDE

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Technologies: Java, NetBeans platform, WebKit, HTML, PHP, JavaScript

Description:

The goal of this project is to create a plug-in for NetBeans IDE that allows visual editing of HTML documents (editing in the WYSIWYG style). The plug-in will allow users to create and edit HTML files in context of NetBeans projects (Web Project, for example). Preview of the HTML page will be achieved via integrating a component that uses the WebKit rendering engine (open-source HTML rendering engine used in Konqueror and Safari web browsers). Editing of the page will be based on direct manipulations with the page's DOM tree. Such an approach to implementation (use of a real HTML rendering engine instead of a simplified rendering mechanism) will assure a very realistic preview of the HTML page. Ease of use and validity of the resulting code will be one of the main features of the plug-in.

Basic support for the dynamically generated content will be implemented too. The support will be based on the observation that most of the current web pages are static pages with only a few parts that have a dynamic content (discussions, voting, tables with items, etc.). These frequently used dynamic elements will be implemented as components that can be placed in the visual design. It will not be possible to edit the HTML code generated inside these components but the resulting output will be previewed in the visual design. Initial support will be only for the PHP language. However, a general mechanism to support other scripting languages will be offered.

Another outcome of the project will be an almost full featured web browser - plug-in for Flash, Java applets, and other similar plug-ins will not be supported due to high complexity of implementation. The browser can be later integrated to applications based on the NetBeans platform, for example to NetBeans IDE (where it can be used for JavaDoc browser, Welcome page, etc.).

Support for editing HTML documents in WYSIWYG mode is among top voted issues on NetBeans website [1]. This fact suggests that the project will be positively accepted by the NetBeans community - Sun Microsystems supports the project because successful implementation is in its interest. An input for this project (not the project itself) will be done in partial cooperation with the Sun's AWT team (situated abroad). The project will serve as an early feedback on the new JWebPane component [2].

[1] http://qa.netbeans.org/bugzilla/dashboards/top-voted.html

[2] http://weblogs.java.net/blog/ixmal/archive/2008/05/introducing_jwe.html