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# Building Internet Applications With Mozilla XULRunner

- What is XULRunner?
- Web applications outside of a browser
- Client applications written using web technologies
- Roadmap and Developer Resources  
[http:// developer.mozilla.org/ en/ docs/ XULRunner](http://developer.mozilla.org/en/docs/XULRunner)

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- “Firefox without the browser”
- A runtime for applications
  - Web applications (webrunner)
  - Client applications Vee McMillen
  - Embedding applications
- Will be available for small devices
- **Deployment solution for internet applications**



- Mix and match rich-client and web-app development and deployment techniques
- Cross-platform (like the web), but with support for native look and feel through the XUL language



- AJAX murder of the page- navigation model
  - Is the browser frame still appropriate?
  - When mail + calendar + chat + the next cool thing are all web apps, the browser can become overloaded.
  - “webrunner” based on XULRunner runs web apps in their own process



## Open an application from the web:

```
window.open("http://www.foo.com/app", "_blank",  
            "application=yes");  
  
<a href="http://www.foo.com/app" target="_blank"  
    rel="application">
```

## Open a webpage from an application:

```
window.open("http://www.example.org/webpage",  
            "_blank", "external=yes");  
  
<a href="http://www.example.org/webpage"  
    target="_blank" rel="external">
```



- XML User-interface Language
- Pronounced “zool”
- The language used to create the Firefox UI
- But it can also be used by web applications
- Only implemented by Mozilla-based browsers
- Gives web apps the ability to use a platform-native look and feel
- User might not know/ care that it's a webapp



- If/ when “webrunner” is integrated with browsers, deploying a web app to the desktop could be a single click
- Cross- browser API for web app and web widget deployment being investigated
- App is run in the security context of the website
  - Users more confident about trying apps if there is a security sandbox
- Browsers (Firefox especially!) developing better offline- browsing support, including enhanced offline storage primitives and offline cache pinning



- Dashboard and Opera Widgets: helpful UI model
  - Utilities automatically have full privileges
  - Are specific to the browser/ OS
- With XULRunner, widgets can be local (fully privileged) or remote (web app, pinned in the cache for offline usage)
  - Can be written in any supported language, including HTML, SVG, XUL
- Develop a cross-browser widget deployment model?



- The Mozilla platform provides useful features
  - Extension and theme management
  - Automatic update mechanism
  - Applications don't require any compiled bits
  - Easy iterative development
  - Builtin development support (JS debugger, DOM/ CSS inspector)
- Applications are structured like Firefox Extensions
  - It is easy to port a Firefox extension to be a XULRunner application



- EclipseXUL -

<http://eclipsexul.sourceforge.net/>

- Wizard produces a working skeleton app, so it's easy to get started
- Create a useful app in 10 minutes!
- Future plans include integration with other Eclipse technologies, for easy GUI building of XUL applications as well as integrated debugging



- Mozilla Developer Center
  - [http:// developer.mozilla.org/](http://developer.mozilla.org/)
  - Community documentation project
  - Resources for web developers, extension and app developers, and mozilla internal development
  - The open web answer to MSDN



- Your Every Question Answered
  - [news:// news.mozilla.org](https://news.mozilla.org)
    - [mozilla.dev.platform](https://mozilla.dev.platform)
    - [mozilla.dev.xul](https://mozilla.dev.xul)
  - [irc.mozilla.org](https://irc.mozilla.org)
    - #xulrunner
    - #extdev
    - #xul
  - Large and growing community



- Mozilla Developer Kit
  - Tools and documentation
  - Prototyping (EclipseXUL and other wizards)
  - Development (DOM inspector and JS debugger)
  - Localization
  - Documentation
  - Deployment (stub installers and packagers)



- Stable Developer Preview (1.8.0.1) – February 2006
  - Already being used in production environments
  - Doesn't have builtin deployment support (write your own installer)
- Firefox + XULRunner
  - Firefox 3 (early 2007)
  - First production release of XULRunner
- Firefox: primary distribution mechanism
- Stub installer allows for easy install paths
- XULRunner is not the final name



- Democracy Player <http://www.getdemocracy.com/>
- Songbird <http://www.songbirdnest.com/>
  - See <http://www.windjay.com/> for extensions!
- AJAX Tools Framework <http://www.eclipse.org/atf/>
  - Debug the web from within Eclipse, by embedding XULRunner
- And others: see [http://developer.mozilla.org/en/docs/XULRunner\\_Hall\\_of\\_Fame](http://developer.mozilla.org/en/docs/XULRunner_Hall_of_Fame)