Tools for Mobile Web Agenda

- Why TMW?
- What does TMW do?
- How is TMW made?
- Demo
- Future Directions
Web Development Trends

- There are an order or two of magnitude more web developers (using JavaScript, HTML and CSS) than C++ developers

- Increasingly more powerful and complex Web applications:
  - JavaScript evolution
    - More powerful (and complex) libraries: JQuery, YUI, Dojo, etc.
    - More robust with tools like jslint
  - HTML5
    - Offline storage, canvas, media, etc.
Mobile Development and cross-platform

- Major mobile platforms creating differentiated programming environments – Objective C, Java, C++, etc.

- Tension between device creators and developers
  - Walled gardens versus standards

- But - all platforms are using WebKit and moving to HTML5

- Web is likely to be the first place where cross-platform application development emerges

- Convergence – mobile, web, desktop
  - Advertising, analytics, payments easiest
Mobile Web Development Challenges

- Accessing mobile features
  - Geo Location
  - Vibration
  - Accelerometer
  - Contacts
  - SMS
  - Telephony

- Deployment

- Distribution

- Security
Tools for Mobile Web Feature Summary

- Address the needs for:
  - Scaling web apps
  - Particular requirements of mobile device programming
  - Accessibility and usability
  - Open source solution

- Enable Web programmers to create mobile apps

- Access to sensor/device capabilities

- Streamlined Eclipse-based tooling

- Provide common grounds for cooperation and innovation
Tools for Mobile Web

- Eclipse project to provide tools for web developers creating applications for mobile devices

- Initial contributors from Symbian Foundation and Aplix (BONDI SDK)

- Feedback and interest from SonyEricsson, IBM, RIMM, Nokia and Nitobi

- Enable differentiation on runtimes or mobile devices versus putting resources on copying others inadequate tools

Tools for Mobile Web Components

- A fully integrated experience to create Mobile Web Applications
  - Project management
  - Source editing
  - Library support
    - WRTKit
    - PhoneGap
  - Previewing
  - Debugging
  - Packaging
  - Deployment
Tools for Mobile Web Components

- Projects and Runtimes
- Development
- Debug
- Application Preview
- Deployment

- Faceted Project Framework
- Webtools and JSDT
- Chrome Developer Tools
- XULRunner
- BlueCove
Based on Eclipse Platform

- Unified project model fosters cross-IDE interoperability and community development

- Extends and leverages existing Eclipse projects
  - Eclipse UI for consistent user experience
  - Web Tools project as a basis for source editing support
  - JSDT editors with extensions for mobile API support

- BUT, streamlined and focused on mobile web development!
Chrome Debugger Protocol

- Will be in every WebKit-based browser (desktop or mobile)
- Becoming De-facto standard for cross-device debugging
  - BONDI
  - Nokia
- No browser plug-in needed
- No native code needed for IDE support
Demo
Web Tools Future Directions

- On-device debugging
- More standardized web runtime API support
  - BONDI
  - JIL
- Grow the community
  - More runtimes
  - More web libraries like jQuery (with jQTouch), YUI, XUI
  - More plug-ins
- Continue to lower the barrier to entry

Join us!
Tools for Mobile Web Useful Links

- Download from http://builds.symbian.org/sf_builds/wrt_ide/
- http://www.phonegap.com
- TMW proposal at http://www.eclipse.org/proposals/tmw/
- Paul’s blog is at http://paulbsymbian.wordpress.com/
- Eugene’s blog at http://eclipseblog.ostroukhovs.com/
- Follow me on twitter at paulbeusterien
- Email paulb@symbian.org
Back-Up Slides
## Open-Source Stack

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PhoneGap Integration

- Project template and code snippets for smoother learning curve
- Simulator with PhoneGap events support
- PhoneGap-aware JavaScript editor
- Package and deploy PhoneGap application to mobile device