

eSWT: The new UI toolkit for the mobile java

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Nokia

Current Mobile Java UIs

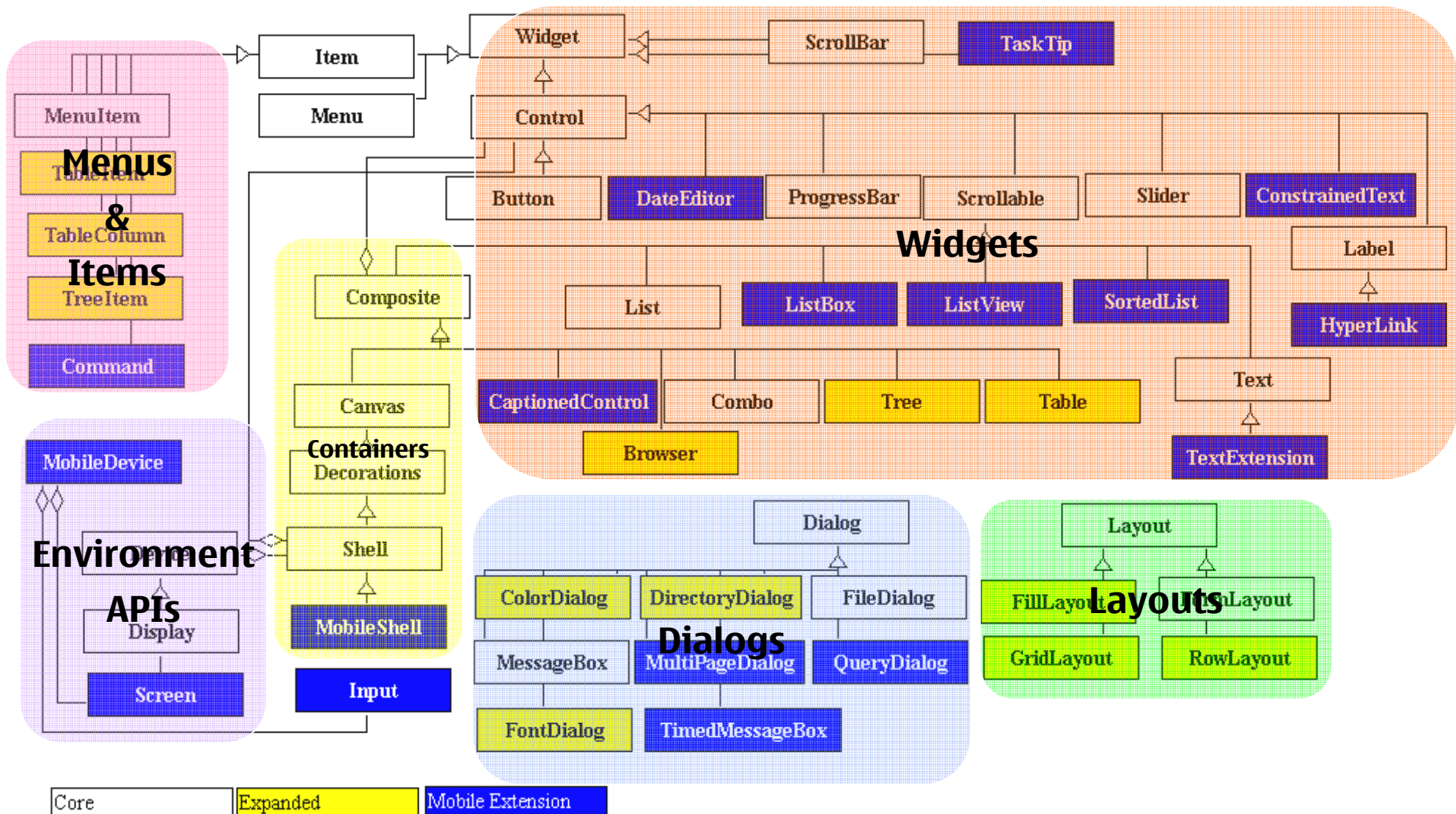
- 2D & 3D Graphics support
- MIDP Limited Capability Device User Interface API (LCDUI)
 - originally designed at the time there were still black and white monochrome displays (Nokia Series 30)
 - No significant improvements during the past years in JCP
 - low-end devices portability
- Mobile java lacks the UI functionality of modern smart phone user interface frameworks!

Why do we have eSWT anyway?

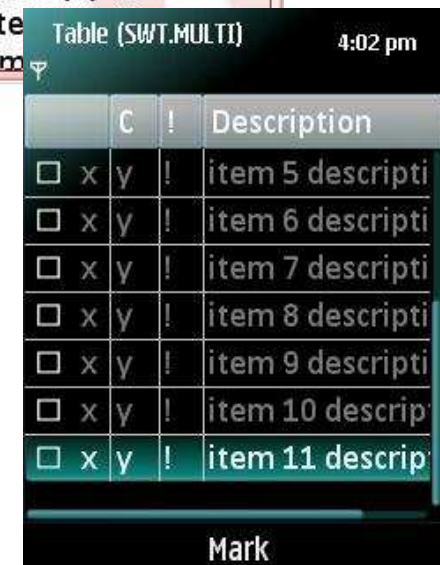
- Open
 - Open source
 - Licensed under Eclipse Public License (EPL)
 - Part of eRCP project in eclipse.org
- Capable
 - Rich user interface component set
 - Flexible and scalable layout system via layout managers
 - Rich user interface events
- Integrated
 - Access to native UI functionality on-par with smartphone UI frameworks
 - Java applications look (and behave) like native applications
 - Enables advanced entertainment and enterprise applications
- Familiar
 - Subset of SWT
 - Provides familiar java UI concepts
 - Already available on many platforms

Then... What is eSWT ?

- Provides efficient, portable access to the user interface facilities of the operating system
 - Most of the "real" work is done by the optimized, platform-specific code
- Consists of 3 packages
 - Subset of desktop SWT
 - *core package*
 - *expanded package*
 - New mobile specific eSWT components
 - *mobile package*
- Has traditional Java GUI library characteristics
 - UI is constructed by widgets in containers
 - Containers use layout managers to scale the UI.
 - API is non-thread safe and there's single UI thread
 - Applications must explicitly include the event dispatching loop in the *entry*



Everybody loves screenshots...



eSWT MIDlet Demo

eSWT availability

- Available form eRCP downloads for 1.1
 - WinCE 5.0 Professional
 - Windows Mobile 2003/5/6
 - Series 80 (eSWT 1.0)
- Installed on Device
 - All S60 3rd edition FP2 devices as part of MIDP runtime
 - Updates will be available from eRCP downloads
- You can start developing today!
 - Already available as part of the 3rd edition FP2 MIDP SDK

It is now possible to reuse UI code

- SWT
 - Available for most desktop platforms
- eSWT
 - Part of eRCP project
- RWT
 - Part of the RAP project

Demo