

Tablets... Powered by DataFlex

Harm Wibier
Data Access Europe B.V.



Devices

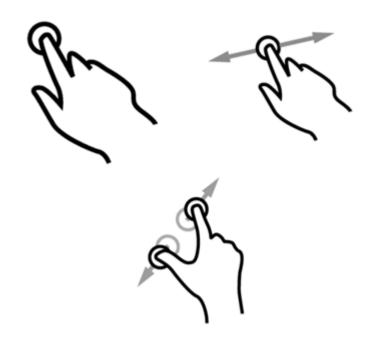
- Tablet
 - Touch screen
 - On-screen keyboard
- Mobile
 - Touch screen
 - On-screen keyboard





Differences

- Touch screen
 - Thick fingers
 - No hover
 - Swipe gestures
 - Zoom, pan, scroll, ...
- Limited screen space
 - Especially on mobile
- Screen ratio
- On-screen keyboard





Strategies

Native

- Greater functionality
- Mobile optimized
- Offline capability
- Best user experience
- Platform dependent
- Unknown technology

Browser

- Cross platform
- Easier to deploy
- Known technology
- No offline capability



Native Apps

- Platform dependent
- Access local API's
- The best user experience
- Different programming environments
 - IOS (Objective C)
 - Android (Java)
 - Windows 8 (C#)
- Major investment!









Browser Apps

- Single source for multiple platforms
- Centralized maintenance and deployment
- Known environment
 - HTML & CSS
 - JavaScript
- Smaller investment
- Quicker development









Mixed vs Mobile

- Mixed Browser App
 - Single WebApp for all devices
 - Low development & maintenance costs
 - Responsive technology
- Mobile Browser App
 - Optimize for mobile devices
 - Use mobile frameworks



Browser Frameworks

- Written in JavaScript
- Access DataFlex Web Services
- Use frameworks
 - jQuery
 - Sencha Touch
 - DHTMLX Touch
 - Dojo Toolkit



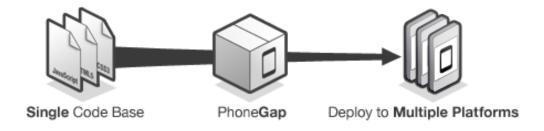






Phonegap

- Wraps a Browser App into a Native App
- Access native API's from JavaScript
- Generate for multiple platforms





Cases

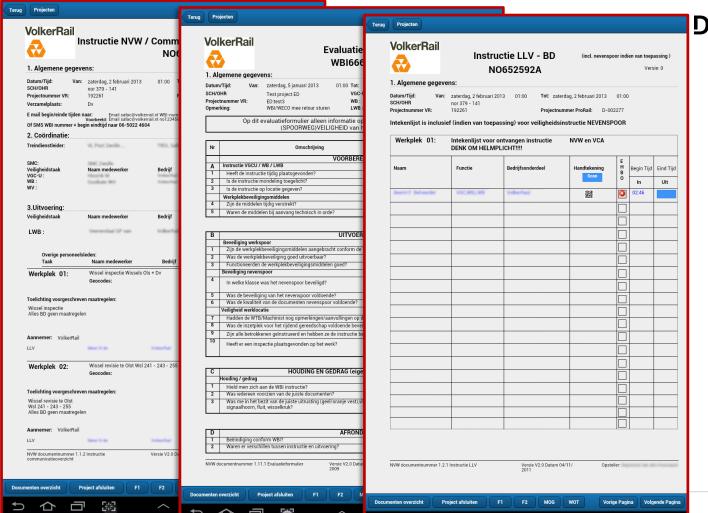
- Existing Browser Application
 - Make accessible from mobile devices
- New Browser Application
 - Design for multiple platforms
- New Mobile Application
 - Design specifically for mobile devices



DAE Project: Volkerrail

- New application
- For a specific tablet
- Display documents
- Fill out documents
- Sign using QR Code































DAE Project: Volkerrail

- Technology
 - Sencha Touch
 - PhoneGap
 - DataFlex Reports
 - DataFlex WebApp Server



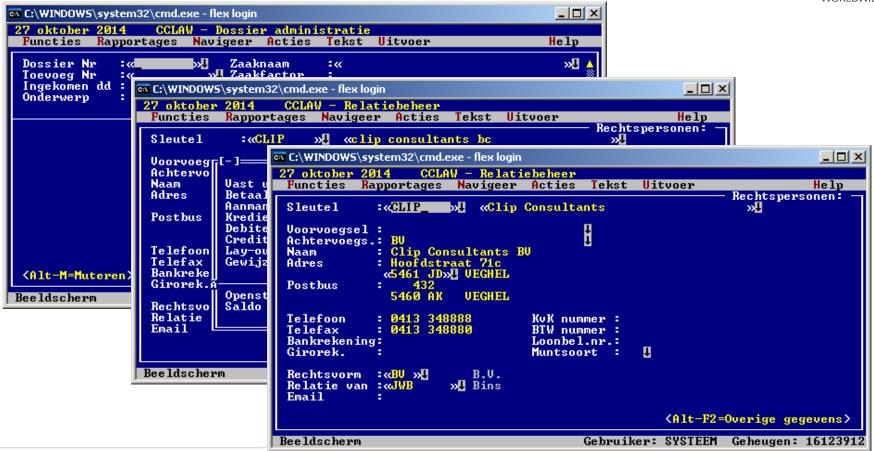


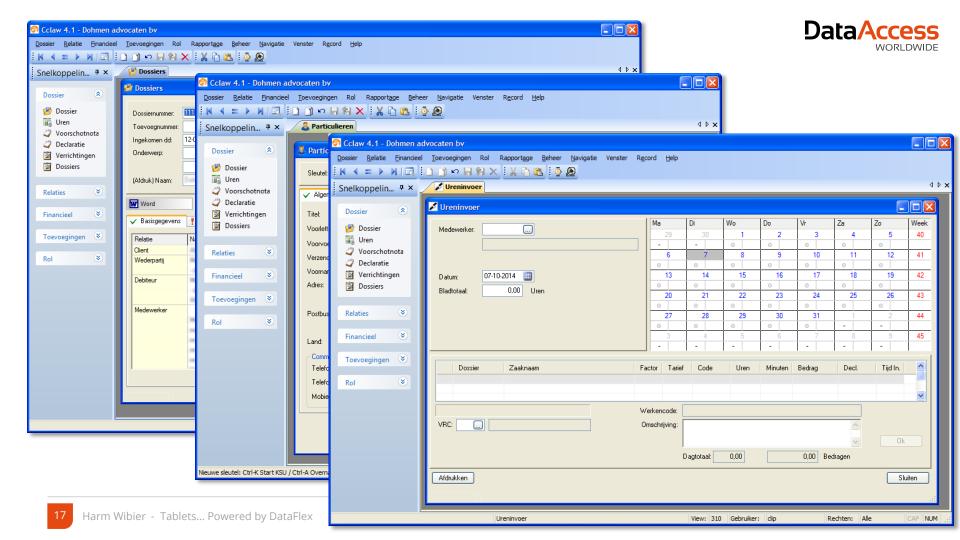
DAE Project: CCLAW Web

- Web version of existing windows application
- Optimized for tablet
- Administration for Lawyers
 - Hours
 - Dossiers
 - Clients











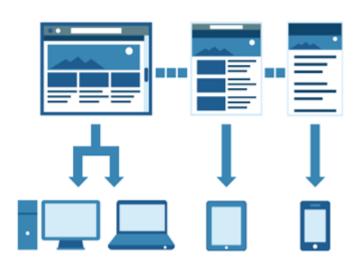
DAE Project: CCLAW Web

- Technology
 - DataFlex WebApp Framework
 - Custom theme
 - Custom controls
 - Menu
 - Floating panel
 - Bread-crumb
 - Calendar



Responsive Layout

- Layout that adjusts itself to the horizontal screen space
 - www.educconference.com
 - www.itravelyork.info





Adjustments

- Navigation changes
- Items reposition
- Items resize
- Items disappear









Breakpoints

- Screen width where layout changes
 - 320px (mobile portait)
 - 400 ----
 - 480px (mobile landscape)
 - 600 ----
 - 768px (tablet portait)
 - 1024px (tablet landscape)]



Technology Stack





Case study: Using WebApp Framework on mobile devices.

MOBILE WEBORDER



Case Study

- DataFlex WebApp on Mobile
 - Find inconveniences
 - Test improvements
 - Develop responsiveness
- Mobile version of the good old Order Entry
 - http://localhost/WebOrderMobile_18/



Responsive in DataFlex

- Reduce piColumnCount
 - Controls get pushed to the next line
 - Controls grow relatively to the view size
- piWidth to 0
 - View stretches to the full width
- OnWindowResize event
 - Triggered on initialization and on window resize
 - Triggers on oWebApp and on the view(s)
 - WebSet properties like piColumnCount, pbShowLabel, pbRender, ...

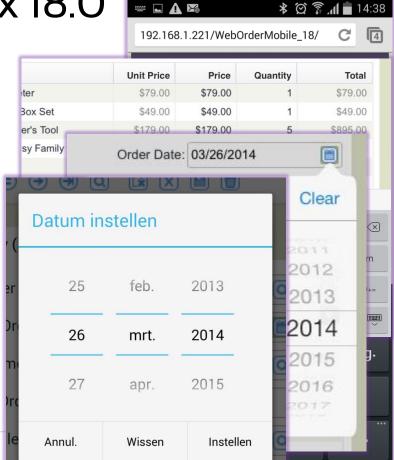


WEBAPP FRAMEWORK



Improvements in DataFlex 18.0

- Centering of modal Dialogs
- Sizing of info, error and question dialogs
- Menu's open on touch / click
- Reducing key-board flashing for lookups
- Numeric keyboard
 - pbHtml5NumberOnMobile
- Native date picker
 - pbHtml5NativeOnMobile





Conclusion

DataFlex WebApps will be the way to go for supporting Mobile Devices!

