

A Closer Look At CHAMPS EAM Windows Mobile

A functional review of the CHAMPS EAM Mobile
Application Screens, User Interface, Features and
Requirements

The Mobile Application Problem:

Issues considered when developing a Mobile Application

- Devices being used...
 - Many businesses encourage BYODevice
 - Vast array of form factors... phones, phablets, tablets, PCs
 - iPhone4, iPhone5, iPhone5s, iPhone6, iPhone6 Plus

- Development Issues...
 - Target each platform and device size... iOS, Android, Windows
 - Steep learning curve adopting Objective C, Swift, MAC
 - Deployment to App Stores
 - Testing with various devices and emulators
 - Mobile Web
 - No one-size-fits-all website
 - Needs to be able to take advantage of the phone, camera, geolocation

What is a LightSwitch Web Application?:

A review of the technology and tools used to generate the Mobile Application

- Platforms reviewed...
 - Powerbuilder 12.5
 - Wavemaker
 - Apple Filemaker Pro

- Platform selected...
 - Microsoft Visual Studio LightSwitch 2013

- LightSwitch was selected because...
 - Rapid Application Development tool
 - Uses LightSwitch HTML Client... we do not use Silverlight!!!
 - Primary development language is JavaScript (jQuery/JQueryMobile, CSS 3.0, HTML5)
 - Using Entity Framework to consume many types of datasources...
 - CHAMPS External Database
 - LightSwitch can connect to SharePoint and SAP datasources
 - LightSwitch applications can be hosted on Azure
 - Supports iOS , Android, WP8, WinRT

So what is the CHAMPS Mobile Web Application?:

A summary of the CHAMPS Mobile Web Application

- It is not...
 - Not an installed iPhone, Android, or Windows Phone app
 - Not sold or downloaded from an App Store
 - Not a large website squashed down to a mobile browser
 - Not a replacement for CHAMPS EAM Windows
 - Not competition for CHAMPS EAM Web

- It is...
 - Responsive website design adapts to device screen sizes
 - Cross-browser, Mobile-first, HTML5, touch-based application, operating on Mobile Browsers... Safari, Chrome, etc.
 - Using simple interface that emphasizes data and usability
 - Able to run on desktop browsers (ie. simple kiosk)
 - An extension to the CHAMPS EAM Windows V13 product

Screen Design and User Interface:

An overview of how the data is grouped and presented to the User

- Screens...
 - Menus
 - Typical Use of Equipment, Work Order and SKU data

- User Interface...
 - Browse vs. View Detail vs. Add/Edit screens
 - Required vs. non-Modifiable columns
 - Lookup Columns
 - Buttons and Navigation links (Blue columns, Phone, Website, Email)
 - Column Validation & Error Messaging

For the Control Enthusiasts:

A peek under the hood for those that enjoy their coffee at a perfect 177 degrees.

- Security...
 - Users login using password strength rules you provide
 - Permissions are related to application data and functions...
 - Can View Work Orders
 - Can Add Requests
 - Roles are related to one or more Permissions...
 - Data Viewer
 - Work Requester
 - Users are related to one or more Roles

- Translation...
 - Uses a JSON resource file to render the text for the following...
 - Menu Navigation Names
 - Screen Titles, Screen Tab Names, Column Label Names, Button Names
 - Error/Warning Messages
 - Supports translation localization - allows for client modification to match customization or Windows Maintenance changes (Equipment Id rather than Asset Id)

For the Control Enthusiasts:

A peek under the hood for those that enjoy their coffee at a perfect 177 degrees.

- Requirements...
 - CHAMPS EAM Windows V13
 - Server running IIS7 (Needs access to database and network attachment folders)
 - Wi-Fi or 4G/LTE cell service (No disconnected support.)

- What Devices have you tested with?...
 - iPhone5/iOS 8
 - iPad Air 2/iOS 8
 - Samsung Galaxy 5 Android

- Consider the Cost...
 - Providing employees with devices
 - Wi-Fi Service in work areas
 - Training and culture change
 - Upgrade to CHAMPS EAM Windows V13
 - Mike Melfi (aka PO Mike) will be calling with license information