LIVECODE

Cross-Platform Development

from RUNREV

Minnebar 9

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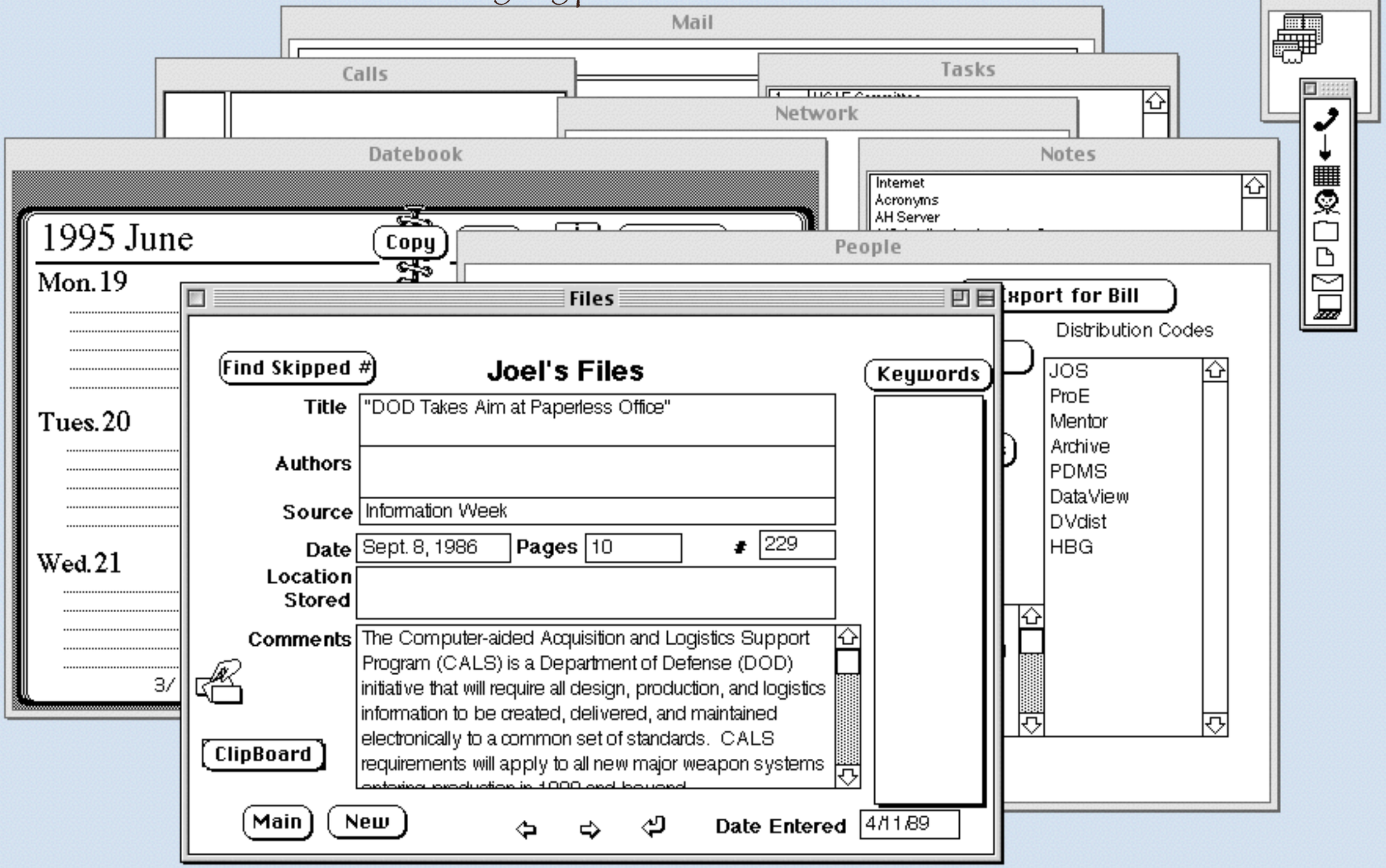
Joel Gerdeen

My Background

- First computer use in at GM Tech Center summer job
- Main-frames, minicomputers, personal computers to mobile
- Engineering IT professional at 3 Fortune 100 companies
- Computer historian (hoarder)
- Secretary of Mini'app'les user group
- Partner in Primmo Apps iConnexUs startup/shutdown
- Registered Android & Apple iOS developer

My HyperCard Office



Why I got interested?

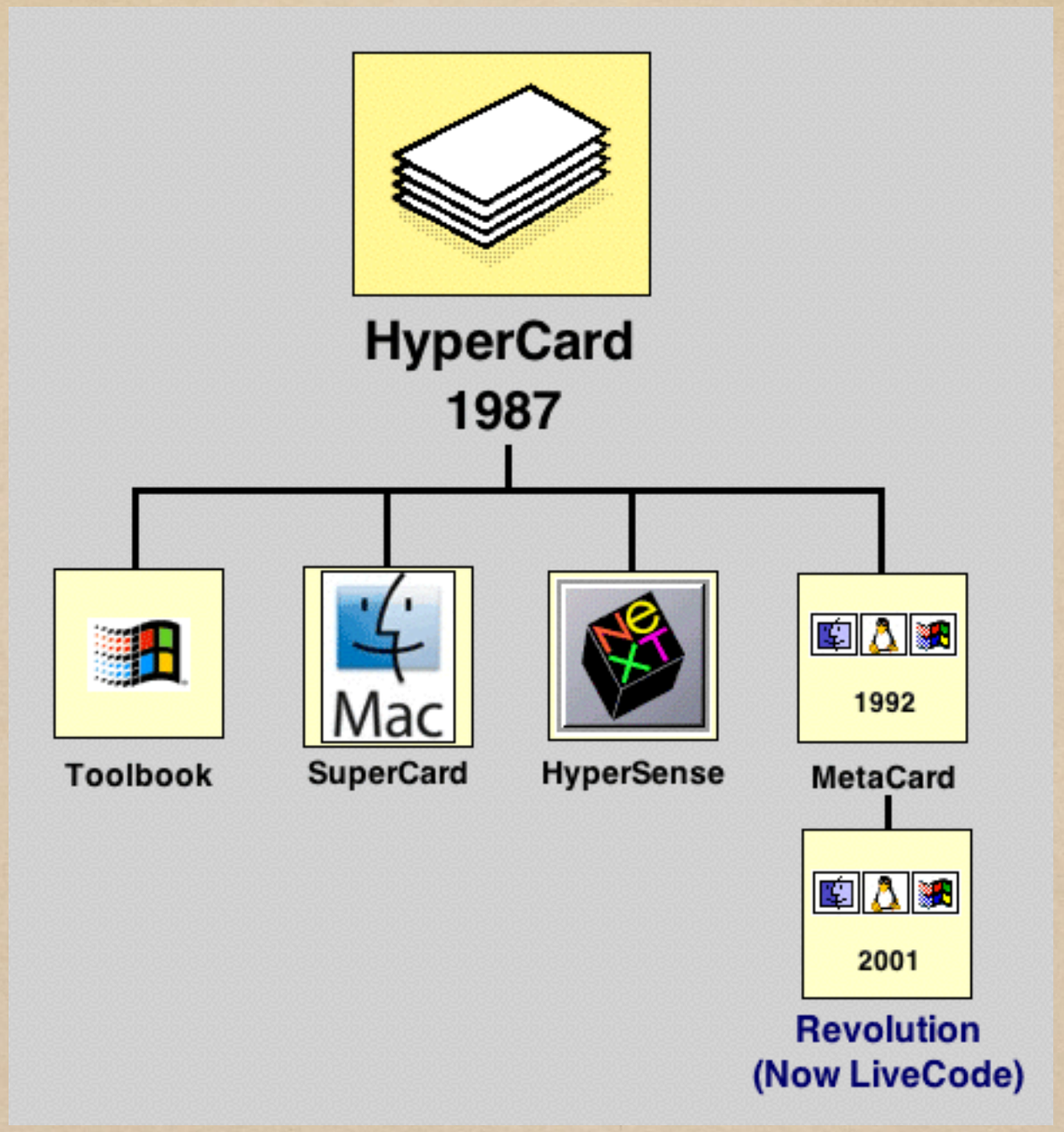
Why you should be interested

- Livecode was a finalist in a recent review of Mobile Development Tools by Dr. Dobb's

- Xamarin, Sencha, Corona, Titanium, PhoneGap

Heritage & History

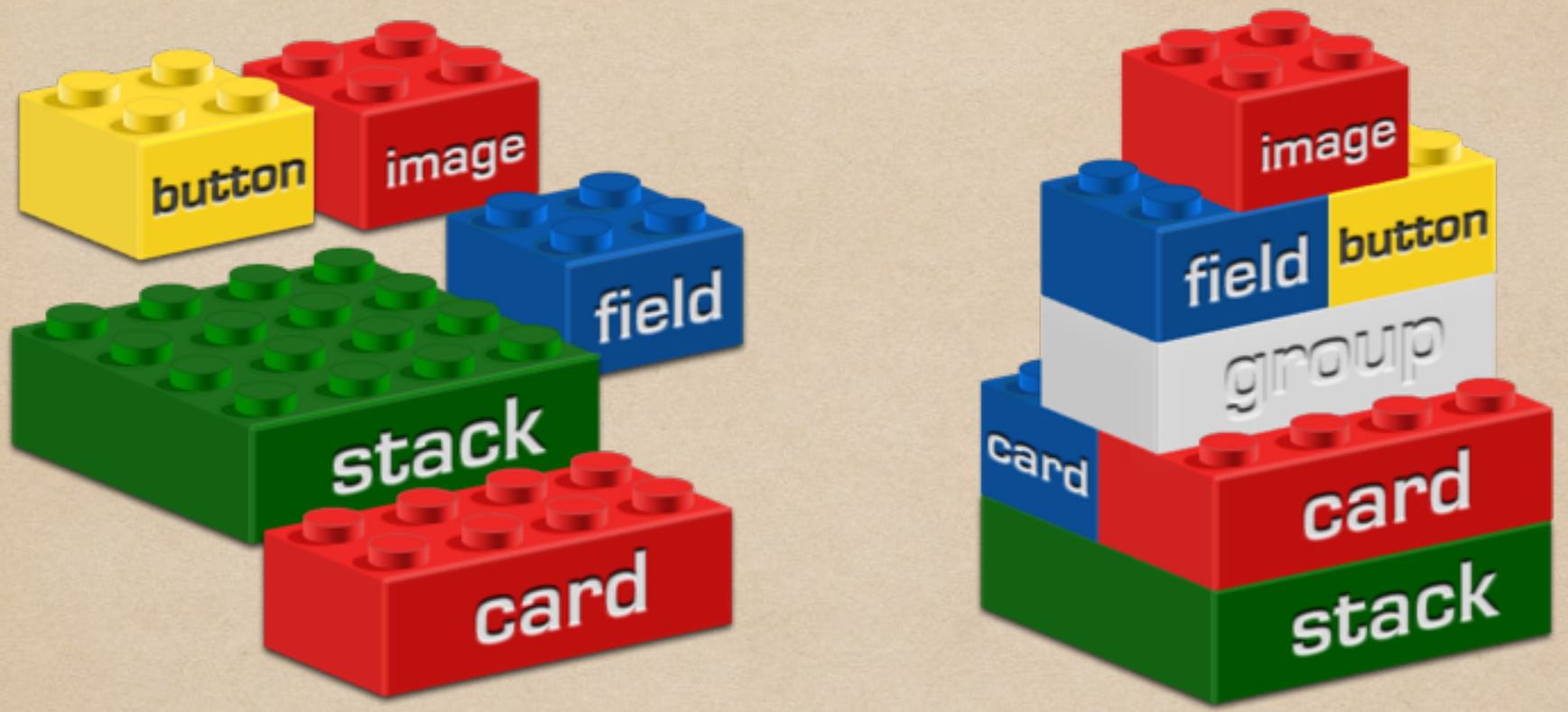
- Hypertext/HyperMedia - Ted Nelson 1963
- Hypercard - Apple 1987
- WWW - Tim Berners-Lee 1989
- RunRev - Edinburgh, Scotland 1997
- Metacard - 1992, Acquired by RunRev 2003
- LiveCode - New name 2010
- Kickstarter Campaign - Open Source 2013



Source: BYU Digital Humanities & Technology

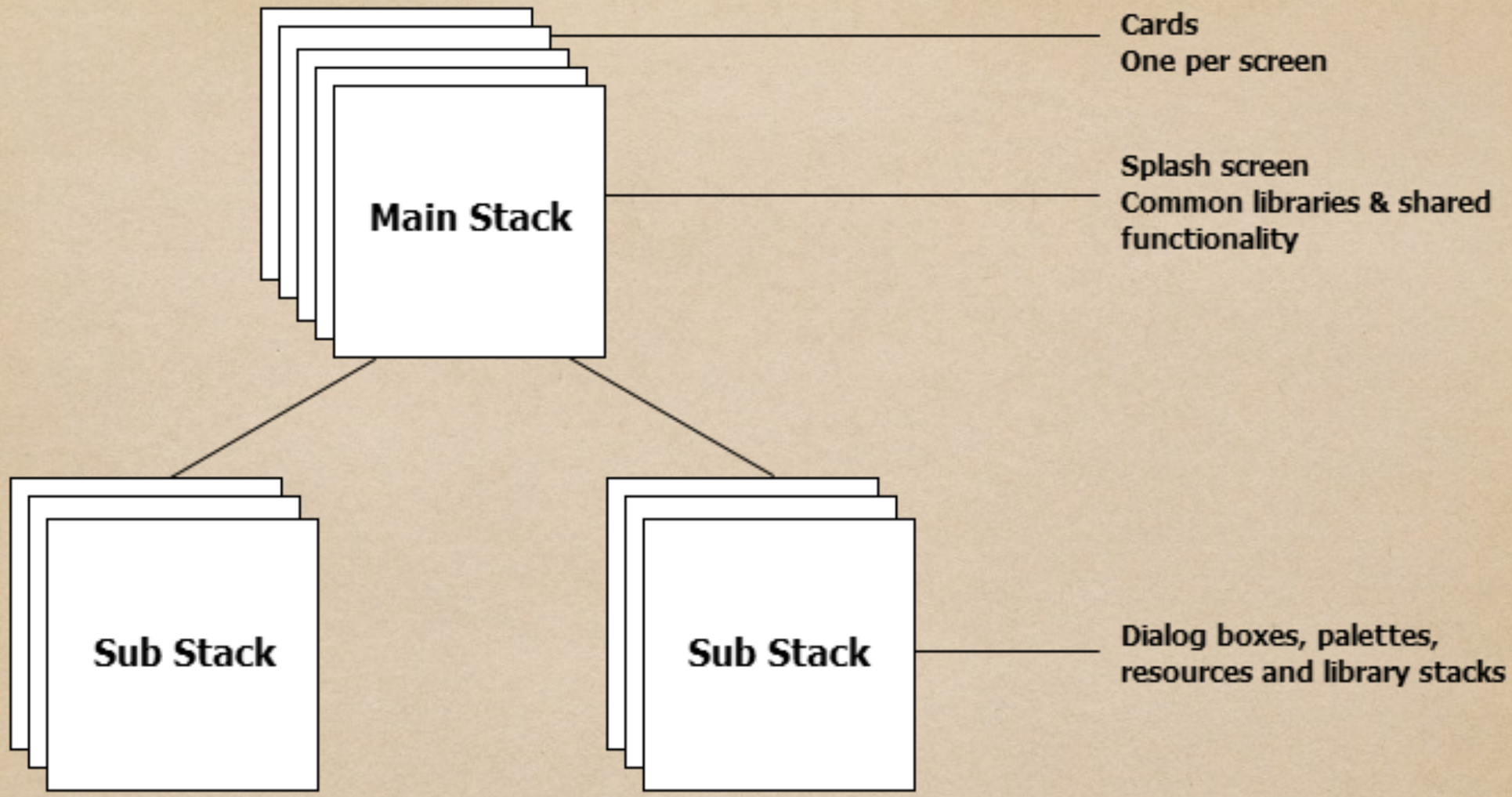
Supported Devices

- Development - Mac, PC, Linux
- Delivery - Mac, PC, Linux, iOS, Android, servers
- Future - Raspberry Pi, Windows 8 Mobile, ?



Building Block Approach

Source: BYU Digital Humanities & Technology

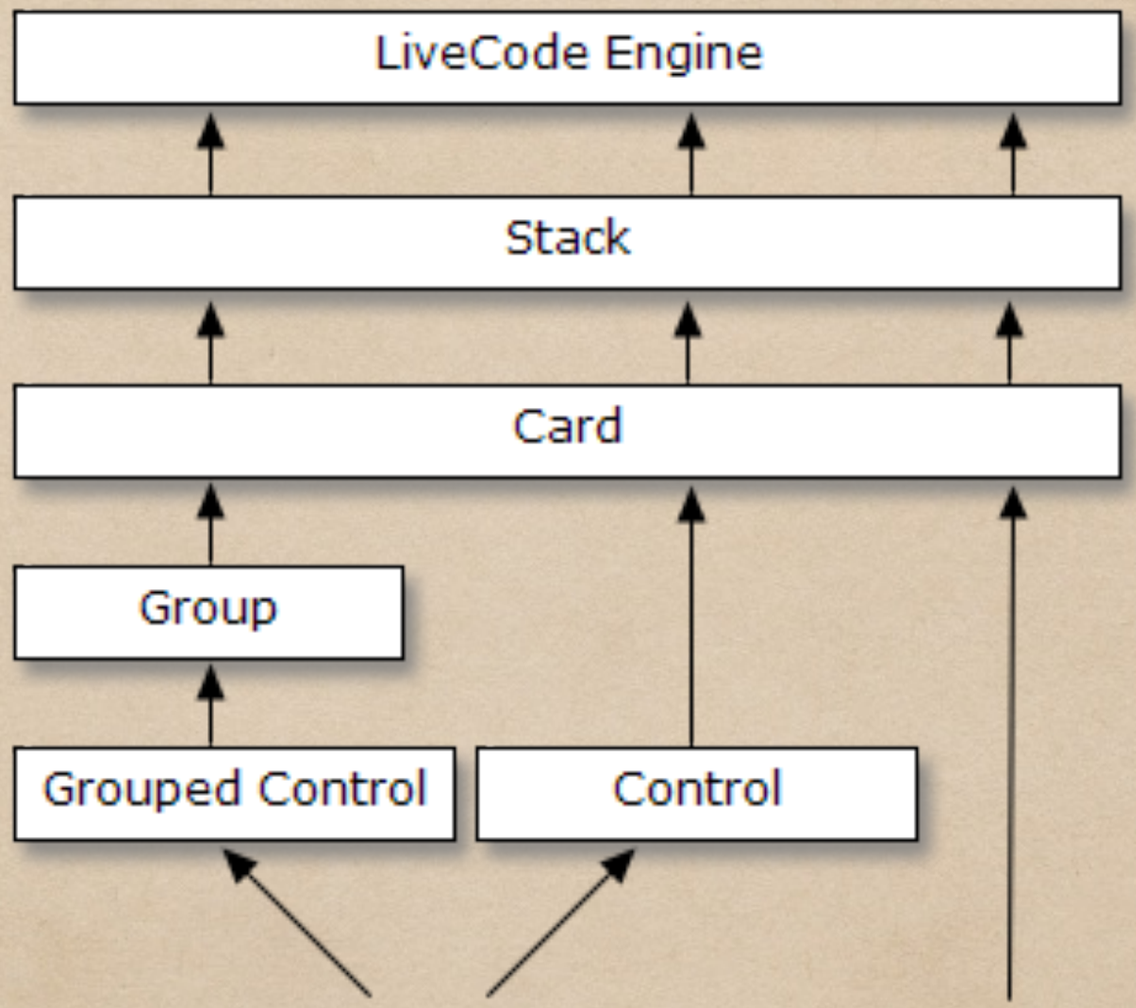

Main Stack
Cards
One per screen
Splash screen
Common libraries & shared functionality
Sub Stack
Sub Stack
Dialog boxes, palettes, resources and library stacks

LiveCode Language

- English-like with minimal syntax, self-documenting
- LiveCode: sort lines of theText descending by last item of each
- JavaScript: theText = theText.split("\n");theText = theText.sort(sort_item_3).join("\n");function sort_item_3(line1, line2) { line1 = line1.split(","); line2 = line2.split(","); if(line1[2] == line2[2]) return 0; else if(line1[2] > line2[2]) return -1; else return 1;}

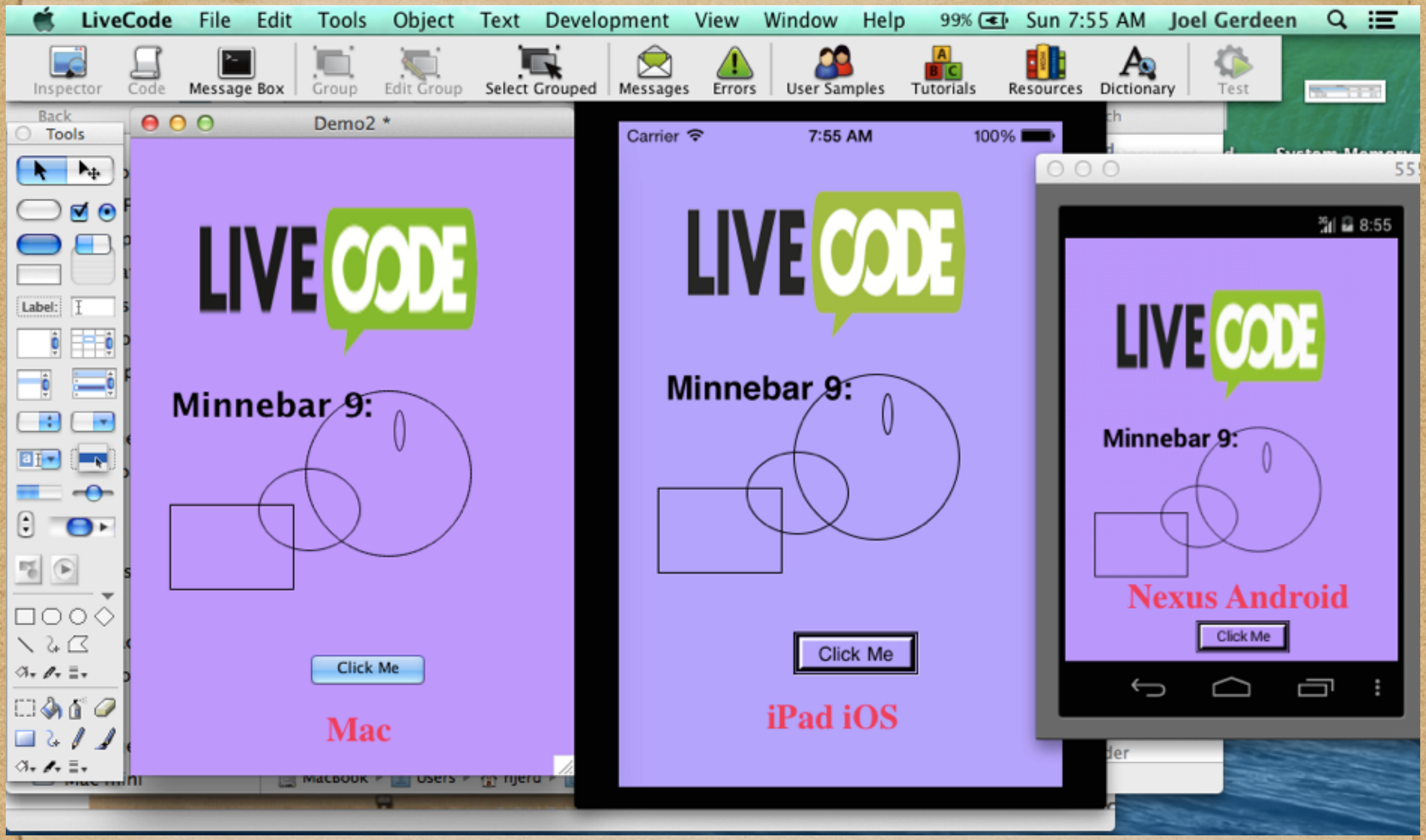
Example source: RunRev CEO Presentation

LiveCode Message Path
(simplified)

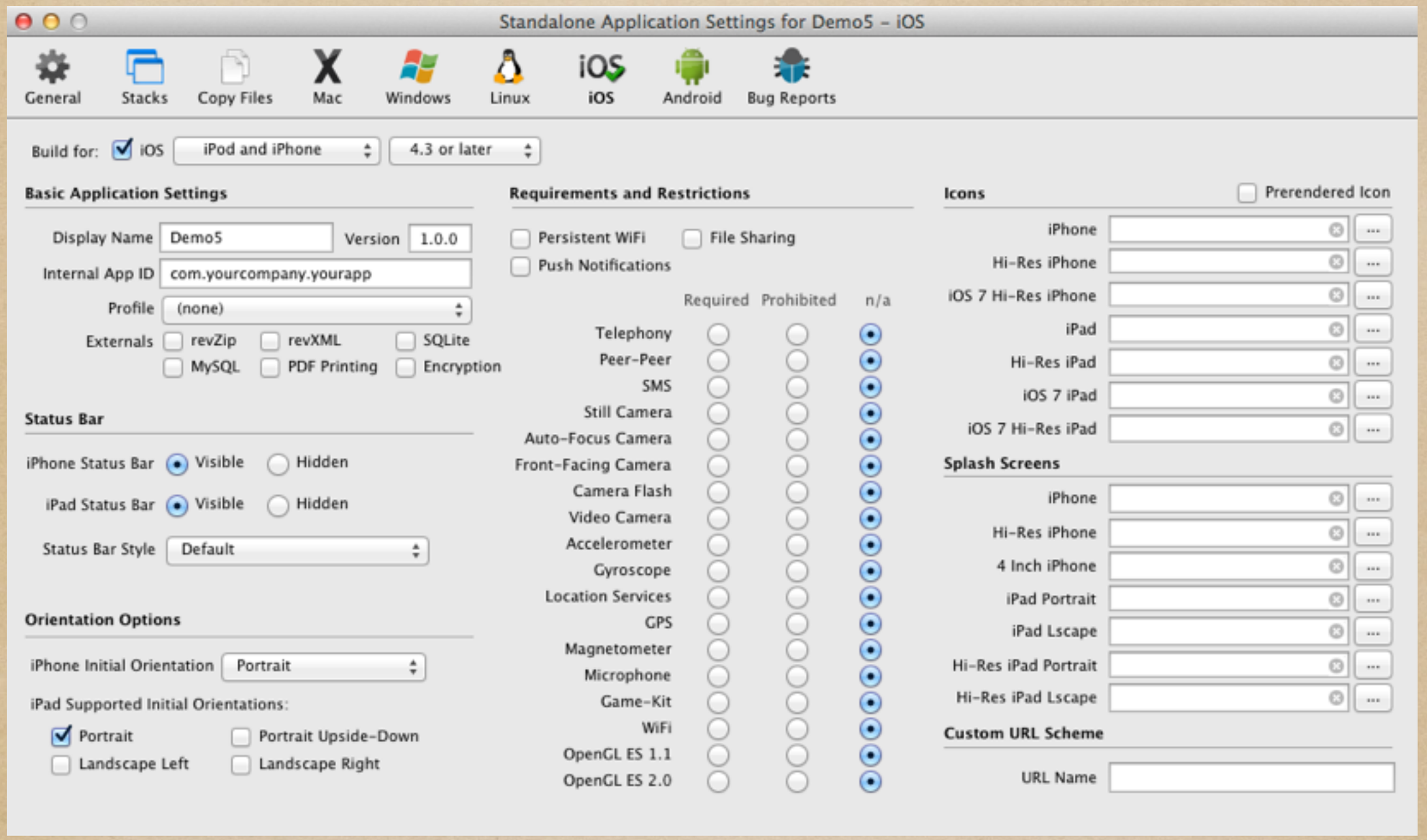


Demo

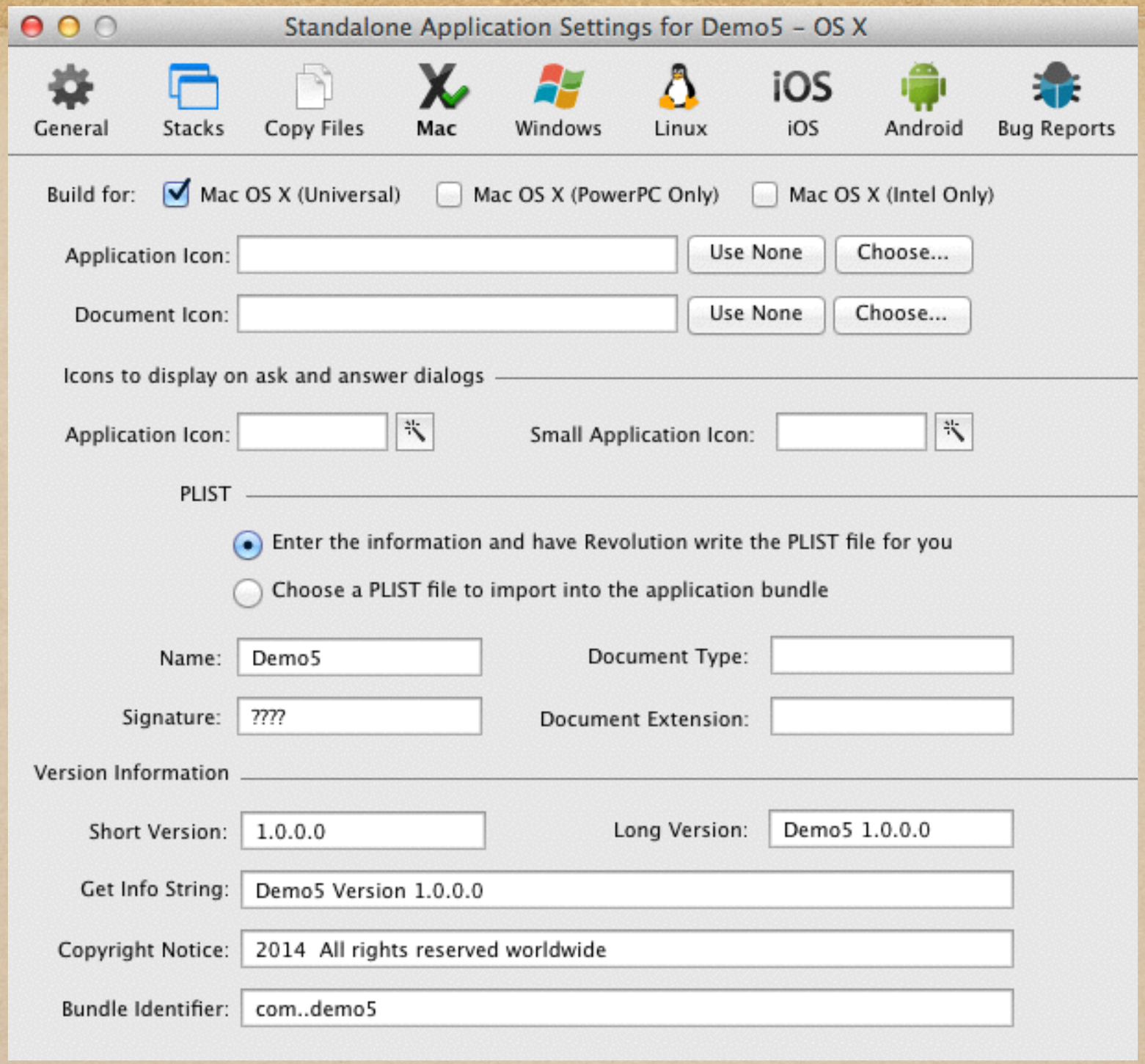
- Show the development system
- Create a simple app with full screen scaling
- Configure standalone parameters
- Show app running in iOS and Android emulators



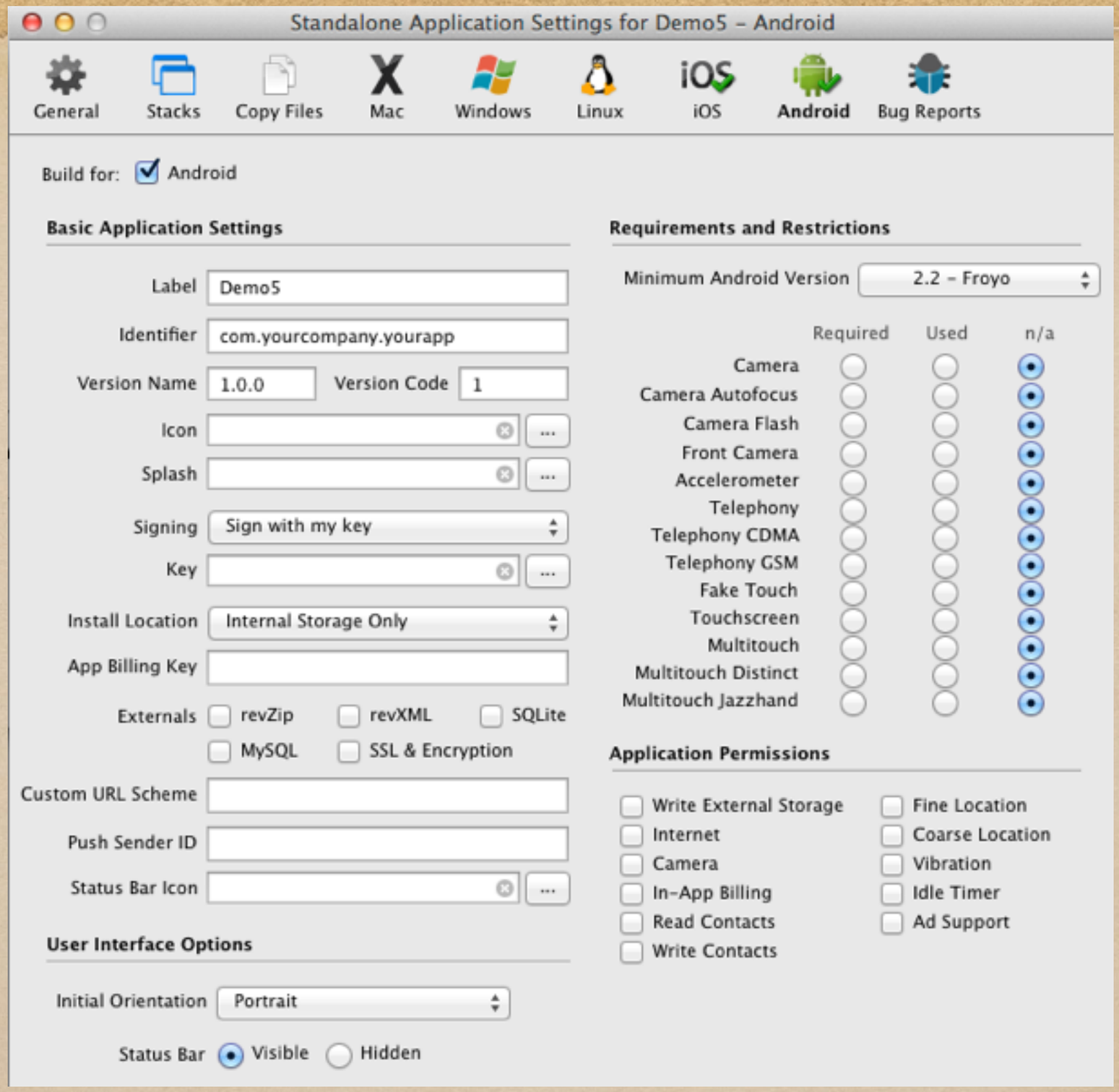
LiveCode IDE with 3 emulators


Standalone Application Settings for Demo5 – iOS
General
Stacks
Copy Files
Mac
Windows
Linux
iOS
Android
Bug Reports
Build for:
iOS
iPod and iPhone
4.3 or later
Basic Application Settings
Display Name
Demo5
Version
1.0.0
Internal App ID
com.yourcompany.yourapp
Profile
(none)
Externals
revZip
revXML
SQLite
MySQL
PDF Printing
Encryption
Status Bar
iPhone Status Bar
Visible
Hidden
iPad Status Bar
Visible
Hidden
Status Bar Style
Default
Orientation Options
iPhone Initial Orientation
Portrait
iPad Supported Initial Orientations:
Portrait
Portrait Upside-Down
Landscape Left
Landscape Right
Requirements and Restrictions
Persistent WiFi
File Sharing
Push Notifications
Required
Prohibited
n/a
Telephony
Peer-Peer
SMS
Still Camera
Auto-Focus Camera
Front-Facing Camera
Camera Flash
Video Camera
Accelerometer
Gyroscope
Location Services
GPS
Magnetometer
Microphone
Game-Kit
WiFi
OpenGL ES 1.1
OpenGL ES 2.0
Icons
Prerendered Icon
iPhone
Hi-Res iPhone
iOS 7 Hi-Res iPhone
iPad
Hi-Res iPad
iOS 7 iPad
iOS 7 Hi-Res iPad
Splash Screens
iPhone
Hi-Res iPhone
4 Inch iPhone
iPad Portrait
iPad Lscape
Hi-Res iPad Portrait
Hi-Res iPad Lscape
Custom URL Scheme
URL Name

iOS Setup


Standalone Application Settings for Demo5 – OS X
General
Stacks
Copy Files
Mac
Windows
Linux
iOS
iOS
Android
Bug Reports
Build for:
Mac OS X (Universal)
Mac OS X (PowerPC Only)
Mac OS X (Intel Only)
Application Icon:
Use None
Choose...
Document Icon:
Use None
Choose...
Icons to display on ask and answer dialogs
Application Icon:
Small Application Icon:
PLIST
Enter the information and have Revolution write the PLIST file for you
Choose a PLIST file to import into the application bundle
Name:
Demo5
Document Type:
Signature:
????
Document Extension:
Version Information
Short Version:
1.0.0.0
Long Version:
Demo5 1.0.0.0
Get Info String:
Demo5 Version 1.0.0.0
Copyright Notice:
2014 All rights reserved worldwide
Bundle Identifier:
com..demo5

Mac Setup



Android Setup

App Scaling

- Adapts to different device sizes
- set the fullscreenmode of me to empty - default mode
    - exactFit
    - Letterbox
    - noBorder
    - noScale

Not just a mobile development tool

- Capable of enterprise level development
  - KLM Booking System
  - Univ of Vienna - Management of 100,000 student & staff
  - USGS Satellite Control
  - FrontDocs Document Management
- http://livecode.com/showcase/

Plugins/Externals

- Native look & feel
- Animation Engine
- ChartMaker
- Word Import/Export
- FileMaker Migrator
- Sound Libraries
- User Registration
- Plus many more

Plugins

- Mob-GUI
- Air Launcher
- Zygodact
- Animation Engine
- App Design Kit
- ChartMaker
- Data Grid Helper
- DataTree
- Quartram Reports
- WheeLib
- WordLib
- WordReport
- FMpro Migrator
- mergExt

Resources

- Free Community open source version,
  Commercial version required to publish
- Tutorials, University, Academies
- Newsletter & Blog
- Forums & Email list
- Sharing Portal
- RunRevLive Conferences
- on-Rev hosting service

Contact Info

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- Check back for presentation materials