



# How to choose between Hybrid vs. Native Apps

# Agenda

- ▣ Hybrid App development

- Pros
- Cons



- ▣ Native App Development

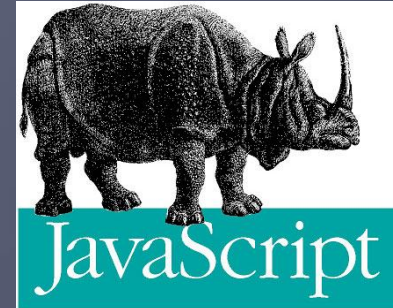
- ▣ Pros
- ▣ Cons

- ▣ Modern MEAP: best of both approaches

# 2 Approaches to App Development

## ▣ Hybrid App Development

- Web technology
- HTML5/Javascript/ PhoneGap
- Turning a website into an executable app
- Embedding a browser



## ▣ Native App Development

- Develop Apps in native language of the operating system
- Java for Android and Objective-C for IOS
- Use platform SDKs



# Pros of Hybrid Approach

- ▣ Develop once run anywhere
  - As opposed to development for each mobile device
- ▣ JavaScript is the most popular language
  - ▣ Lots of programmers to choose from
- ▣ Quicker than native app development
  - JavaScript is simpler than Objective-C and Java
- ▣ Cheaper than Native app development

# Cons of Hybrid Approach

- ▣ Browser fragmentation
  - Looks different on different browsers
  - Inconsistent support of HTML5 features
  - Difficult to debug and fix problems in all browsers
- ▣ Performance issues
  - Many more layers of software
  - Not designed for multi-threaded apps.
- ▣ Security issues
  - Easier to hack vs compiled code
- ▣ Access to device hardware
  - Is limited by Phonegap or similar wrapper
- ▣ UI/UX is not consistent across all browsers
- ▣ limited local storage and limited ability to work in a disconnected mode



# Why Native Apps?

- ▣ Best Performance
- ▣ Best Security
- ▣ Local databases
  - On device storage
- ▣ Work in disconnected mode
  - Unlike internal apps connection is not always available
- ▣ Native look and feel
- ▣ App store marketing
- ▣ Timely access to new OS innovations



# Native App Development Challenges

**Requires separate development for each platform**

- IOS and Android versions



**Too few objective-C and java developers**

- Supply vs demand.
- Monster.com alone has over 4,000 jobs

**Steep learning curve**

- Learning Java and Objective-C takes 6 to 9 months



**Slow development using native SDKs**

- Takes 4 to 6 month to develop native apps
- Low level programming languages

# Use SaaS MEAPs to Speed up Development

- write once  
run anywhere
- Should support both  
native or hybrid
- no install/configure
- less code or no  
code to write
- no proprietary  
languages





# Visual Development Using snAPPii

Home Contact Us FAQ Dashboard

SnAPPii WYSIWYG Editor

Prototype app (Enterprise) Logout

- Save App
- Submit/Publish
- Data Sources
- Save App As
- New App
- My Apps
- Tutorial
- QR codes
- Preview

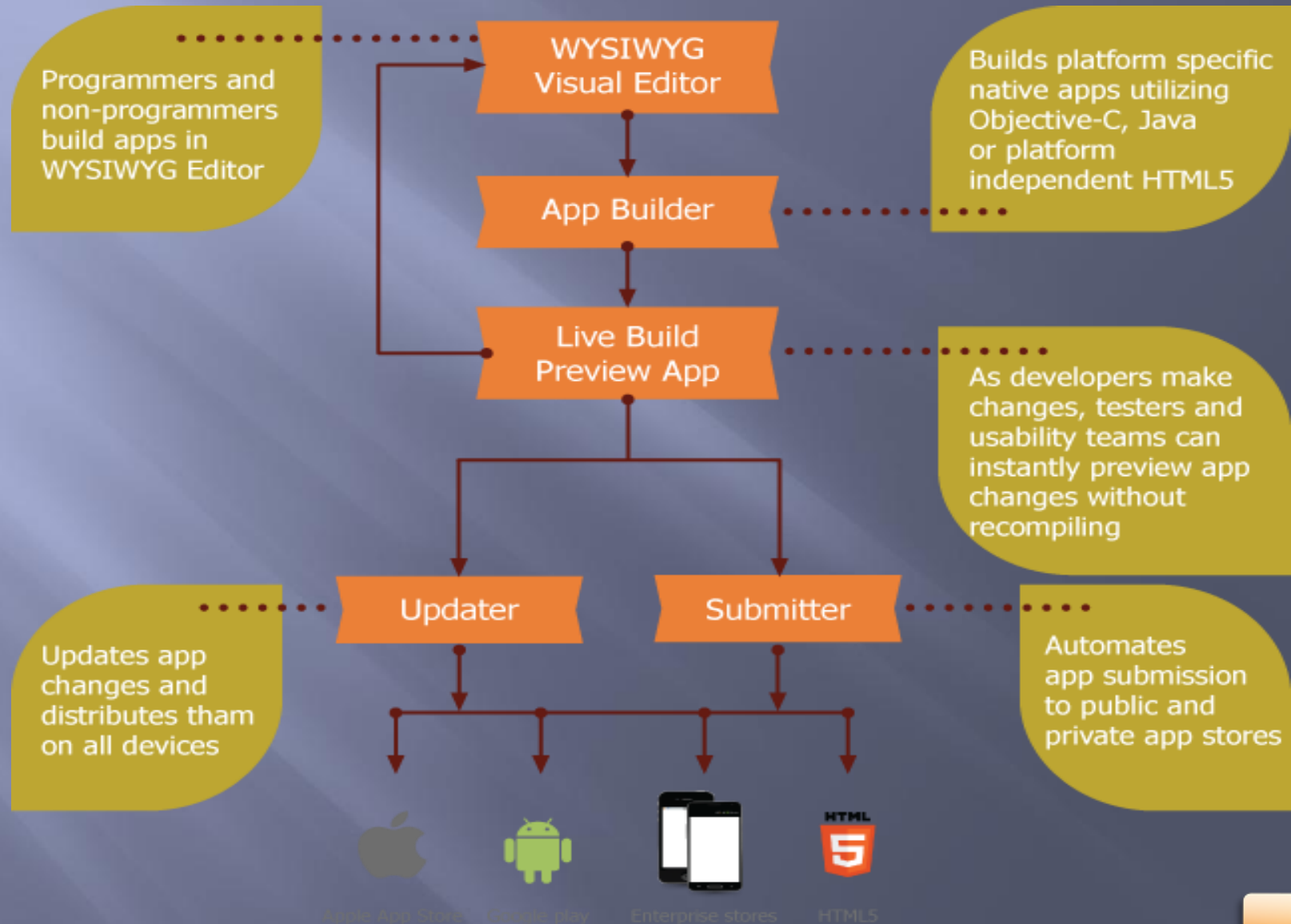


Just build your app with our WYSIWYG Editor, save it, and view it on your device immediately!

Mobile Application Platform for Business



# snAPPii Development Process



*Mobile Application Platform for Business*

# Architecture of Apps Created with snAPPii

WYSIWYG  
Visual Editor

Native Apps created by SnAPPii  
(work in **online**/**offline** modes)



RESTful API



RESTful API



RESTful API

## SnAPPii Cloud Platform Server

Security end Encryption

Notification Service

Location Service

User Management

Database Services

Web Services

Lists and Forms

On-Premise  
Enterprise systems



RESTful API

RESTful API

Cloud-based  
Web services



*Mobile Application Platform for Business*





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