

Android AR & Raspberry Pi

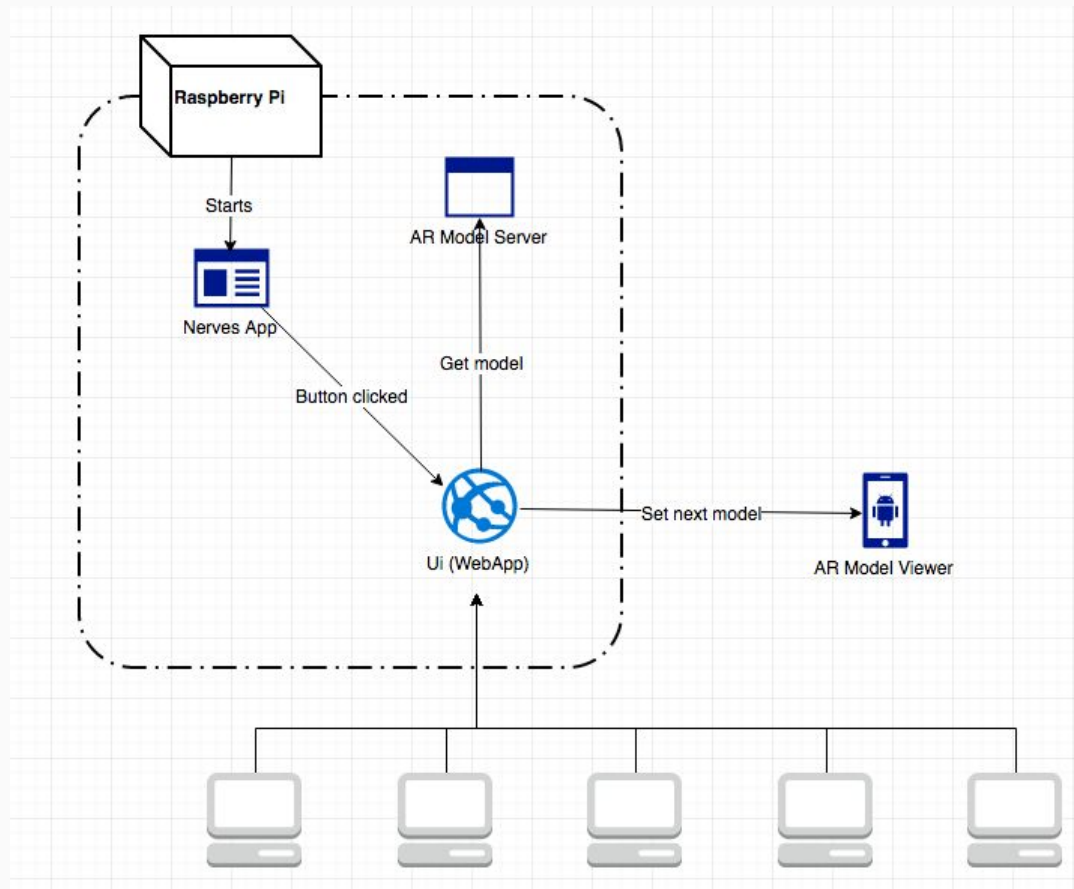
Bram

Growth Session #4 - June 15-16 2017



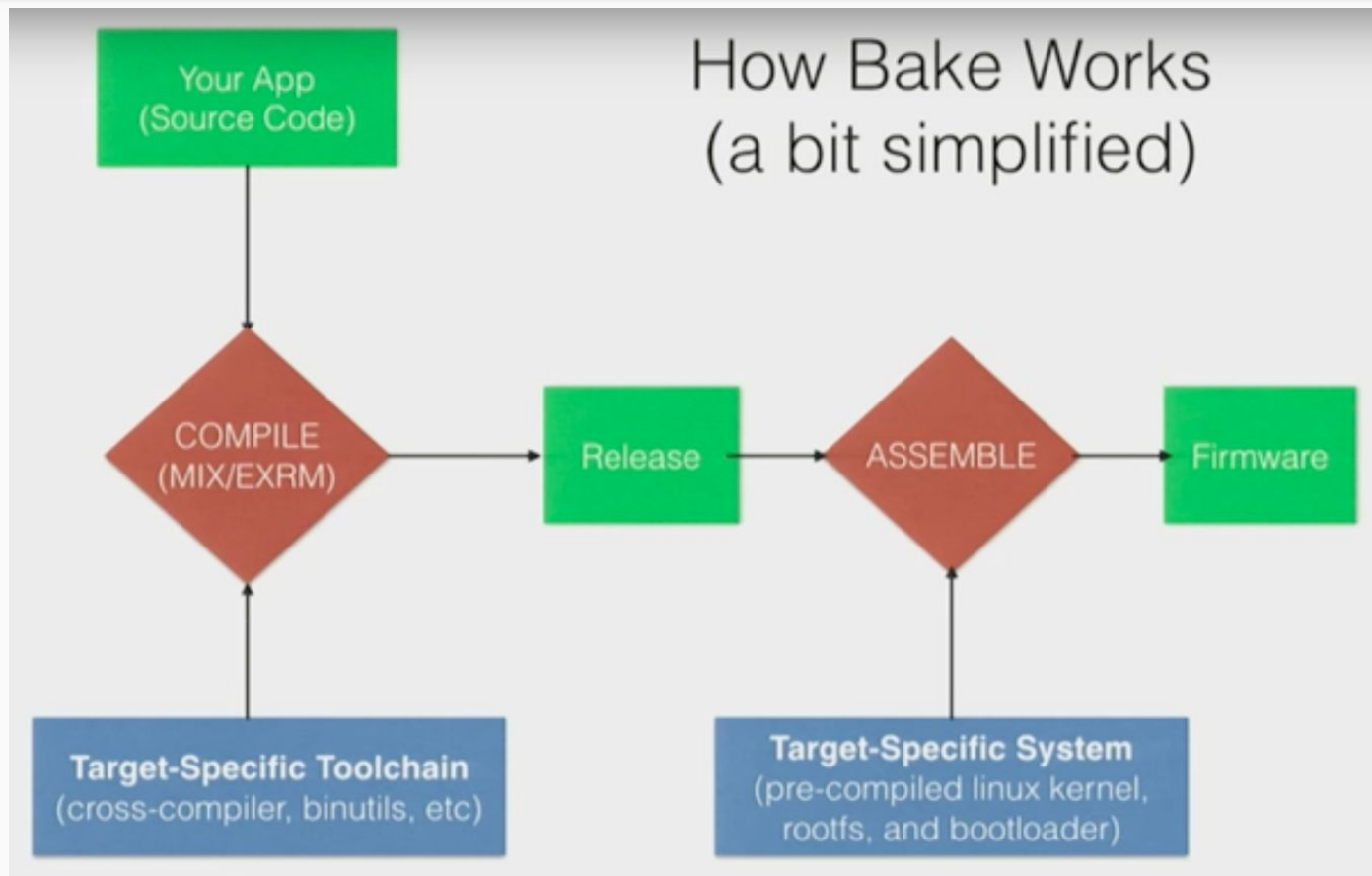
- Augmented reality android app
- Raspberry Pi controller
- Webapp with a 'dashboard'

High level overview



Craft and deploy bulletproof embedded software in Elixir

- **Platform** - Lean cross-compiled 12 MB Linux
- **Framework** - Nerves <http://nerves-project.org/>
 - Network
 - Discovery
 - IO
 - Firmware updates
- **Tooling**
 - Mix new.nerves app_name



Nerves is fast and small

Nerves vs Raspbian

	Nerves	Raspbian
Cold Boot to App	3-6 seconds	30-60 seconds
Zipped FW Image	~13-18 MB	~350-500 MB
Update Strategy	Entire Image	Just Application
Root Partition	64-128MB	1-2 GB
Fallback Strategy	A/B Partitions	???
Unpluggability	R/O Root Partition	???

ARToolkit for Android

- A fast and modern open source tracking and recognition SDK
- Multi-platform
- Unity integration



- UI in the form of a Web App
- Made with Phoenix Framework
- Phoenix Channels

Nerves Project is fast
and easy

Thanks!

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