

# Creating Offline-first Mobile Apps with HTML5

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## PLANNING OFFLINE WEB APPS



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FOUNDER OF WATZTHIS?

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# Meet Intelligent Inspections, Inc.\*



Jim works in the field, doing home inspections, and returns to the office to input data.



Lucy works at the office making appointments, preparing final reports, sending invoices.

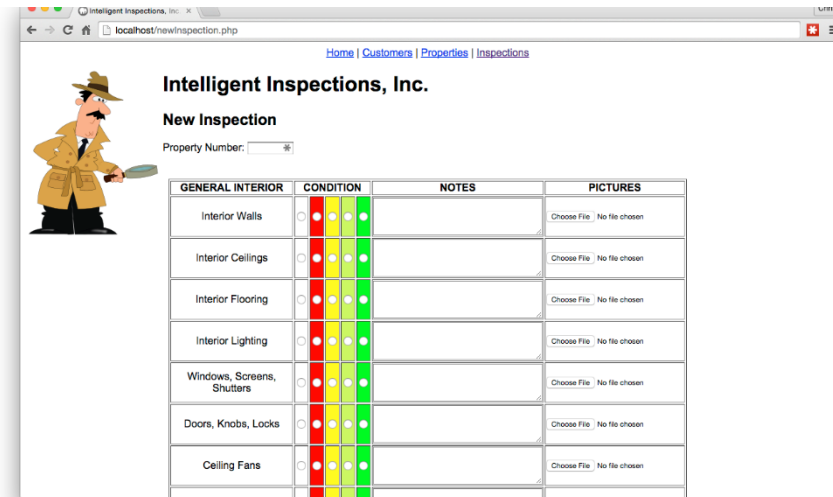
\* A fictitious company



# Stuck in 1999

Doors, Knobs and Locks						
Ceiling Fans						
Stairs and Handrails						
Smoke and CO Alarms						
Fireplaces						
<b>KITCHEN</b>	Condition					<b>NOTES</b>
	NA	Poor	Fair	Good	Great	
Cabinetry						
Ceiling						
Countertops						
Dishwasher						
Doors						
Electrical						
Flooring						
Garbage Disposal						
Ice Maker						
Lighting						
Microwave Oven						
Oven						
Refrigerator						
Sinks and Plumbing						
Stove						

Jim fills out a paper form.



Intelligent Inspections, Inc.

New Inspection

Property Number:

GENERAL INTERIOR	CONDITION	NOTES	PICTURES
Interior Walls	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen
Interior Ceilings	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen
Interior Flooring	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen
Interior Lighting	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen
Windows, Screens, Shutters	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen
Doors, Knobs, Locks	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen
Ceiling Fans	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		<input type="button" value="Choose File"/> No file chosen

Lucy enters data into a web form.



# The Argument



**“I can’t get the Internet when I’m in  
a cellar or out in Newcastle!”**



**“I can’t keep typing up your reports.  
I have other things to do!”**

# Where You Come In



1. **Convert web form to app**
2. **Reuse as much as possible.**
3. **It must work in basements!**
4. **Easy to use.**

# The Problem



**Constant data connection is not guaranteed in mobile computing**



# The Solution



**Offline First assumes spotty data**


**Syncs with online data**

**Superior user experience**



# What's the Plan?

[Home](#) | [Customers](#) | [Properties](#) | [Inspections](#)

 **Intelligent Inspections, Inc.**

New Inspection

Property Number:

GENERAL INTERIOR	CONDITION	NOTES	PICTURES
Interior Walls	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="text"/>	<input type="button" value="Choose File"/> no file selected
Interior Ceilings	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="text"/>	<input type="button" value="Choose File"/> no file selected
Interior Flooring	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="text"/>	<input type="button" value="Choose File"/> no file selected

Convert existing bad form

**NEW INSPECTION**

Property Id:

**INTERIOR WALLS**

**INTERIOR CEILINGS**

Into a functional mobile web form



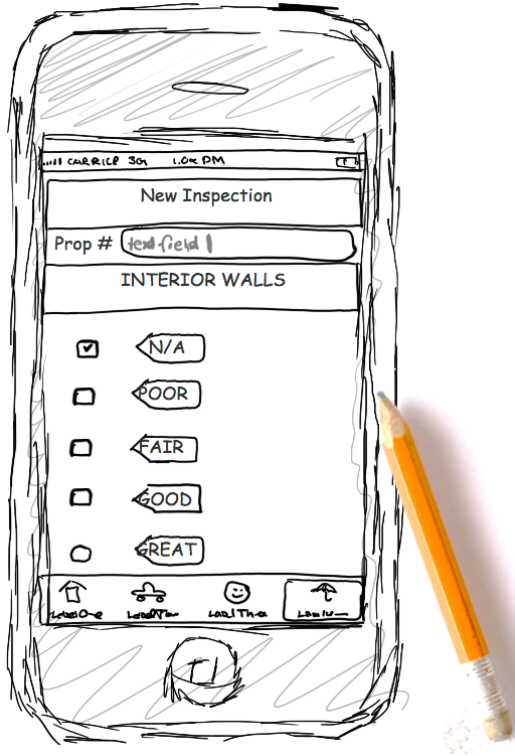


# Prototyping

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# What Is a Prototype?



**A simulated app**

**Not actually functional**

**Guides the design and development**



# Introducing iPhone Mockup



**Extremely simple**

**Mockups in minutes**

**Easy to share**



# Demo



## Building the prototype



# Summary



**Keep prototypes simple**

**Get the big picture pieces in order**

**Agree to be flexible**

