

Building Agile Applications without a Software Developer

Rebecca Heersink and Mary Anne Welsh

About the POP - Parent Outreach Program

- Program was developed in 1975 as a demonstration project for the Ministry of Education
- POP is a Teaching program for parents of children under 18 who have a developmental disability
- Staff work with parents in the parent's home to observe behavior, create goals and deliver teaching programs to increase independence and socialization
- All staff are parents of children who have a developmental disability

The dBase Problem

- **1988** - The POP team invested in creating a custom database. The Database was designed using dBase (Database system made for MicroComputer)
 - The team was on two on a Dual Drive Laptop
 - The database designed matched their workflow and processes
- **1988 to 2000** - Over the years the team evolved in how they used the system by investing in newer hardware
- **2000** - The POP organization merged with WoodGreen Community Services
- **2015** - dBase still worked for collecting the teams data but new Window OS/ computers no longer support dBase
 - dBase still supported the teams Workflow to Collect Data

Finding the Right Solution

Custom In House Solution

- Difficult to Maintain as Technology Improves
- Lack of Internal Capacity to build

Custom Contracted Out Solution

- Who maintains the system?
- The cost and time to develop and implement
- Documenting requirements

Out of the Box Solution

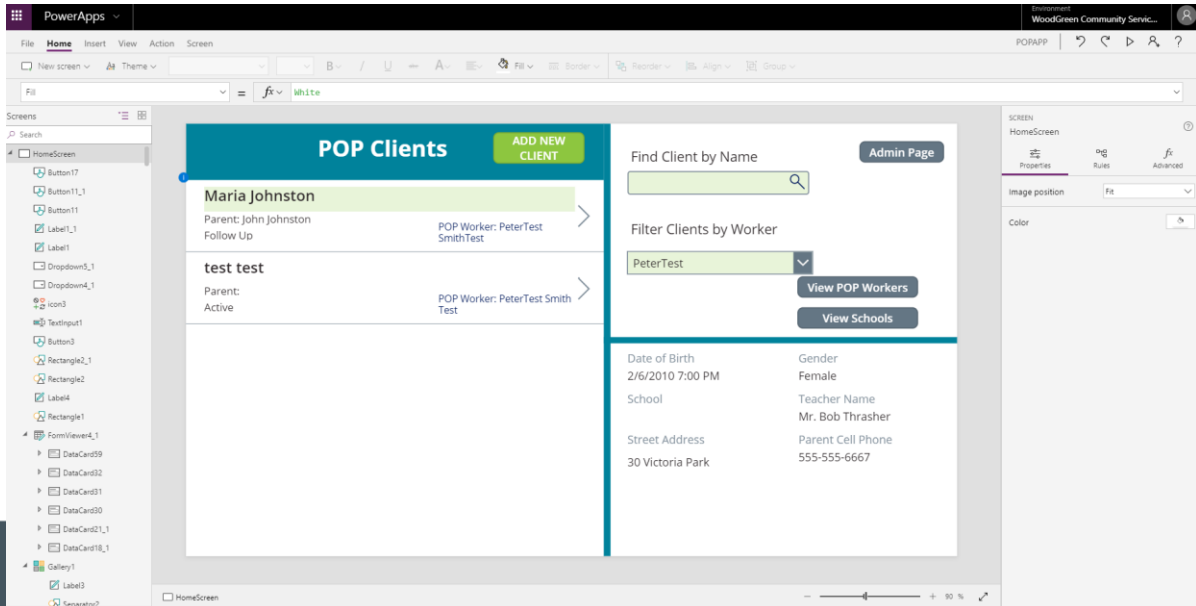
- Nothing designed to fit our needs
- Vendor maintains and improves systems(Hopefully)

Looking for a "Cloud Access"

- POP required a database of similar Complexity of an Access Database
- Access database often lack suitability (bad for multi devices, crashing and corruption)
- We started looking for is their a "Cloud Access" and found PowerApps
- Microsoft designed for Business Analysts to build Apps
- Power Apps requires does not require coding and any coding is similar to excel formulas

About PowerApps

- You can connect data from many sources including a Microsoft Common Data Set, Salesforce, Oracle, MySQL and MANY MORE
- It has a online platform to build apps that is apart of Office365
 - Managing User Accounts is done through Office365 – No Extra Work!
- Free Online modules are available to learn how use PowerApps from Microsoft



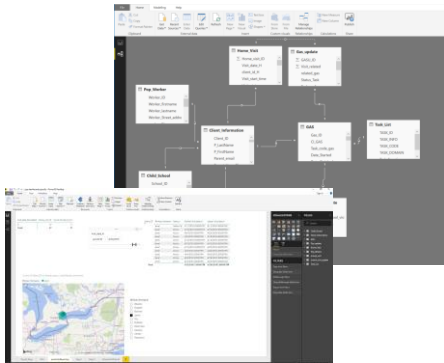
Most Complex Code in POPAPP

```
Sort(Filter(
'[dbo].[Client_Information]_1',
TextInput1.Text in C_FirstName &&
Dropdown5_1.Selected.Value in
Worker_ID_C && (Status_c = "Active"
Or Status_c="Preview" Or Status_c=
"Follow Up")), C_FirstName,
Ascending)
```

POPAPP Set Up



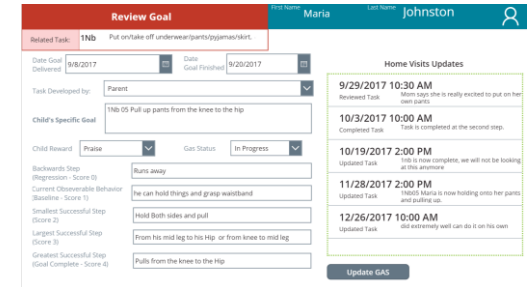
How we report our Data



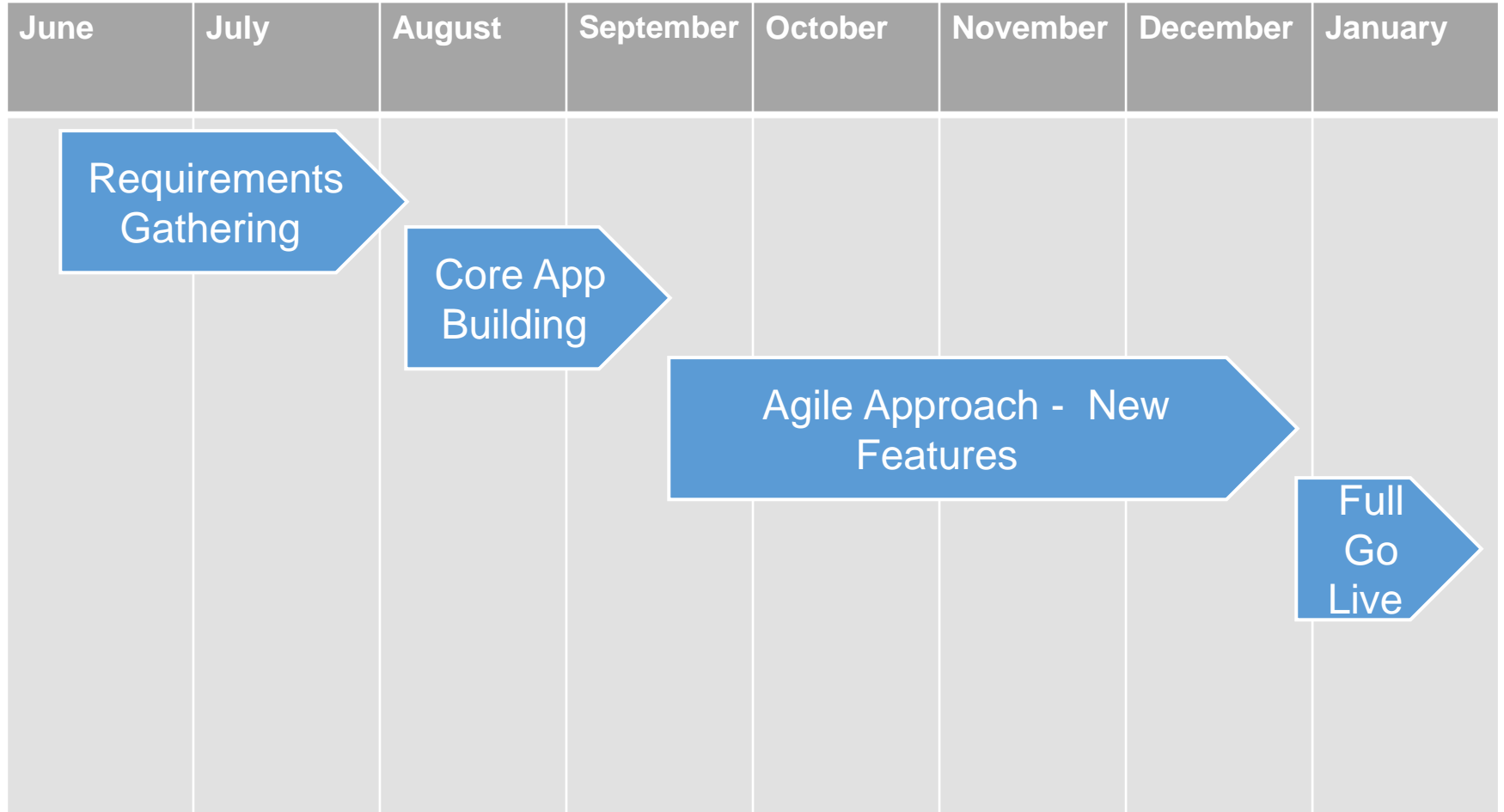
Where Our Data Is Stored

\$\$

How we Add/Change Out Data



Project Plan POPAPP



Working with an Agile Approach

- Built the Core of the App in a Month (build the database and set up main screens)
- Then worked with the Staff team to learn and change the App over four months
 - The team consists of 8 staff who had been working on the old application for 3 to 27 Years
- Staff were encouraged to send feedback ongoing about their experiences with the APP
- Staff could access POPAPP from their computer and new Tablets

POPAPP
Created: 08/22/2017 Modified: 01/26/2018

Details • Share • Versions • Settings • Analytics (preview)

PowerApps keeps a version history of your apps.

VERSION	MODIFIED	MODIFIED BY	POWERAPPS RELEASE	PUBLISHED	COMMENT
141	1/26/2018, 11:33:30 AM	Rebecca Heersink	2.0.750	Live	Restore
140	1/23/2018, 3:13:00 PM	Rebecca Heersink	2.0.750		Restore
139	1/18/2018, 1:12:19 PM	Rebecca Heersink	2.0.732		Restore
138	1/11/2018, 2:57:28 PM	Rebecca Heersink	2.0.732		Restore
137	1/11/2018, 1:24:54 PM	Rebecca Heersink	2.0.732		Restore
136	1/10/2018, 1:23:59 PM	Rebecca Heersink	2.0.732		Restore
135	12/14/2017, 9:22:04 AM	Rebecca Heersink	2.0.732		Restore
134	12/6/2017, 11:35:41 AM	Rebecca Heersink	2.0.722		Restore

POP Clients

ADD NEW CLIENT

Admin Page

Maria Johnston	Parent: John Johnston Follow Up	POP Worker: PeterTest SmithTest	>
test test	Parent: Active	POP Worker: PeterTest SmithTest	>

Find Client by Name

Filter Clients by Worker

PeterTest

View POP Workers

View Schools

Date of Birth	Gender
2/6/2010 7:00 PM	Female
School	Teacher Name
	Mr. Bob Thrasher
Street Address	Parent Cell Phone
30 Victoria Park	555-555-6667

PowerApps works and does not

- For programs in the community where:
 - They are unique and one of a kind
 - There isn't a best solution software on the market
 - Where the funding/reporting and database needs are always changing
- Where PowerApps is not a good solution
 - Better software exists where you can compare to your peers
 - More Complex database structures - Think over 20 Tables