

Max's Distinctive, Impressive BizTech Student Blog

Saturday, September 10, 2016

I did it! Check this OUT!

Ok, so I really, really wanted to impress my new “suit” friend/boss (Riley’s her name, BTW) and I wanted to make this the best app-for-tracking-pitches-to-VCs-&Angel-investors ever in the history of humanity annd...I did! (I think). So, my devoted followers, here’s everything I did to create my totally killer app & I’m listing it out step-by-step so you can follow along if you want to try it too.

But first, before you startup Salesforce, let me give you the gist of what I did and why so you know where this is going. So, to start out, I created what SF calls an “object”. (Most databases call them “tables” but SF likes to be different that way—sigh—we just accept and move on.) Objects, tables, whatever. Prof says they’re just a way to organize the data into what are like lists. And a big company might have tons of “lists” so keeping them as separate “objects” just makes it all easier to deal with.

Giants Scoreboard—lists of player data (boo Dodgers)

Prof says an object is like a box for holding data, a box with rows and columns, just like the list of players on the scoreboard at a Giant’s game, for example. We’re used to thinking of lists as bunches of the same kinds of things (players), where each row is one individual of that type of thing (eg. Buster Posey) and the columns tell different kinds of things about the things in the rows, (eg. Buster wears the number 28, plays the catcher position – “C”, batting average=.321).

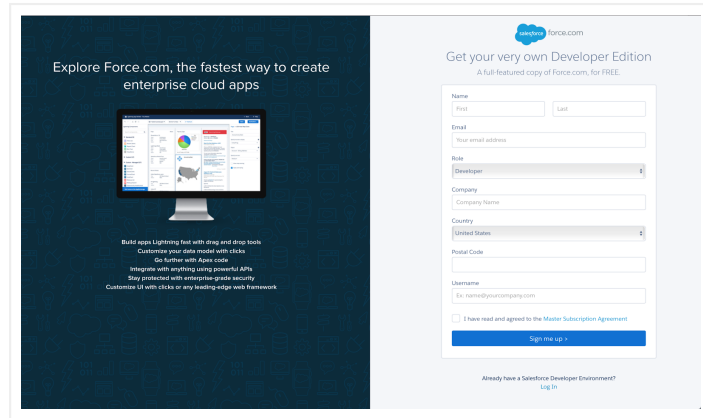
Well, objects are like lists of things you want to keep track of and when you create an object, you name it that way (like “players”). And the columns are called fields and you name them too (like “player name”, “position” & “batting average”, even though they don’t bother to put column headers on the scoreboard). The field names are like the column headers for a list. You can have as many fields as you want (almost) and you can name them whatever makes sense.

Besides telling SF the name of the field, you have to tell it the kind of stuff that will be going in there, like, is it numbers (how many digits, max, do you want?) or will it be text (like player names—how many letters, max?) or is it labels from a list (like position=“RF”, “LF”, “C”, “P”; there’s only 9 of them in baseball, case you’re not a fan). Telling the system this stuff helps it make the displays & reports look good and also helps it automatically keep some goofball from entering letters for the batting average, etc. that would mess up the database.

So, back to my app for Riley. She wanted to keep track of these “pitches” she’s going to be making where she tries to get potential investors, these VCs and Angels, to invest, hence I named my object “pitches.” (These are like sales pitches but for investing. Nothing to do with baseball—that Giants thing was just an example!)

SF comes already set up with a bunch of objects they created in advance to make it easy to use, as soon as you start, for selling stuff, if that’s what you want to do with it. Those are called “standard objects,” but you can always create your own “custom objects.” That’s what I did.

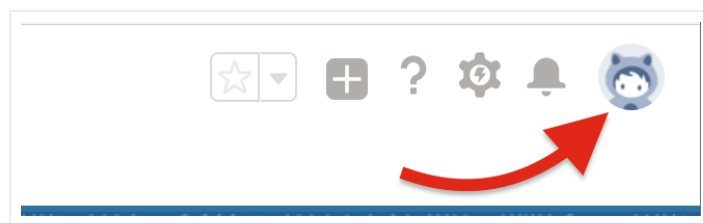
So now, get a SF account but do **NOT** get the the 30-day free trial account! It won’t work for this! Instead you have to go to <https://developer.salesforce.com/signup> and get the free, lifetime Salesforce “Developer Edition” (DE) account. The web page with the form should look like this:



On the signup page, enter your real name and use a real email address—one you can access—b/c they send you an email with the link to click on to set your password & get started. (Do **NOT** use a Yahoo, Hotmail or AOL account—they don’t play nice with SF! To be safe, create new a Gmail account to use just for this.) For “Company,” I just used “SJSU” but you can use anything.

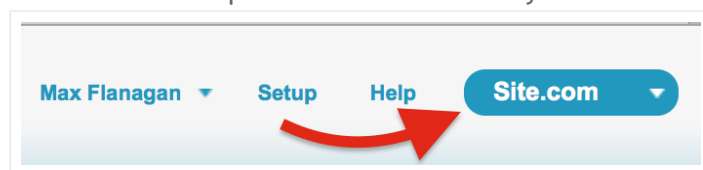
Check the email account you entered, find the “Welcome...Verify your account” message & click **VerifyAccount**. Follow the instructions to set your password & Voila—you’re logged in!

Now, don’t panic! There’s a lot of stuff, tons of links & all these tabs for contacts, campaigns & such. Probably useful someday when my company is actually selling stuff, but for now I wanted to keep it simple so I just clicked on the goofy round character (profile) icon at the top right corner next to the bell:



and, then in the popup window, under **Options**, I clicked **Switch to Salesforce Classic**.

That brings up a simpler screen with a feed where you could post & share messages, a calendar, etc. But for now, just click on the blue pull-down menu that says **Site.com** at the top right corner:

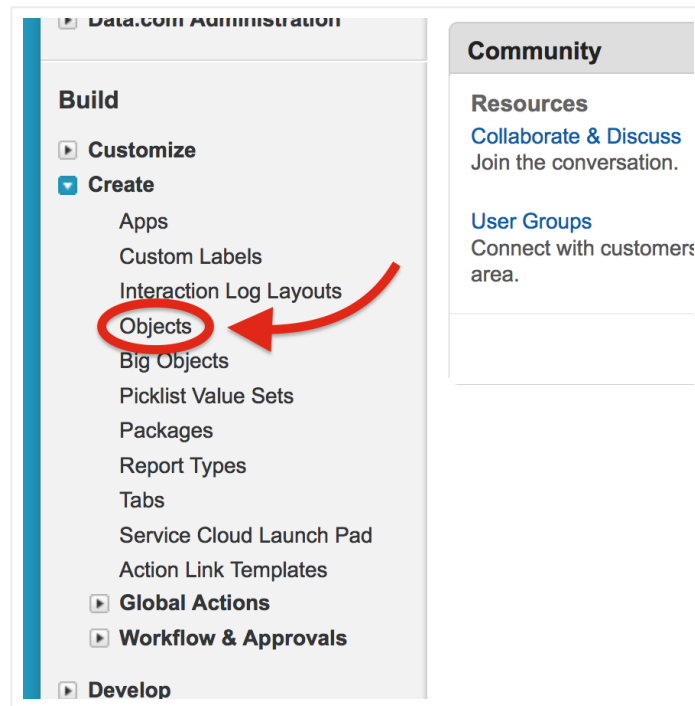


and select **Marketing** instead. And you can kill the banner ad for the mobile apps—just to clean up.

Now you're set! You can just follow along with how I figured out how to build an SF object (table) & the fields (columns) I would need for my app for Riley. (If a little yellow popups appear asking you to take a tour, just ignore. I'm your tour guide! Same for any yellow update popups, etc. Blah.)

So first, I decided I needed a record for every pitch Riley made (the "please invest in my company" kind of pitch, NOT the baseball kind). SF doesn't have a Pitch object already built-in ("out of the box") so I had to create my own, a custom object, which I creatively named "Pitch":

1. I clicked **Setup** (upper right next to your name)
2. Then under **Build** (on the lefthand vertical menu), I clicked **Create** and then **Objects** that appeared below it. (You may have to scroll down the page.)



3. Then I clicked the **New Custom Object** button in the center

Then to name my new object, I set this stuff:

4. for **Label**, I entered "Pitch" (don't type the quote marks—just showing you stuff you type)
5. for **Plural Label**, "Pitches"
6. Then I skipped down to **Record Name** under **Enter Record Name Label and Format**

Now **records** are just the individual rows of data that go together for one instance of the kind of thing you're tracking (eg. "Buster Posey," "C", ".321" all would go together as a baseball player record). And Prof says you want some kind of record ID—some field that'll have a different value for every record, just to help keep them all straight. Sometimes you can just use names or Social Security Numbers or such but I know Riley won't be getting investor's SSNs so that won't work.

Turns out SF has a built-in way to create record IDs automatically and the **Record Name** settings are where you do that. You just have to tell SF how you want you want them numbered and how you want the IDs to look. Try the settings I used:

7. For **Record Name** enter "Pitch ID" (if it was filled already, just type over it)
8. Use the **Data Type** drop-down menu to select **Auto Number**

9. In the **Display Format** textbox that opens up enter “P-{000}” (tells SF to make the IDs look like “P-027” and such; good enough to handle a thousand investors—plenty, but be sure to include the braces!)
10. For **Starting Number** enter the number 0 (not the letter “O”)
11. I checked **Allow Reports** in case I wanted to try that out later
12. Then I skipped down to the bottom and clicked **Save**

That gave me a massive page about my new custom object, **Pitch**. I could see SF had created some fields for me: **Created By**, **Last Modified By**, **Owner** and **Pitch ID**. I think those are built-in, what they call “standard fields” in SF. Whatever. I ignored those and just focused on creating the fields for Riley to use. You guessed it—the “custom fields”:

13. I scrolled down to the **Custom Fields & Relationships** section & clicked on **New**

Here’s where I had to tell SF about each field I wanted to add, eg. what would be the name (like the column header) and what type of data would be going in there, how many letters or numbers to plan on, etc.

So first off, I knew for every pitch she’s making, she would want to record the name of the business, e.g. the VC firm, that she’s making that pitch to. For each of these businesses, the name would just be text so:

14. For **Data Type**, I scrolled down to find **Text** & clicked the circle (“radio button”) to select it
15. Then I scrolled down to the bottom and clicked **Next** to go on
16. For **Field Label**, I entered “Business Name” and when I hit my tab key to go to the next slot, SF automatically filled in the **Field Name** slot with “Business_Name” (adding the underscore)
17. For **Length**, I put in the number 40 (figured that should be enough for any business name)
18. I clicked **Required** (to make sure every pitch record will at least include the business’ name)
19. Then, I scrolled on down and clicked **Next**
20. That gave me a **Step 3** screen about **Field Level Security** which I ignored & just scrolled down to click **Next** again
21. Then I got a **Step 4** screen about layouts, ignored that stuff again and clicked **Save & New** to start again with the next field to add

(BTW, as I was adding these fields, I messed up a couple of times and got lost & I kind of panicked. But it turns out, it’s ok b/c if that happens, all the stuff you saved is still there and you can just get back into adding fields again, just like before, to finish off. No worries.)

Anyway...it was time for another custom field. This time I wanted to add a field to say what kind of investor was being pitched—a VC or an “angel.” Since there were only two possible values to fill in for this field, I found a data type, “Picklist” that would let me set up a list for Riley to choose from for that field so she wouldn’t have to type it out each time:

22. This time, for **Data Type**, I selected **Picklist** (not Multi) & then clicked **Next** like before
23. For **Field Label**, I entered “Type” (to save which type, VC or Angel, for each **Pitch**)
24. Then, just below **Field Label**, next to **Values**, I clicked the **Enter values, with each value separated by a new line.** option & that opened a textbox where I typed “VC” on the 1st line & then hit **Enter** & typed “Angel” on the 2nd line
25. Then, like before I clicked **Next**, then **Next** again and then **Save & New** to add another field

I figured she would want to record the name of her contact at that company, of course, and a single field would do (no need to make any more **Required**, like I did for **Business Name**):

26. For **Data Type**, I selected **Text** & clicked **Next**
27. For **Field Label**, I entered “Contact Name”
28. **Length**: 30
29. Then, like before I clicked **Next**, then **Next** again and then **Save & New** to add another field

Obviously, she would want to keep track of the contact info for her contact at each business she’s pitching and fortunately, SF has a special data type that formats phone number like it should, automatically. So I created another new field this way:

30. **Data Type**: Phone
31. **Next**
32. **Field Label**: “Mobile”
33. **Next, Next, Save & New**

Then, turns out there’s special data type for email address fields too, so:

34. **Data Type**: Email
35. **Next**
36. **Field Label**: “Email” (less typing than “Email Address” & the “Address” part is obvious)
37. **Next, Next, Save & New**

Then, I remembered, at each company she pitched, she wanted to keep track of the dollar amount that they discussed possibly investing. I knew I could put that in a text field but then I realized she might want to do something with the number values later on. Like she might want to add up the total amount for all pitches or display all the pitches that talked about amounts over \$200k or something. I remember Prof said if you type numbers into a text field, then they’re just like letters, etc.—you can’t do math on them. So I looked for a good number-based option to use and found SF has a currency field type. Made it big enough for multi-million deals (hah), just in case:

38. **Data Type**: Currency
39. **Next**
40. **Field Label**: “Investment Amount”
41. **Length**: 12
42. **Decimal places**: 2
43. **Next, Next, Save & New**

And I knew since they were talking about the amount they might invest, then they would also be talking about the percentage of equity (remember that’s the share of ownership they get for their investment) so I added:

44. **Data Type**: Percent
45. **Next**
46. **Field Label**: “Equity Percentage”
47. **Length**: 3
48. **Decimal places**: 1
49. **Next, Next, Save & New**

In another flash of brilliance, it occurred to me that the date of the pitch might be important & there's a built-in date type for just such occasions:

- 50. **Data Type:** Date
- 51. **Next**
- 52. **Field Label:** "Pitch Date"
- 53. **Next, Next, Save & New**

I guessed she would want to keep track of a date to follow up with them after the initial meeting too so I added:

- 54. **Data Type:** Date
- 55. **Next**
- 56. **Field Label:** "Follow Up"
- 57. **Next, Next, Save & New**

And she'd said she wanted to be able to type in a few personal comments on each business, to remind her how things went. Looking at the data type options, "Text Area (Long)" and "Text Area (Rich)" seemed like overkill. But plain old "Text Area" with its 255 characters seemed just right.

- 58. **Data Type:** Text Area
- 59. **Next**
- 60. **Field Label:** "Comments"
- 61. **Next, Next** and then...WAIT!!!—**NOT Save & New** this time (b/c I was done with adding fields)—just plain **Save** this time

Ok, that wasn't bad. A custom object (table) with a bunch of custom fields (columns) of all different types and it took...only a few. I was stoked! Then it was like, ok what else do I need to make it an app—something that's useful and usable to do stuff?

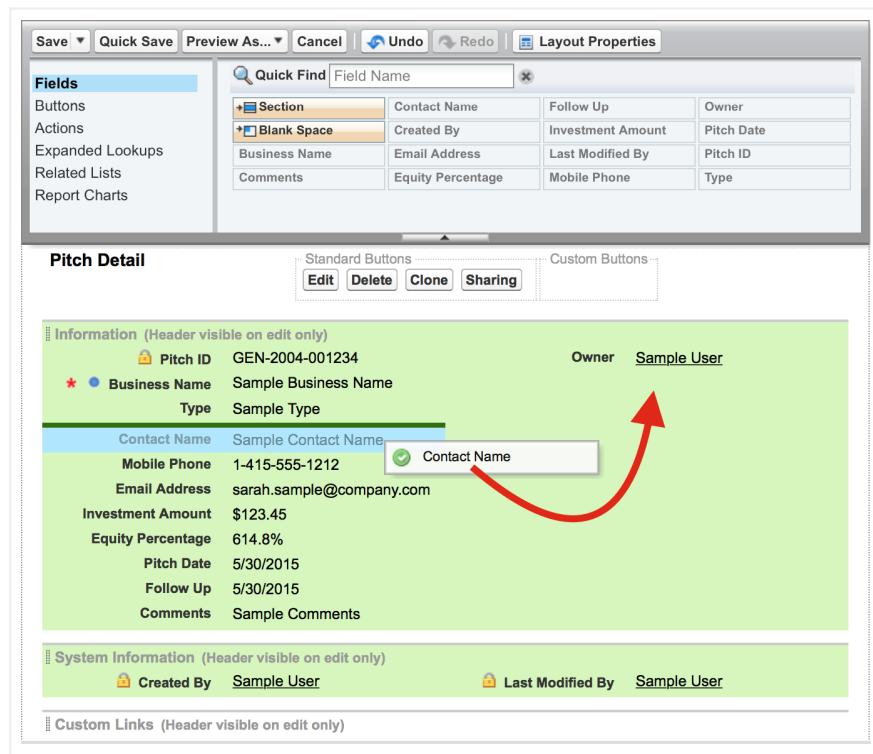
Well, I knew she'd need a data entry screen and voila—I just scrolled down on the **Pitch** custom object page, and found a section called **Page Layouts**. SF already created one for me called, amazingly, **Pitch Layout**. Sweet. Ok, then I tried editing it to make sure it would look nice:

- 62. I clicked on **Edit** just to the left of the **Pitch Layout** name, under **Action**



So that brought up this page with a toolbar at the top. Then I scrolled down and found a section labelled **Pitch Detail** with a sample mock up of a basic entry screen below. I saw little lock icons next to those system-generated fields, like **Pitch ID**, and next to **Business Name** there was a red star b/c I made it required and blue dot that means it always has to be on the layout. Totally got it.

But I wanted to see if I could make it look a little better and this was cool—when I put the cursor over a field, it changed to a four-directional arrow and made some of the background area green and it let me drag and drop the field to wherever I wanted on the green area to change the layout:



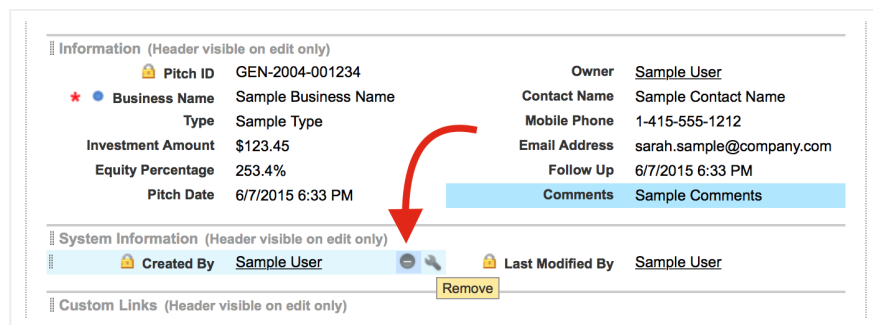
So:

63. I pressed down & held on the **Contact Name** field to drag it over to the right hand column under **Owner** and then I let go & it stuck there!
64. I did the same to drag **Mobile** under **Contact Name**
65. Then I dragged **Email** under **Mobile**
66. Next I dragged **Follow Up** under **Email**
67. And finally, I dragged **Comments** under **Follow Up**

Now, whenever Riley would view a record or enter a new one, the screen layout would have this nice 2-column look with the stuff she needed for the next meeting grouped together on the right.

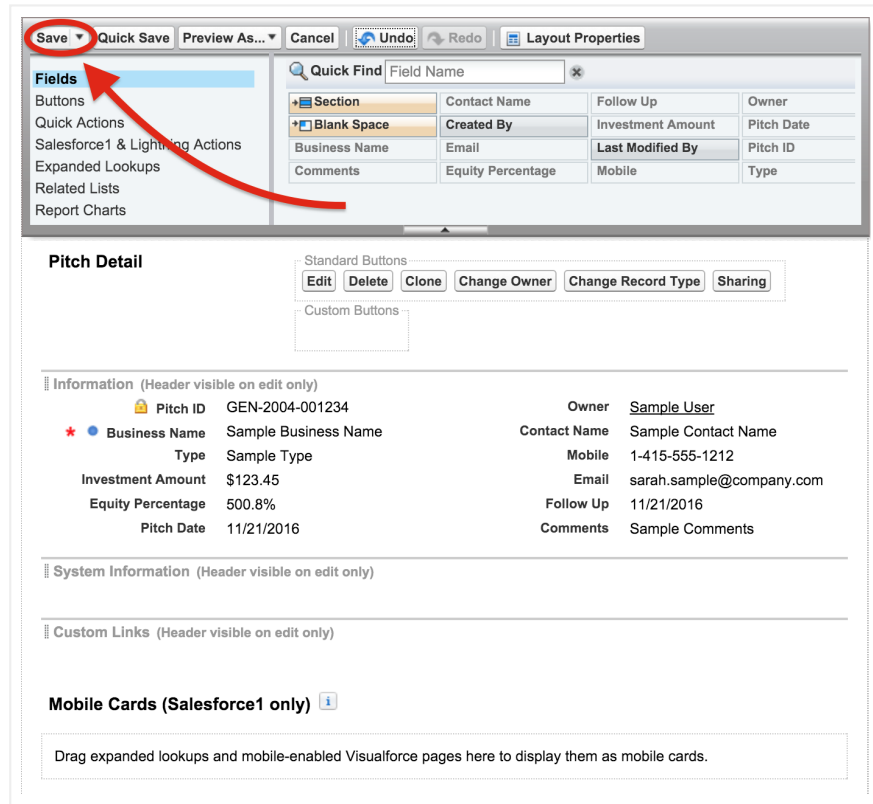
I also wanted to hide the system stuff that Riley wouldn't need—**Created By** & **Last Modified By**—so it would look cleaner to her. Turns out it's easy. Try it. Don't worry, it's ok. Promise!

68. I rolled the cursor arrow over the **Created By** field, just below **Pitch Date** and a little circle with a minus sign (-) inside appeared next to a little wrench
69. When I touched the little circle with the minus sign inside, a **Remove** label popped up to show me what it does—I went ahead and clicked the circle to take that field out of the layout



70. I did the same thing (Steps 68 & 69) for **Last Modified By** (under **Comments**)

71. Then, to save the layout changes, I clicked the **Save** button on the top left of that top toolbar:



Better. Good enough. I knew I could always polish it up more later.

Then I was like, how do I try it out? How do I add data? Then I remembered the tutorial I did before—I'd created a tab for doing this very thing—up there on the row with the **Home**, **Chatter**, **Campaigns**, etc tabs. So then I tried making a tab for **Pitches**:

72. I clicked on **Create** (back on the left hand vertical menu, under **Build**)

73. I selected **Tabs** under that

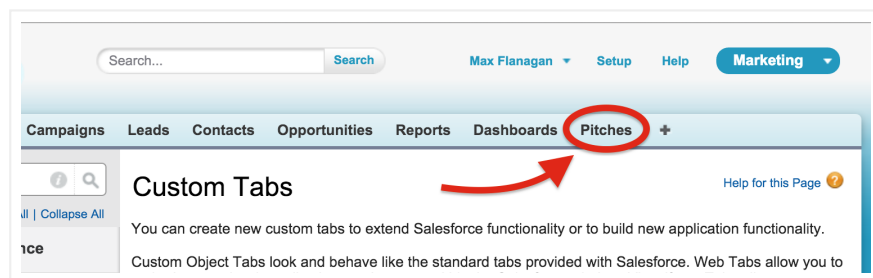
74. In the **Custom Object Tabs** section, I clicked on the **New** button

75. For **Object**, I selected **Pitch**

76. For **Tab Style**, I clicked on the magnifying glass & selected an icon/color to use. I chose the treasure chest (hehe) but you can choose whatever

77. **Next, Next, Save**

and there it was at the far right of my tab bar (the light blue bar just below the dark blue banner at the top) next to the row with **Home**, **Chatter**, **Campaigns**, etc:



78. Then, I clicked on my new **Pitches** tab

79. Then, I clicked on the **New** button in the center

80. Then, I entered some fake data for each field and clicked **Save**—there was my first record!

Pitch Detail		Edit Delete Clone	
Pitch ID	P-000	Owner	Max Flanagan [Change]
Business Name	Soaring Eagle, Inc	Contact Name	Chi Wang
Type	Angel	Mobile	(650) 398-9741
Investment Amount	\$500,000.00	Email	inchargeintime1975@hotmail.com
Equity Percentage	33.3%	Follow Up	9/30/2016
Pitch Date	9/21/2016	Comments	Nice guy but skeptical

Edit | Delete | Clone

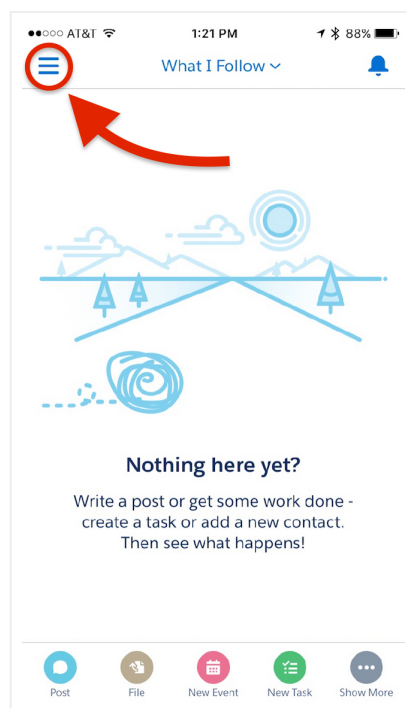
1

81. Now use the **Pitch** tab and **New** button again (just like above) to add three (3) more **Pitch** records with different fake data (just make up stuff) so you end up with least two (2) different VC firms and 2 angels. We only made **Business Name** required, remember, that's why there's that red bar in that slot. But you should fill in every slot anyway just so they'll all look like real, complete records. For **Investment Amount** use numbers between \$20,000 and \$750,000. For **Equity Percentage** use values between 5.0% and 90.0%.

Notice you can enter bad phone numbers, like with letters, but it blocks you from entering an email address in the wrong format. As long as the format's right though, it takes it, even if it's not a real, working address. Try other fields to see what mistakes SF will/won't block automatically for you.

So next, I wanted to try out the mobile app on my iPhone to see if I could view the records I'd entered and even add a new pitch record that way, like Riley would. If you have a mobile, install the free **Salesforce** app (Google Play/iTunes), open it up (same login), click **Allow** & follow along.

82. So, on my iPhone, I tapped the little 3-bar "hamburger" menu icon on the upper left



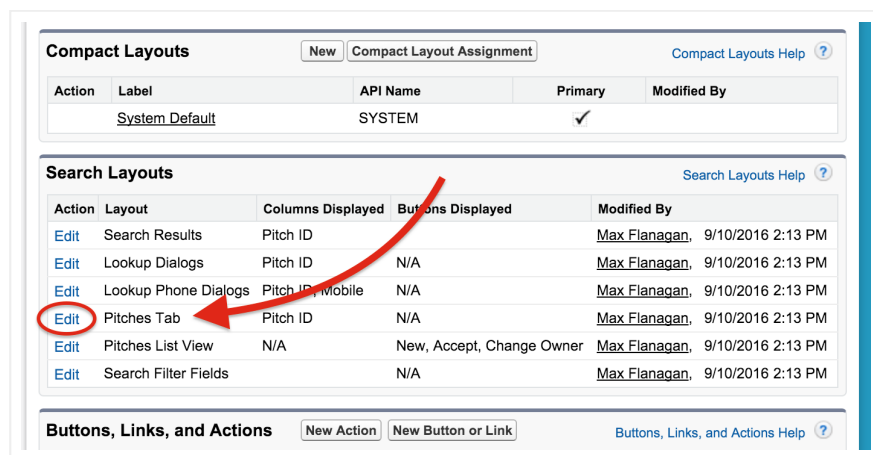
83. Then, it showed me a menu of labelled icons & I had to scroll down and then tap ... **More** to see the **Pitches** tab I'd created
84. I clicked on it and...voila—I saw the list of **Pitch IDs** for the pitch records that I'd just added on my laptop!
85. But all I could see in the list was the ID numbers. I clicked on one and I saw all the info that I had just entered for that record

The mobile version looked a little different than it did on my laptop. Instead of my nice two-column layout, the fields were just in a single column. I had to scroll down to see all the data. Anyway, did it really work as a mobile app?

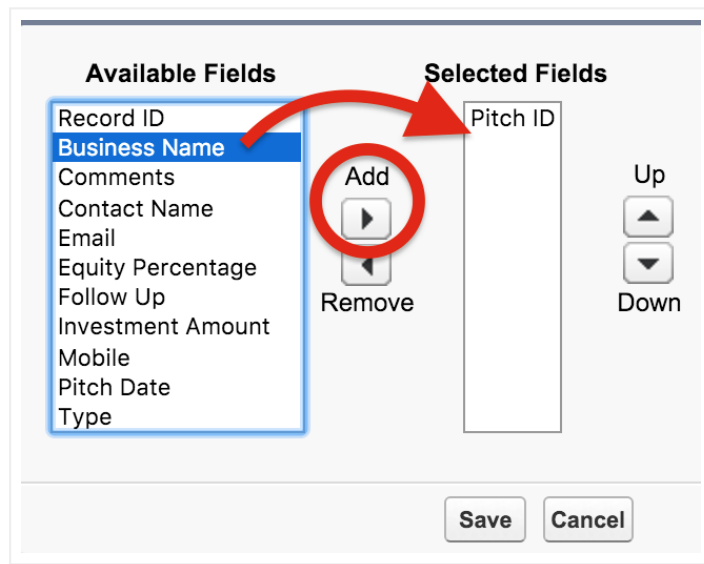
86. At the bottom right corner, I tapped on the blue circle icon with the ... to find the **Edit** button (turquoise pencil icon). When I tapped that, it let me touch the field values and change them however I wanted.
87. Then after I tapped **Save**, I went back to my laptop, used the **Pitches** tab and clicked on the **Pitch ID** number of the record I had just edited and...I could see the changes there right away. This cloud thing is awesome! (You might have to use your browser's refresh function to see the update.)
88. Back on my phone, I tapped the left arrow at the top left (Androids, use your back buttons) to get back to the screen listing the **Pitch IDs** and I tried out the **New** button at the upper right corner
89. I filled in the fields and clicked **Save** (top right) to create a new **Pitch** record which then showed up, as expected, on my laptop. This was actually turning out to be *fun*. (Don't tell anyone I said that.)

So, last step - I still wanted the **Pitches** tab on my laptop and on my mobile app to show more than just the IDs when you click on **Pitches**, so I went back to my laptop and found a way to do it:

90. I clicked on **Setup**
91. I clicked **Create** on the left side menu
92. I selected **Objects**
93. From the list of **Custom Objects**, I clicked on **Pitch**
94. I scrolled down to the **Search Layouts** section



95. I clicked **Edit** next to the row for **Pitches Tab**
96. In the **Available Fields** listbox, I clicked on **Business Name** & then clicked the arrow under **Add** to move it over to the **Selected Fields** listbox (see pic below)



97. I did the same for **Type**, **Investment Amount** and **Equity Percentage**

98. I clicked the **Save** button

99. Finally, I repeated **Steps 95-98** for the **Lookup Dialogs** layout that's also there in the **Search Layouts** section

Search Layouts Search Layouts Help ?				
Action	Layout	Columns Displayed	Buttons Displayed	Modified By
Edit	Search Results	Pitch ID		Max Flanagan, 9/10/2016 2:13 PM
Edit	Lookup Dialogs	Pitch ID	N/A	Max Flanagan, 9/10/2016 2:13 PM
Edit	Lookup Phone Dialogs	Pitch ID, Mobile	N/A	Max Flanagan, 9/10/2016 2:13 PM
Edit	Pitches Tab	Pitch ID, Business Name, Type, Investment Amount, Equity Percentage	N/A	Max Flanagan, 9/10/2016 5:17 PM
Edit	Pitches List View	N/A	New, Accept, Change Owner	Max Flanagan, 9/10/2016 2:13 PM
Edit	Search Filter Fields		N/A	Max Flanagan, 9/10/2016 2:13 PM

100. Then, when I went back to the **Pitches** tab on my laptop—again (like after Step 78), much better! I could see rows and columns of actual data—looked like a real table.

Pitches Home Help for this Page ?

View: All Go! [Edit](#) | [Create New View](#)

Recent Pitches New Recently Viewed

Pitch ID	Business Name	Type	Investment Amount	Equity Percentage
P-004	Smart Technology Investment Partners	VC	\$80,000.00	8.5
P-003	Net Wealth Leverage Associates	VC	\$450,000.00	18.0
P-002	Silicon Valley Extreme Venture	VC	\$360,000.00	12.0
P-001	Engell & Associates	Angel	\$200,000.00	25.0
P-000	Soaring Eagle, Inc	Angel	\$500,000.00	33.3

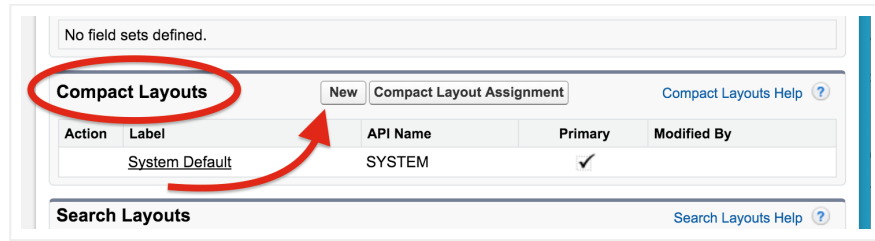
My phone view was better too. The **Business Names** showed up with the **Pitch IDs** so Riley could choose one by name. Way better. Check it out for yourself.

But then, when I clicked on one to open it up, the fields were still listed in one column. :(Turns out that's just because of the lack of screen "real estate" on a phone—when I tried it on an iPad, with the larger screen, the two-column layout worked fine, just like the laptop.

Still, I wanted to add a little more polish before I took a break so I tried this "Compact Layouts" feature that I'd noticed on the Pitch object definitions page. I guessed it was for setting up layouts for small displays, eg, phones, etc. I guessed right:

101. I got back to the Pitch object definitions page (Setup > Create > Objects > Pitch)

102. Scrolled down to the Compact Layouts section and clicked New



103. For Label, I entered "Pitch Essentials for Phone"

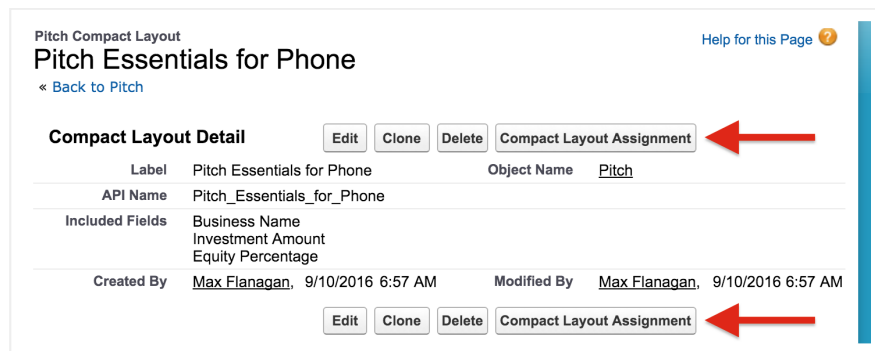
104. When I tabbed, the Name field auto-populated with "Pitch_Essentials_for_Phone"

105. Then under Available Fields listbox, I highlighted Business Name and clicked the Add button to move it over to the Selected Fields listbox

106. Then I did the same for Investment Amount and Equity Percentage since those are the key things to know for each pitch

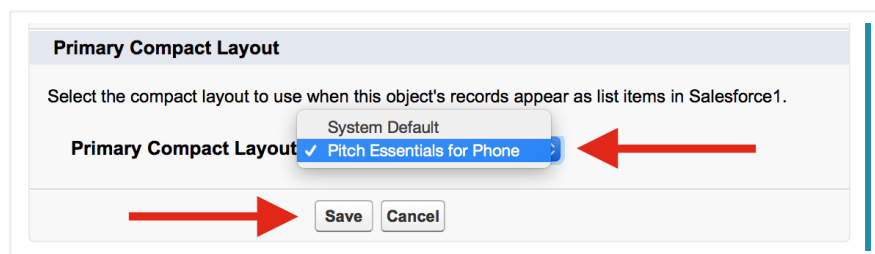
107. Then I clicked Save

108. On the next page that came up, I clicked Compact Layout Assignment



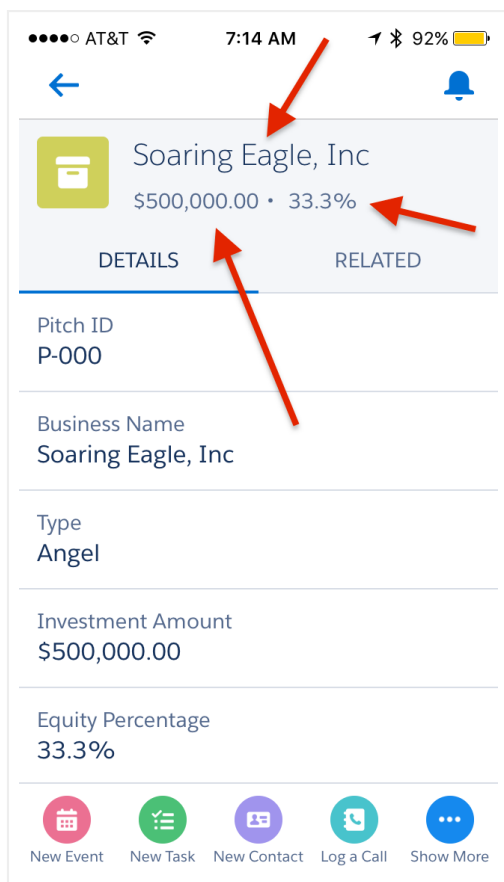
109. Then on the next page, I clicked Edit Assignment

110. For the Primary Compact Layout pull-down menu, I selected the layout I'd named Pitch Essentials for Phone



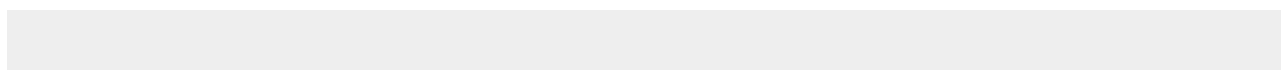
111. Then Save

Then, when I went to my iPhone and clicked on a specific pitch, behold—there was a nice header at the top of that pitch’s screen, showing the **Business Name**, **Investment Amount** and **Equity Percentage**. Seriously, *undeniably*, sweet!



Starting to look like a real app—something someone could actually do something...useful with. I thought about Riley sitting in her car, with her phone, in front of some big shot VC company, adding her comments about how the big pitch meeting went, using MY mobile app! Now *THAT'S* pretty dang distinctive & impressive, you have to admit.

So, in just over an hour, I created a working database app with mobile update & lookup capability and I *swear* I'm not a geek but...I'm uber-amped. It's just...I guess love making this stuff work and SF makes it easy. Plus, Riley's going to be so blown away. (I hope). Stay tuned...



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