Business Systems Innovation Labs
Lab 2a Pre-flight Checklist

"No Sh**, Sherlock—The Case of the Lost Integrity"

Halloween's on the way & Max is back with another episode & a scary-weird data mystery to solve.

Prep: Get ready

- ☑ **Before you start this lab**, be sure you scored your work from the previous one (1b) in the grader app.
- ☑ If you didn't do **Lab 1a** & **1b**, NP—just follow **Lab 1a** (pg 2) to get your SF account, then do **Steps 5-36** of **Lab 1b** and you're good to go for **2a**.
- ☑ If you didn't get the **Average Amount & Equity by Type** report created successfully in **Lab 1b**, np. When you hit **Step 52** below, just refer to the embedded screencap showing the report.

Learning Objectives: What to "get"

- ☑ Realize how devastating errors in data can be & learn one way we strive to prevent them.
- ☑ See how duplicate data (redundancy) threatens system integrity ("truth").
- ☑ Get a feel for working with users to understand them & build to their needs.
- ☑ Get how systems must be *evolved,* like living things, to adapt as the business environment changes.
- ☑ Recognize *there's an underlying logical structure* to a database (the data model) and it better match up to how users think of the data (their mental model) if you want the apps to work right for them.

Checkpoints: Get points

When you reach these checkpoints in the lab, make sure your screen matches the screencap shown there. If not, fix whatever's wrong before going on. It's a good idea to run the grader app at every checkpoint, so you can see any mistakes so far & how to fix them. (Just ignore errors about steps you haven't done yet.) **But be sure to run the grader app at the end of the lab, at least, before going on to the next one so you don't lose your work!** (See https://www.maxzplace.com/grader-info for grader app installation/info.)

1 After **Step 17**, you should see the **Pitch** details screen with an error message displayed next to the **Equity Percentage** field where you tried to enter a number over 100. (15 pts)

2 After **Step 51**, you should be viewing the **Seeing Triple** view you created and just the three records you entered for **Spray & Pray Ventures**. (30 pts)

3 After **Step 113**, you should be seeing the **Pitch** details for 3rd meeting w/**Spray & Pray Ventures** ($800,000, 35%), along with a list of the three meetings that go with it. (55 pts)

Tips: Get more

Learning a bit about Salesforce is great but you have to read Max's thinking to get the "why's" & "how's" behind tech's power to enable & transform business, so please do read the stuff between the steps. Thx!

Resources: Get help

Stuck? **DON'T TRY TO UNDO/REDO THE WHOLE LAB**—that can make things worse! Instead, look for a fast fix, 24/7, at the Help FAQ at MaxzPlace. No luck? Then post to the Help Forum there to get answers ASAP!

Max's Distinctive, Impressive BizTech Student Blog

Friday, October 7, 2019

No Sh**, Sherlock - The Case of the Lost Integrity

So, I've got a story for you—a mystery, actually. Turned out my killer app needed…some help. As of today, it's fixed and it really *is* pretty killer now, but fixing it killed me, almost. I survived, but not the M&M's. They were supposed to be for the trick-or-treaters, but I got tricked, so treats were in order! Check this out…

Seeking Validation

It started out with the smallest thing. Riley was doing her stuff, pitching investors, using my app… I was helping her out more & more with all kinds of stuff. Life was good. Until one day, I went back into SF, just browsing the database to make sure all was well & I found a **Pitch** record with an **Equity Percentage** of 125%.

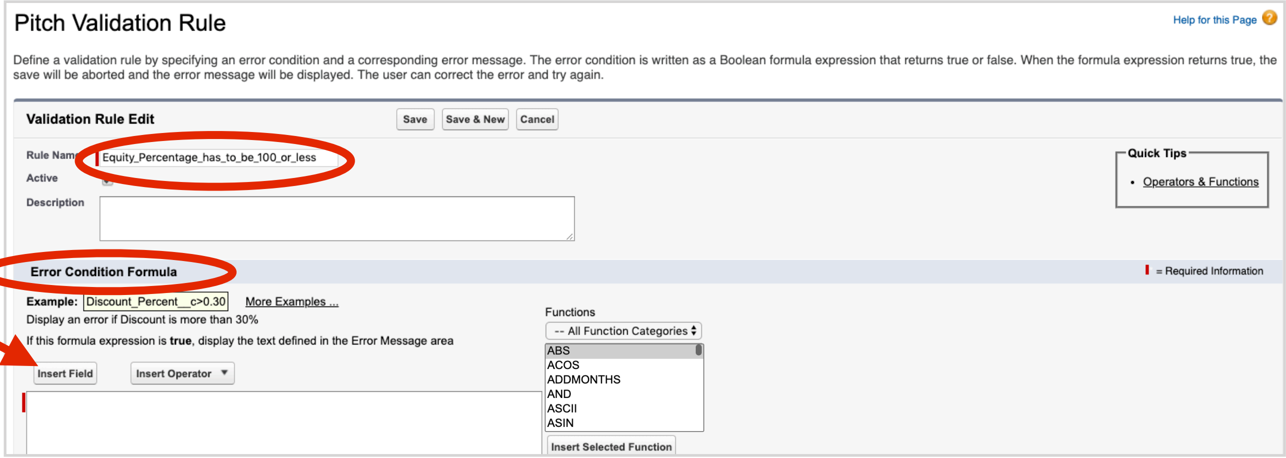
So, I'm not exactly a math wiz but–percentages? Pretty sure those are not supposed to run over 100. Sorry, Coach Debbie (8th grade soccer).

So, I tracked down Riley & turned out she had just mistyped it. It was supposed to be 12**.**5% but it had been embedded there in the data awhile, probably throwing off reports, dashboards, etc and thereby throwing off Riley's strategic moves. Rats! I fixed it, but then I thought...*there must be something in SF that helps keep wrong data from getting in there bc data mistakes like that could really <bleep> things up.*

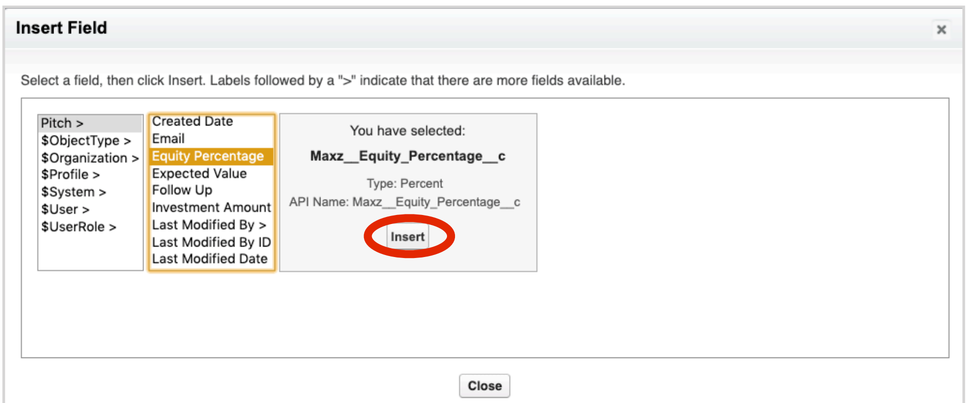
It took some extensive Googling, but I finally found it—validation rules:

1. Click the trusty old **Setup** gear icon on the top right & click **Setup** and then, on the lefthand menu, under **PLATFORM TOOLS**, click **Objects & Fields** and then **Object Manager**, under that
2. Scroll down and find **Pitch** & click it
3. On the lefthand menu, click on **Validation Rules** at the bottom and then, in the new panel that comes up, click **New** on the upper right
4. Set **Rule Name** = "Equity Percentage has to be 100 or less"
5. Look down under **Error Condition Formula**—that's where you tell what condition should trigger an error message and stop the user from adding the bad data

6. Click **Insert Field**

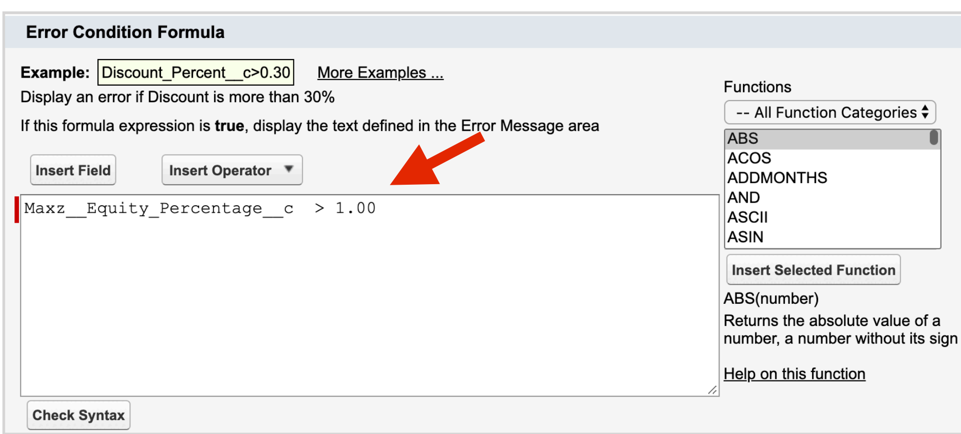


7. That should bring up a dialog box with two picklists. On the left one, **Pitch >** should be selected/ highlighted already. That brings up **Pitch** fields on the right, so you can choose the one you want to make the rule about.
8. Pick **Equity Percentage** and you'll see a box pop up confirming your choice
9. Click **Insert**

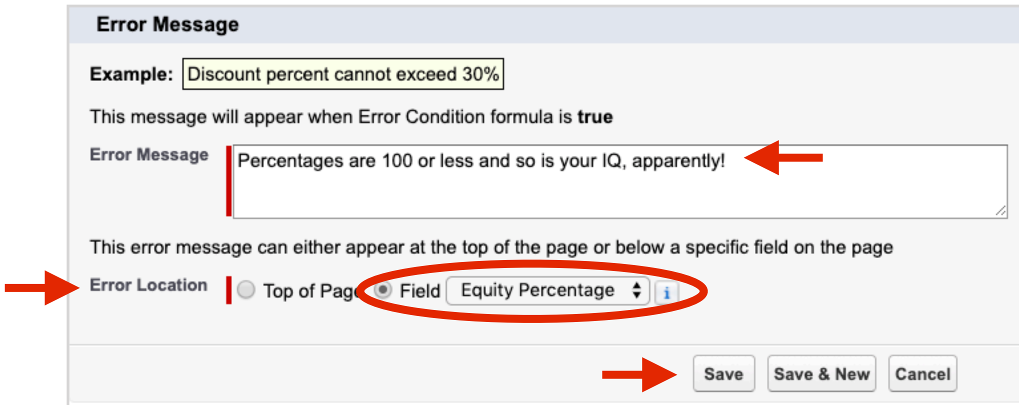


10. Now back on the big empty formula text box SF should've inserted **Maxz__Equity_Percentage__c** in there for you (that's how SF refers to it internally)
11. Now you can click on **Insert Operator** to drop down a menu and select **> Greater Than** and SF inserts the symbol into the formula box for you
12. Now you have to type for yourself, sorry—just the number "1.00" is all you need—that's 100%, mathematically speaking

So it should read "**Maxz__Equity_Percentage__c > 1.00**" when you're done. (Click **Check Syntax,** just below the text box, to make sure you got it right–it should say "No errors found")



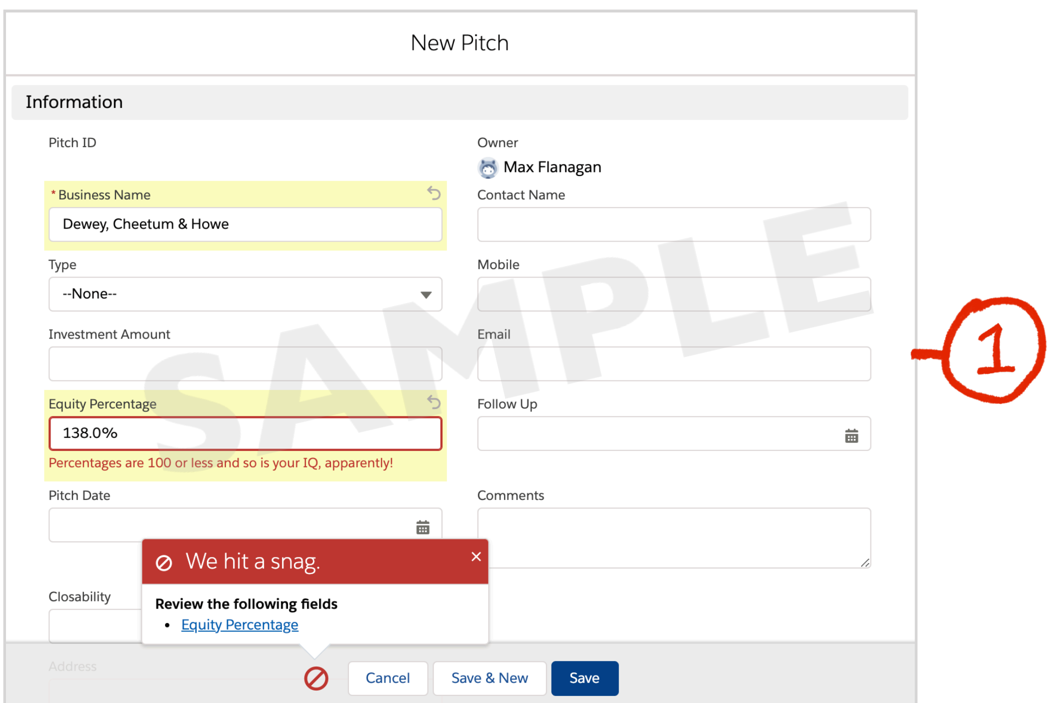
13. Now skip down to the **Error Message** text box and enter something cheeky like "Percentages are 100 or less and so is your IQ, apparently!" (For Riley, I did NOT enter that.)
14. Finally, find **Error Location** at the very bottom & select **Field** to bring up a new drop-down menu
15. Pick **Equity Percentage** so the error message will appear right there, next to the bad value, when a user tries to enter it.



16. Click **Save**

Now try it out to make sure it's working:

17. Use the **App Launcher** again to go to the **Marketing** app and hit your **Pitches** tab and click **New** and then make up something to fill in for **Business Name** & ignore the other fields but enter a number over 100 for **Equity Percentage** and click **Save**



Cool, right? Doesn't block every kind of mistake but it helps, at least. (You could add another rule to keep out percentages less than zero but that feels like overkill—you'd have to be lame. Definitely not Riley.)

18. For now, just click **Cancel** to skip the edit once you're done admiring your work :-)

So, no more bad data, right? Yeah, that's what I thought, too. Calm before the storm, bc that's just when something weird caught my eye—two **Pitch** records with the same **Business Name**. I was like…come on, seriously? But yeah, same **Address** too. How is that even possible? No way she forgot and put in the same pitch twice. Then it *really* got weird.

The **Investment Amount** & **Equity Percentage** values were different. **Pitch Dates** and **Follow Up** dates too. But both had the same contact info, ie **First Name, Last Name, Mobile**, etc which, by now was plenty weird enough, but then it went astro-weird on me—the **Pitch Date** for one was the same as the **Follow Up** date for the other. I know!

I was like the dude in **Jaws**—"*This was no typing accident!*" Whatever this was, it went way beyond validation rules. Something was out there mangling my data. I didn't know it then, but I would soon find out—Killer Clones.

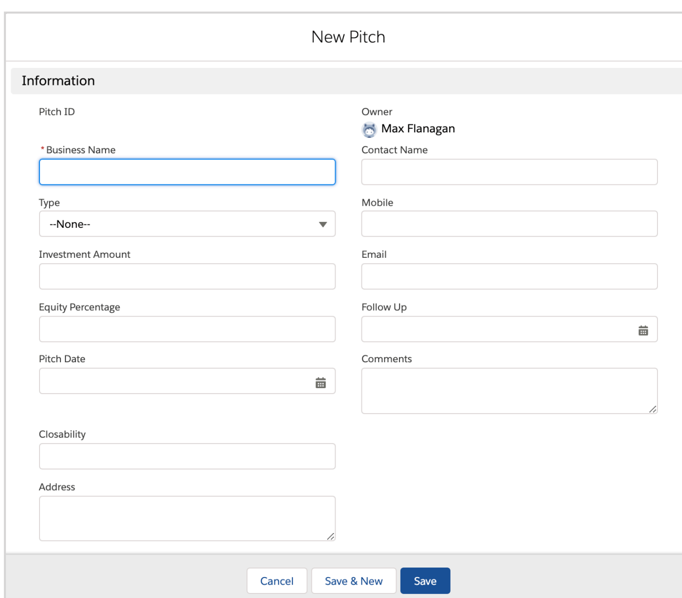
Data Redundancy (aka "Evil Twins")

So, I learned something new (the hard way)—turns out when you pitch an angel or VC firm, it takes awhile for them to warm up to giving you a bunch of their money (go figure!) and so you might have multiple meetings with them which (unfortunately) I hadn't really accounted for when setting things up (d'oh!). Thus, there was a moment, like in scary movies, when something hideous suddenly appears and you scream & have a heart attack. Except this was way worse. Ok, pretend you're Riley:

So today's 10/7/2019. You (Riley) just got out of your first meeting to pitch a VC firm named "Spray & Pray Ventures," located at 2870 Sand Hill Road, Palo Alto, CA 94304. You met with your contact there Julia Chavez (510-403-8995, julia.chavez1981@gmail.com). Your meeting notes say "She thinks it's worth considering at the $600,000 level (yay) for 30% equity, but she wants to see some more work on the revenue model." You agreed to meet with her again on the 21st. Based on the conversation, you estimate the Closability at 60%.

Now you're back in your car, you pull out your phone and you're creating the new record (but just use your laptop for now—it's easier):

19. Click on your **Pitches** tab and then click **New** to create a record for this new pitch that began with that first meeting today with Julia



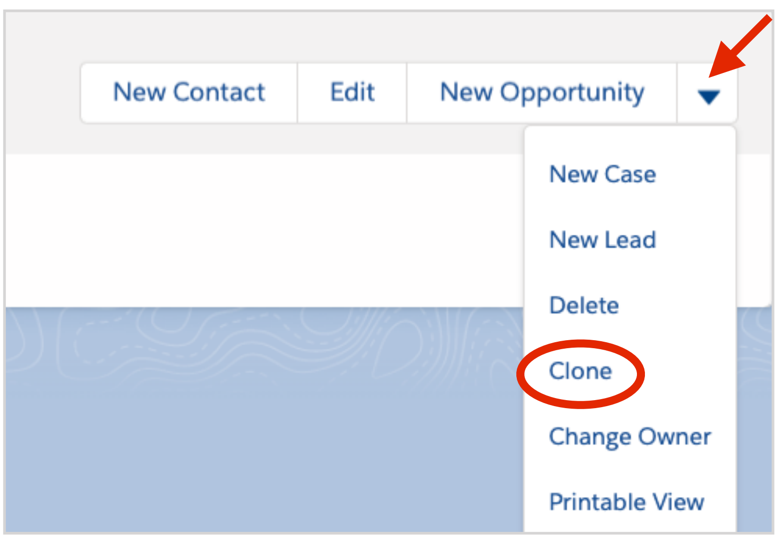
20. Fill in all the field values using the info from the paragraph above that describes the 10/7/2019 meeting with "Spray & Pray Ventures," just like Riley would, with "Julia Chavez" for the **Contact Name** (obviously) and her notes about "She thinks...the revenue model." as **Comments** (drag the diagonal lines in lower right corner of the **Comments** texbox to resize it) & the rest of the data
21. When all your data is in, click **Save** and then just stay on that **Pitch Detail** screen for now

Apparently, for some unknown reason, these investor-types like Julia seem to be all obsessed with business plans, especially the revenue model part (ie "*where is the revenue going to come from?"*) and Julia thought yours needed work so you got two weeks to fix it before the 2nd meeting.

Now today's the 21st, you just had your 2nd meeting. You showed Julia the new rev model & she liked it, but she's kinda snarky. She offered to up their investment to $750,000 but... now she says they want a 40% equity stake instead of 30%. Hey! That's 10% less for you to bargain to other investors (or for you to split on payday with your geeky co-founder someday). Maybe 10% doesn't seem like much now, but if your company gets bought out by Google someday for $500M, Spray's extra 10% is $50 million more for them & $50 million less for you, your co-founder & your other investors. Ouch! You tell them you'll need to discuss it with your co-founder & get back to them in about a week. You set a follow up meeting for 10/31/2019.

Meeting's over. Back in your car, you grab your phone to save your 2nd meeting info, fast—without typing in all the same stuff again. Wouldn't it be nice if you could just clone the one from the first meeting and then change a few things? Well you can!

22. Click the down-arrow next to **New Opportunity** on the upper right and hit **Clone**



What you see now is a new **Pitch** record identical to the one you made before and you can just change whatever:

23. Change **Pitch Date** to the pretend date for today, 10/21/2019
24. Change **Follow Up** to the pretend next week meeting date, 10/31/2019
25. Change **Investment Amount** and **Equity Percentage** to show the new current terms of the deal ($750,000 & 40%)
26. Raise **Closability** to 70%
27. For **Comments** enter "She liked the new revenue model, but now she's driving a hard bargain!"
28. Click **Save**

See *that's* how Riley wound up with two **Pitch** records for one firm. Should be fine, right? Uh…no.

Fast forward to 10/31. You clone the 2nd meeting record to make one for today's 3rd meeting:

29. Just like before, click the down-arrow next to **New Opportunity** and hit **Clone** again

In this 3rd meeting, you proposed another, even better revenue model fix (3rd version) along with better deal terms (for you), upping their investment to $800,000 and lowering their equity to 35%. Julia says they'll think it over and she wants another meeting on 11/15/2019. And BTW, they're moving their offices—the new address will be 455 Castro Ave, Mountain View, CA 94041.

Now edit your 3rd meeting record accordingly:

30. Change **Address** to the new "Mountain View" one shown above so it'll be up-to-date from now on
31. Change **Pitch Date** to 10/31/2019 (pretend today)
32. Change **Follow Up** to 11/15/2019 (next meeting date)
33. Enter the new current terms (**Investment Amount** = $800,000; **Equity Percentage** = 35%)
34. Lower **Closability** to 65% (because you're pushing back a little)
35. Set **Comments** to "Counter-offered her. Hah! Hope she doesn't call my bluff."
36. Click **Save**

Still good? Yeah, not so much.

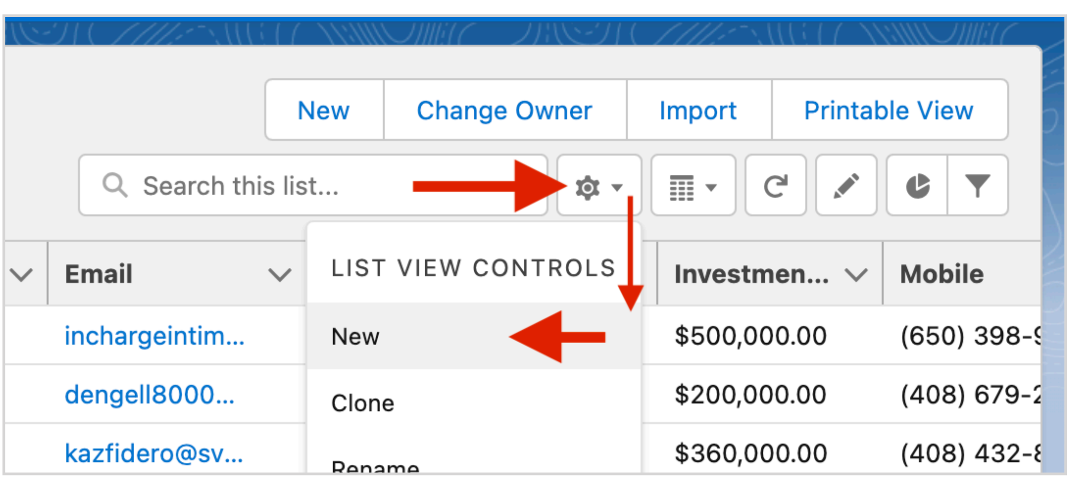
See, the **Pitch** record is trying to record things about the pitch, which is pitched to one firm with one type and one address, etc. But it's <u>also</u> trying to record things about each of the *multiple* meetings that make up a single pitch, like the dates of all the meetings for that pitch, comments, and who you met with at each of those meetings, etc. Mixing one-pitch things in the same record structure with several-pitch things is where I made my big mistake...and took you along for the ride. Sorry :(

Let's take a look at the records you entered, listed next to each other:

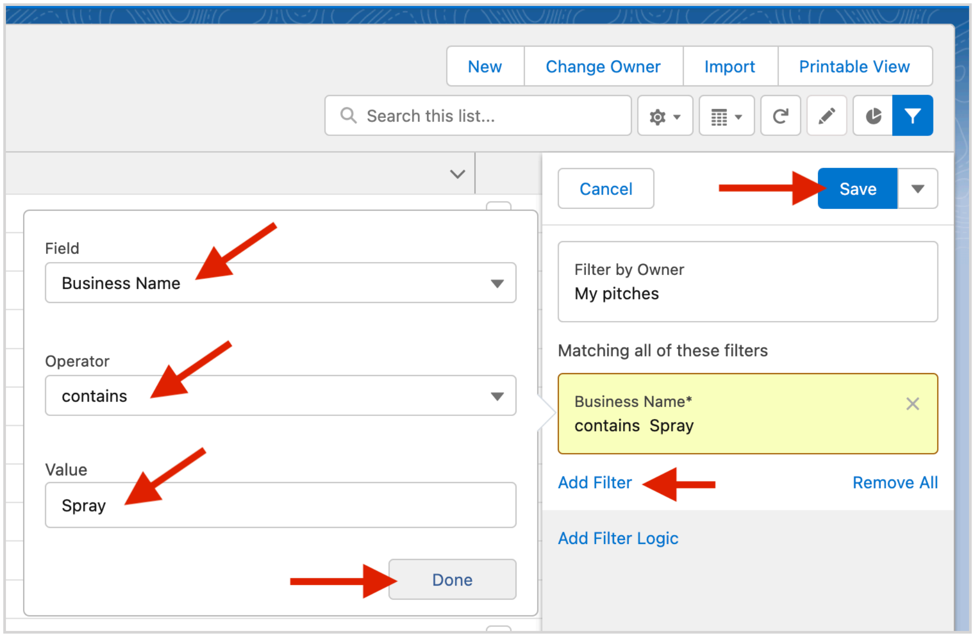
37. Click your **Pitches** tab

See your three Spray & Pray Ventures records? Try making a new view, just for them, to get the full effect:

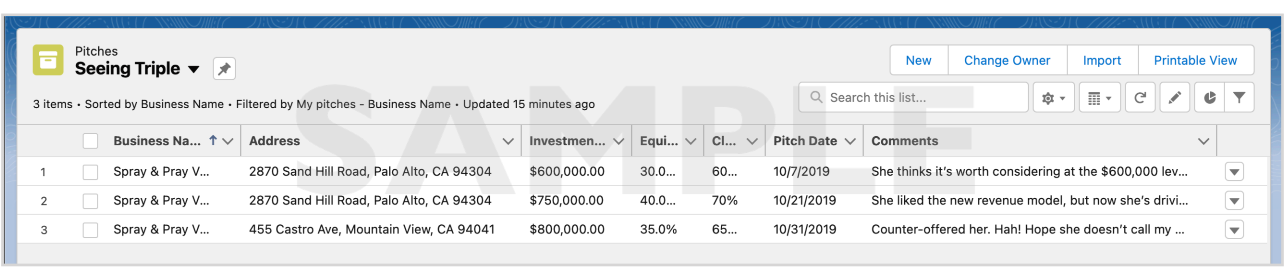
38. Click the tiny gear icon (NOT the **Setup** gear) to drop down the **LIST VIEW CONTROLS** menu & select **New**



39. For **List Name** enter "Seeing Triple", then tab to auto-fill **List API Name**, and then click **Save**
40. In the **Filters** panel on the right, click **Add Filter** (blue)
41. In the form panel that opens up, under **Field** use the drop-down to change **Address** to **Business Name**
42. Below that, for **Operator,** use the drop-down to change **equals** to **contains**
43. Under **Value** enter "Spray" and click **Done**



44. Then click the blue **Save** button in the **Filters** panel
45. Next, to add some columns, click the tiny gear again and click **Select Fields to Display**
46. In the popup, under the **Available Fields** list on the left, click to highlight **Business Name** and click the right-arrow in the middle to move it over to the **Visible Fields** list on the right
47. Repeat the last step to move **Address, Investment Amount, Equity Percentage, Closability, Pitch Date** and **Comments** over to the **Visible Fields** list too
48. If you got them in a different order somehow, you can always shift them around by clicking one to highlight it and then using the up or down-arrows to move wherever you want
49. Under **Visible Fields,** click to highlight **Pitch ID** and click the left-arrow to move it over to the **Available Fields** list
50. Click **Save** to save and display the new view with just the three Spray & Pray Ventures records
51. Click the blue Martini-glass-looking icon on the far right, above the **Filters** panel to hide it



2

See any issues? For one, some records say Spray & Pray Ventures is located in Palo Alto. Others say Mountain View. At some point, somebody's going to look it up on the wrong record and wind up missing a meeting by going to the wrong location. And they'll be mad at my app (and me).

And there's a bunch of different values in the other fields for just one business. Riley said she does like to keep the dates & comments for each meeting, so she can remember the history of what went down. But she thinks of each pitch as having one current deal on the table for that one business—one **Investment Amount**, **Equity Percentage** & **Closability**, not a bunch. With all the old ones showing up on the reports & dashboard, etc, it's going to throw off her moves.

Check this out:

52. Click the **Reports** tab and click the **Average Amount & Equity by Type** report you created last time you followed along (but if you don't still have the report, it's ok–just see below)

REPORT: PITCHES
Average Amt & Equity by Type

Total Records	Average Investment Amount	Average Equity Percentage
13	$404,615.38	25.0%

Type ↑	Pitch: Pitch ID	Business Name	Investment Amount	Equity Percentage
VC (8)	P-002	Silicon Valley Extreme Venture	$360,000.00	12.0%
	P-003	Net Wealth Leverage Associates	$450,000.00	18.0%
	P-004	Smart Technology Investment Partners	$80,000.00	8.5%
	P-008	Move Over Ventures	$100,000.00	10.0%
	P-009	Applied Investments Limited	$320,000.00	38.5%
	P-012	Spray & Pray Ventures	$800,000.00	35.0%
	P-010	Spray & Pray Ventures	$600,000.00	30.0%
	P-011	Spray & Pray Ventures	$750,000.00	40.0%
Subtotal			Avg: $432,500.00	Avg: 24.0%

105%

$2,150,000

Spray & Pray Ventures shows up all three times in the VC category. One record says they're asking for 30%. Another says 40%. Another says 35%. This seems to be saying they want 105% of your company! Unreal (literally). And it looks as if that one VC is thinking of giving you $2,150,000 ($750,000 + $800,000 + $600,000)–so wrong!

And the averages shown at the top of the report definitely don't mean what they seem to mean—all three Spray & Pray Ventures values are being averaged in with the other VCs.

Here's the thing, turns out you lost "data integrity". Your data's fouled up, conflicts with itself and it's telling you things that are just plain...wrong. "Ahhhhhhh...my database is lying to me!" Who needs that?

Don't feel bad—it's not your fault. My one object for all **Pitch** info, just can't deal with multiple meetings for one pitch to one business firm. This was the problem that Prof told us about before: when you don't break up the fields into the right logical structure—separate objects connected by relationships then you get multiple copies of the same data ("redundancy" aka "Evil Twins"). Then, when there's a data update, some copies get changed & others get missed & you wind up with conflicts between them.

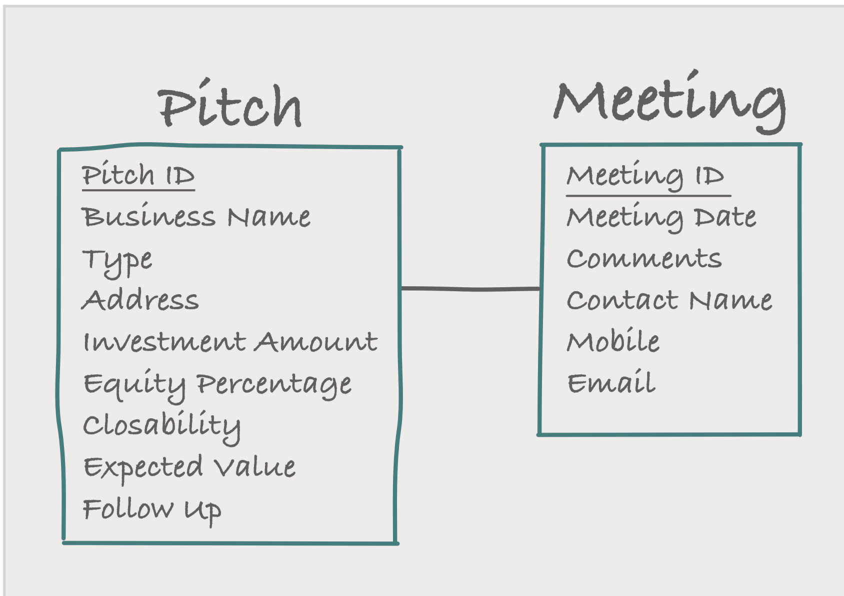
Bottom line? One value of current **Investment Amount, Equity Percentage, Closability** and current **Follow Up** date all go with the firm being pitched, just like **Business Name, Type** and **Address.** Not with the meeting. You shouldn't have to duplicate all those for every meeting you have with them. That's redundancy. That's trouble.

Solution? Make it so there's just one **Pitch** record for every pitch, no matter how many meetings have happened for that pitch. How? Take out all the fields that really go with each meeting. Take them out of **Pitch** and make a new object (**Meeting**) out of them. Done. But then how do you know which meeting records go with which firm pitch records, you ask?

Working on Relationships

Prof told us databases let you break records apart, but also keep their data linked together, using relationships. If you link **Pitch** and **Meeting** together with a relationship, every pitched firm record is connected to all its associated meeting records.

I'll draw you a picture. Prof showed us this E/R (entity/relationship) diagram format:



The line between the entities represents the relationship & it's supposed to have some symbols like "crow's feet" that tell the "cardinality" of the relationship which just means "for one of these, can there be just one of those or maybe many?" It matters bc it turns out, the answer makes a big diff in how you set up in the database. You'll see.

In this case, it's a "one-to-many" relationship, so a crow's feet should go at one end of the line but I left it off just to cramp your brain a tiny bit. It looks like this , so hopefully I don't have to tell you where to stick it. ;)

Ok, nice pic, but how do you make it actually *happen* in SF?

First, you're going to delete the Spray & Pray Ventures records you added for the 1st and 2nd meetings (NOT the 3rd). You're going to have just one **Pitch** record for every firm being pitched from now on, right? That's the whole idea. (Yeah, in a few, you'll have to re-enter some of that data again. Sorry, but...)

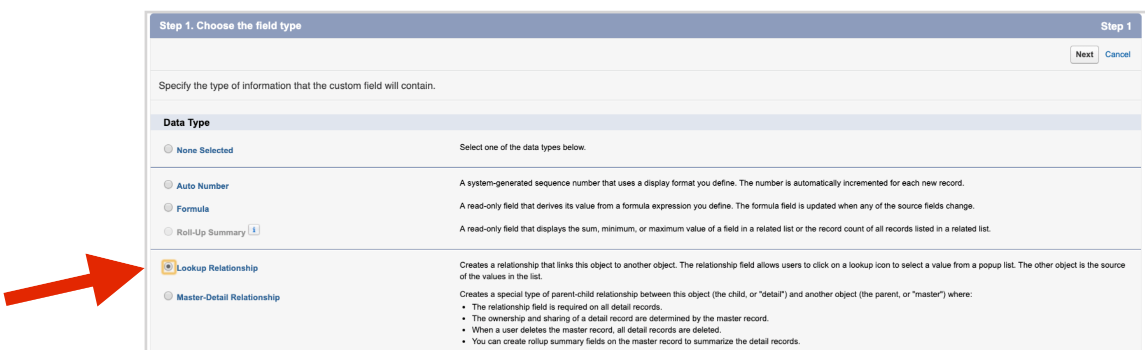
53. Click on your **Pitches** tab & then click the list view drop-down on the upper left that says **Pitch Everything** (or **Recently Viewed**) and select **Seeing Triple**
54. For each of the records from the first two meetings ($600,000 and $750,000) click the down-arrow on the far right & then, on the drop-down, click **Delete** and then, on the popup, click the blue **Delete** button to confirm

Now create a new custom object named **Meeting:**

55. Click on the **Setup** gear, by the bell on the upper right & click **Setup**
56. Now here's a shortcut—click the **Create** button on the upper right to get a drop-down & select **Custom Object**
57. For **Label** enter "Meeting"
58. For **Plural Label** enter "Meetings" (shows up if/when you make a tab for it)
59. **Object Name** should have autofilled already
60. For **Record Name** change it to "Meeting ID"
61. For **Data Type** select **Auto Number**
62. For **Display Format** enter "Mtg-{00}"
63. For **Starting Number** enter "1" (one)
64. Scroll down and check the **Allow Search** checkbox & then click **Save** at the bottom

Now you can connect **Meeting** to **Pitch** (create the relationship) by adding a field (here in **Meeting**) that will tell, for every **Meeting** record, which **Pitch** record it goes with:

65. Still in your **Meeting** object (if you left it, get back in: **Setup** > **Object Manager** > **Meeting**), and click **Fields and Relationships**
66. Click **New** (upper right-ish, next to **Deleted Fields**)
67. For **Data Type,** select **Lookup Relationship** and click **Next**



68. Use the **Related To** drop-down menu to change **--None--** to **Pitch** and click **Next**
69. **Field Label** should already be showing "Pitch"
70. Below that, just click, tab or type to fill in **Field Name** with "Pitch" too
71. Click the checkbox to **Always require a value in this field in order to save a record**
72. Click **Next** (remembering to pause & let the page fully load), then **Next** (pause), then **Next** again
73. Click **Save & New** (you'll be adding some more fields momentarily...)

Now, whenever you add a new record directly to the **Meeting** object, SF will give you a choice of the existing **Pitch** records to connect that meeting record to. (They'll appear in a popup window list you can choose from.)

Ok, you created **Meeting** and you connected it to **Pitch**. Good. Now you want to move those **Pitch** fields that don't belong there into **Meeting** instead. Unfortunately, you can't just drag & drop them. Sorry. You have to create them in **Meeting** and then delete them out of **Pitch**.

Relax. You know how to add fields. For each one, you just select the data type you want, then click **Next**, then fill in field label and whatever, then click **Next** > **Next** > **Save & New,** right?

So for each of the next five steps, just do that same old routine to re-create those five fields from **Pitch** that will now be in **Meeting** instead. Just use the values given and add the new field:

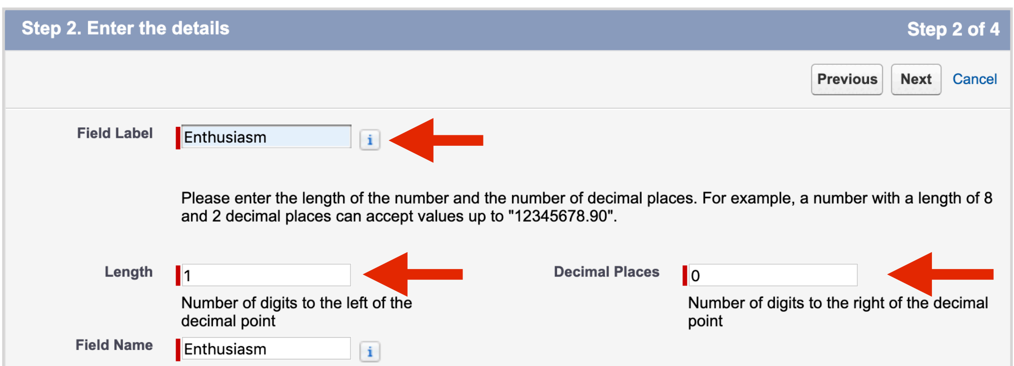
74. To add the first one, pick data type **Date**; in **Field Label** enter "Meeting Date" and check **Required** (only for this first one, though) then **Next** > **Next** > **Save & New**

Now do the same thing for the rest of the four fields. Just use the values given in each step and do the **Next** (pause), **Next** (pause), **Save & New** thing at the end of each one:

75. Pick data type **Text Area**; in **Field Label** enter "Comments" and then just finish it & go on
76. For the next one, pick data type **Text**; **Field Label** = "Contact Name" & **Length** = "30"
77. Next, pick the data type **Phone**; **Field Label** = "Mobile"
78. Last one: pick the **Email** data type; **Field Label** = "Email" (still click **Save & New** again at the end!)

Now one new field—Riley said for each meeting, she also likes to record how enthusiastic the person is on a scale of 0-5 (5 being super-excited and 0 being "meh"). Guess it helps her bluffing & such.

79. Use the **Number** data type with **Field Label** = "Enthusiasm" and **Length** = 1 and **Decimal Places** = 0, but this time just **Save** at the end—no more fields to add



Now, whenever you view the details of a **Pitch** record, you can also see a list of the related **Meeting** records that go with that pitch!

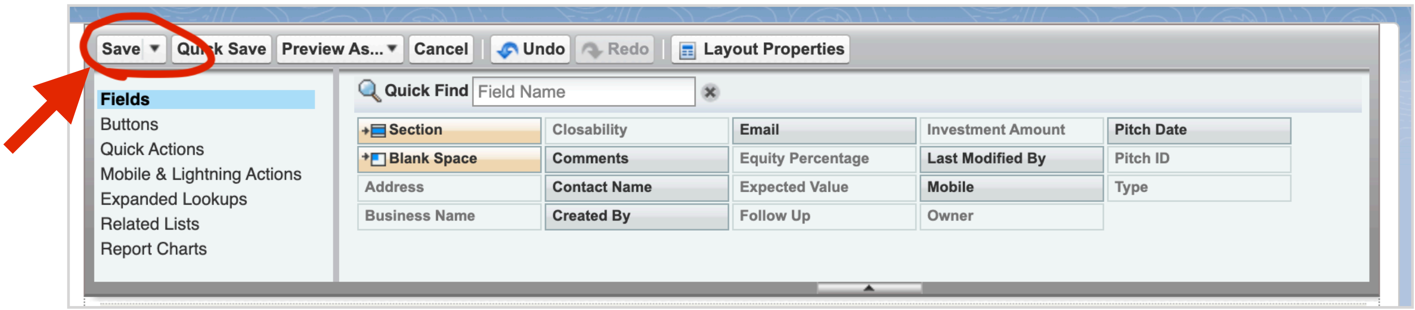
But first, you have to tell SF which of the **Meeting** fields you want to show up in the listing and you do that in the **Pitch** object settings:

80. On the upper left, click **OBJECT MANAGER** (blue) & then select **Pitch** (NOT **Meeting**)
81. On the left, click **Page Layouts** and then click the down-arrow at the far right of the **Pitch Layout** row and select **Edit**
82. Scroll all the way down to **Related Lists** near the very bottom of the page & click the wrench icon  to edit **Properties**
83. From the **Available Fields** list, find **Meeting Date**, click to highlight it and then click the **Add** button, with the right-pointing arrow to move it to the **Selected Fields** list
84. Repeat that last step for **Comments** and then for **Enthusiasm** too
85. Click **OK** at the bottom of the popup (you might have to zoom out to see it—on a Mac, use **Command-minus**)
86. Then just scroll up a bit to find the **Pitch Detail** section on the same page

Ok, one last bit of restructuring left. Those fields that didn't really belong in **Pitch**—you added them to **Meeting**. Cool. But they're still sitting in the **Pitch** object too. See?

We really should delete them but for now, it's easier to just hide them so they don't show up as part of the **Pitch** data when it's being viewed:

87. Just move the cursor over the first *victim,* **Pitch Date**, and you'll see it highlight in blue and the wrench & the minus button will appear on the right
88. Just click (you guessed it) the minus button to remove it from the **Pitch** display layout
89. Now repeat the last step for each of the other fields that shouldn't show up as part of the **Pitch** data anymore (**Comments, Contact Name, Mobile,** and **Email)**
90. When they're all out of the layout, click **Save** (upper left of the layout editor)



All good! That was a pain, I know. But worth it, bc now your new structure ("schema") is super-improved and will keep your boss happy.

No more lost integrity. No more mysteries.

Check out the new structure:

91. Use the **App Launcher** again to get back to the **Marketing** app, hit your **Pitches** tab & then click on the **Pitch ID** for the one Spray & Pray Ventures record that's left (should be **P-012**) to open it up

The **Pitch** terms should show the current levels, as of the last (3rd) meeting ($800k, 35%) and **Follow Up** should be 11/15/2019.

92. Now click on the **Related** tab, to the left of **Details** & you'll see there's no Meeting records there yet, but you can add them here now–just click the **New** button to the right of **Meetings (0)**
93. Notice that the new page, for adding in the data, shows the **Pitch** field already filled in with the right ID for Spray & Pray Ventures: **P-012**
94. Enter the **Meeting Date** for the first meeting: 10/7/2019
95. Enter the **Comments** which were "She thinks it's worth considering at the $600,000 level (yay) for 30% equity, but she wants to see some more work on the revenue model."
96. Enter the **Contact Name** as "Julia Chavez"
97. Enter the **Mobile** as "(510) 403-8995"
98. Enter the **Email** as "julia.chavez1981@gmail.com"
99. Enter the **Enthusiasm** as "2"
100. Click **Save**

That'll open up a page showing the details of the new record. (And places to log tasks, calls & emails below but ignore those for now.)

To add back the other two meetings easily, the **Clone** button is now our friend:

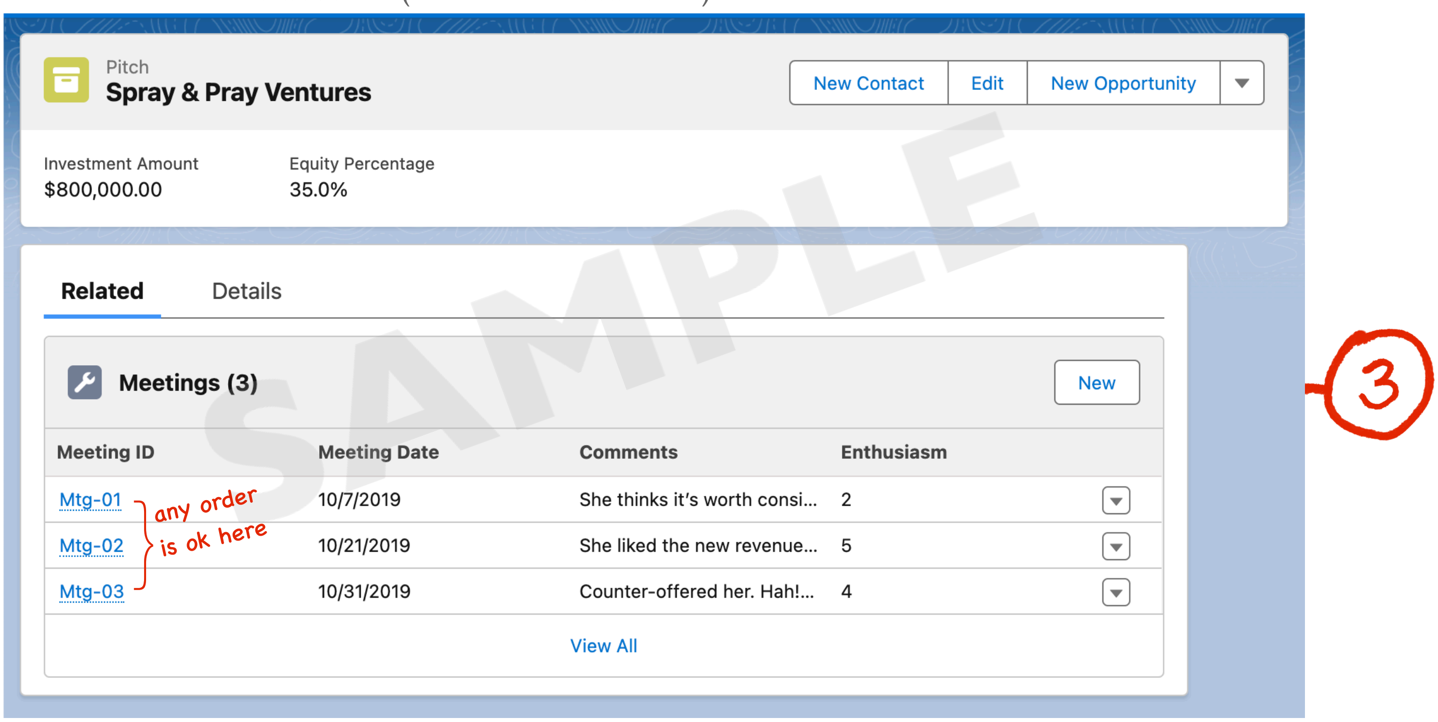
101. Click the **Meeting ID** (**Mtg-01**), for the **Meeting** record you just created to open its details
102. Then click the down-arrow next to **New Opportunity** on the upper right and select **Clone**
103. Change the **Meeting Date** to 10/21/2019
104. Change **Comments** to "She liked the new revenue model, but now she's driving a hard bargain!"
105. Change **Enthusiasm** to "5"
106. Click **Save**

Now for the last (3rd) meeting:

107. Click the down-arrow next to **New Opportunity** on the upper right and select **Clone**
108. Change the **Meeting Date** to 10/31/2019
109. Change **Comments** to "Counter-offered her. Hah! Hope she doesn't call my bluff."
110. Change **Enthusiasm** to "4"
111. Click **Save**

Now to admire your work:

112. Click on the **Pitch ID**, **P-012** (blue) in the current **Meeting** record details
113. Click on the **Related** tab (next to the **Details** tab)



(If only **Mtg-01** shows up, go back to **Setup** & use the **App Launcher** & **Pitches** tab to get back here.)

Now the data looks the way Riley thinks of it: One **Pitch** record with one **Business Name** and the one set of current deal terms under negotiation (one **Investment Amount** and one **Equity Percentage**). AND below all that, there's the meeting basics for each of the three meetings with them: **Meeting Date**, **Comments**, **Enthusiasm**. (BTW - don't worry about the order the **Meetings** are listed in but if you want to change it, go to **View All** and change it there & go back.)

She can just hover on any **Comments** snippet to see the whole thing. And if she wants to access the other **Meeting** record data, like **Contact Name** or contact info, etc, she can just click **View All** at the bottom to see all the whole records and can change column widths, sort, etc, even edit or delete right there too.

See, now everything is set up to make it fast/easy for her to view/use the data the way she needs to do her job the best she can. And best of all, cloning can't hurt us anymore—no more redundancy bc we structured the tables/objects the way they make sense in reality to Riley: one pitch —> many meetings.

Case closed, Watson. Crushed it! Now everything just stay nice for awhile, please?

All done? Good work! Now…

Be sure to run the Grader App right now so you don't lose your work!!!

(Always run the grader app to score your work before going on the next lab!)

Then take a few to give us your feedback & be entered to win AirPods!

Go to http://tiny.cc/MaxLabsFeedback

Enter with every lab for the most chances to win

(one entry/lab/student)

3 winners every term!