Phase 1 Matching System:

Industry / Position
Type of Employment
Length of Employment
Language / Level
Visa Assistance*
Accommodation Assistance*

Phase 2 Additions

Professional Skills
Personal Skills
Degree Title*

Optional (complex) additions

Location (distance between job location and seeker location)

*must make accommodations in “Create Job Listings Page”

Phase 1: System Set-Up:

For “Visa Assistance”, “Accommodation Assistance”, and “Degree Title” to work, these fields will need to be present on the “Post Listing” page.

If the user searches for candidates using the “Find Staff” button at the top of the screen, the %match area should say “Search from “Listing Manager” to see Match%”. This message should appear in the same place the Match% number would display. This message should also be a link to the “Listing Manager” page.

When a job listing or job seeker profile is created, there will be a CSV created that matches the listing or profile This CSV will include values as follows:
“Type of Employment”, “Length of Employment”, “Visa Assistance”, “Accommodation Assistance”, “Language / Level”, “Industry / Position”

The first 4 fields will simply use the number value that is assigned in the database. The last 2 fields will be able to hold an array of compound values. To get the compound values, do the following:

Assign each industry with a 3 digit number
Assign each position with a 3 digit number
Put both 3 digit numbers together to make a 6 digit number

For example, the industry “General” would be assigned 001 and the position ‘Analyst” would be assigned a value 001. If the seeker’s profile, or the listing, has “General Analyst” as an industry position , the CSV would have a value of “001001” in the “Industry / Position” array.

Do the same for the “language / Level” field

So, an example of a CSV that is generated after saving a seeker profile or a listing would be as follows:

2,1,1,1,”015001””010002””006002”,”024008””018012””110053”

Yellow = “Type of Employment”
Teal = “Length of Employment”
Light Green = “Visa Assistance”
Pink = “Accommodation Assistance”
Blue = “Language”
Red = “Level”
Dark Green = “Industry”
Purple = “Position”

When a search is returned, the system will compare the CSV from the listing with the CSV from the seeker profile to calculate the % match. The calculations should be made similar to the following:

1. If (seeker“Type of Employment”) = (listing“Type of Employment”) then $a=10
2. If (seeker“Length of Employment”) = (listing“Length of Employment”) then $b=10
3. If (seeker“Visa Assistance”) = (listing“Visa Assistance”) then $c=15
4. If (seeker“Accommodation Assistance”) = (listing“Accommodation Assistance”) then $d=15
5. If (seeker“Language”) = (listing“Language”) then $e+15 and check level
   If (seeker“Level”) is greater than or equal to (listing“Level”) then $e+10 and next language (until all listing languages are checked)
6. If (seeker“Industry”) = (listing“Industry”) then $f+15 and check level
   If (seeker“Position”) =(seeker“Position”) then $f+10 and next language (until all listing industries are checked)
7. If $c=0 then check if seeker requires visa assistance, if seeker does not require visa assistance then $c=15
8. if $d=0 then check if seeker requires housing assistance, if seeker does not require housing assistance then $d=15

Then, use the following equation on the defined variables:
$a + $b + $c + $d + ($e/[number of listing languages]) + ($f/[number of listing industries]) = $x
($x*99)/100 = match number

Round match number to nearest whole number (4.5 would be 5 and 4.4 would be 4)

After that, display “match number” as the % match.

Here is a process example:
note that 1 = required/offered and 0 = not required/offered for visa and housing
Note that 001 is a lower level than 002 for language levels
Listing: 2,1,1,1,”051001””002004”,”043008”
Seeker: 2,1,1,0,”002004””023001””051002”,”043008”

1. the type of employment matches - $a=10
2. the length of employment matches - $b=10
3. the visa provisions match - $c=15
4. the housing provisions don’t match - $d=0
5. listing language 1 is 051, and seeker has a match - $e+15 ($e=15)
   the seekers level of 051 should be greater than or equal to 001, this is true - $e+10 ($e=25)
   the next listing language is 002, and seeker has a match - $e+15 ($e=40)
   the seekers level of 002 should be greater than or equal to 004, this is true - $e+10 ($e=50)
   no more listing languages
6. listing industry is 043, and seeker has a match - $f+15 ($f=15)
   the position of 043 should be 008, this is true - $f+10 ($f=25)
7. $c is not equal to 0 – do nothing
8. $d is equal to zero, seeker does not require 0 (housing) - $d=15

10 + 10 + 15 + 15 + (50/2) + (25/1) = 100
(100*99)/100 = 99

Match is 99%

Let me know if you have any questions, concerns, or comments.

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