Ranking System Project – User Stories

**##### EPIC – Values System Project #####**

**AS A Hypnotherapist**

**I WANT a system for revealing a person’s values**

**SO THAT I can educate them about why they do what they do**

**AND build a plan for re-aligning those values**

**AND in the process, changing their behavior**

This is a specific instance of a more generalized problem: Sorting items that humans are notoriously not good at sorting on their own.

**##### EPIC – Bias Corrected Ranking System #####**

**AS A Business**

**I WANT a system for ranking arbitrary objects using a simple binary compare**

**SO THAT psychological bias is avoided**

**AND an accurate assessment can be made**

The implementation is based on “wins” and “losses” accumulating for each object, and then sorting the objects by their win-loss record. When presented with items, the user preference determines the result of the “match”. For best results, every object should be compared to every other object.

Some examples of how this system could be applied:

* Ranking photographs in terms of quality or beauty
* Ranking presidential candidates in terms of preference
* Ranking foods
* Ranking movies
* Ranking websites

Really, anything that is subjective, where the ranking is arbitrary or where an absolute ranking of the items is influenced by the order in which the items are presented.

**##### STORY – Foundation – N-item Sort – Admin Set-up #####**

**AS A Business**

**I WANT to define a system whereby people can directly compare N items in groups of 2 and store their responses**

**SO THAT I can analyze their responses and calculate a bias-free ranking**

GIVEN an administrator setting up the test

AND no items currently exist in the system (e.g., stored in the database)

WHEN the administrator goes to define the N items

THEN the administrator is presented with the ability to enter any number of items, where an item is a word or phrase (text data)

AND there is a way for the administrator to indicate when he/she is finished entering items (such as a “Finish” button)

AND there is a way to cancel the task (such as a “Cancel” button)

GIVEN an administrator setting up the test

AND some items already exist in the system (e.g., stored in the database)

WHEN the administrator goes to define the N items

THEN the administrator is presented with a noneditable list of existing items in the system

GIVEN an administrator entering items to define a test

AND fewer than 2 items have been entered

WHEN the administrator begins entering items

THEN the “Finish” action is disabled

GIVEN an administrator entering items to define a test

AND at least 2 items have been entered

WHEN the administrator enters the 2nd item

THEN the “Finish” action is enabled

**##### STORY – Foundation – N-item Sort – User Taking Test #####**

**AS A User**

**I WANT to take a test that directly compares N items in groups of 2 and stores my responses**

**SO THAT I can understand my preferences**

GIVEN some number of items configured (e.g. words)

WHEN the user goes to the test

THEN the user is assigned a unique test-session ID

GIVEN a user taking the test, with a unique test-session ID

WHEN the user begins the test

THEN the user is presented with two items (e.g. words) to choose from

AND can select one, the other, or “I can’t decide”

AND their choice is stored somewhere (e.g. written to a database)

AND that choice is stored as one “win” for the item they chose and one “loss” for the item they didn’t choose, or a “tie” for both items if the user chose “I can’t decide”

GIVEN a user taking the test

AND they have provided answers to every combination of A and B items

WHEN the user would be shown a pair of items

THEN instead they see something else (e.g. a “you’re finished!” message, or the results - TBD)

**##### STORY – User Tracking #####**

**AS A Business**

**I WANT the ability to associate test results with a particular user**

**SO THAT I can find them again**

GIVEN a user taking a test

WHEN the test is started

THEN the user is prompted for their personal info (e.g. email)

AND this info is saved somewhere (e.g., to a database)

**##### STORY – Basic Result Reporting #####**

**AS A Business**

**I WANT the ability to view the ranked items for a given user**

**SO THAT I can use that information for business decisions**

**(e.g. talk about it with client)**

GIVEN a user who has finished the ranking process

WHEN I pull up their ranking results

THEN I can see the items in ranking order, where the order is calculated based on 1 point for a win, 0 points for a tie and -1 point for a loss

AND I can see the win-loss-tie record for each item

**##### STORY – Ordering Comparisons #####**

**AS A Business**

**I WANT the order in which pairs of items are presented to a user for comparison to be random within guidelines**

**SO THAT we can minimize bias based on the order of presentation**

**AND users will see comparisons for pairs they haven’t seen yet before seeing repeated items**

GIVEN a user taking the test

AND some comparisons have been made already

WHEN the system is selecting a pair of items to display

THEN the system will bias towards items that have been involved in the fewest number of previous comparisons (for that user) – in other words, if there are five items, A, B, C, D, E, and the user has compared B and D, the next two items will be selected from A, C, and E.

GIVEN a user taking the test

AND some comparisons have been made already

WHEN the system is selecting a pair of items to display

THEN the system will select as the first item one that has not been compared to every other item already

AND the second item will be one of those that the first item has never been compared to

**##### STORY – Result Matrix #####**

**AS A Business**

**I WANT the ability to see detailed results as a matrix of comparisons (2-D grid)**

**SO THAT I can validate the rankings, for myself and/or with the user**

GIVEN results associated with a particular user

WHEN I display the detailed results

THEN I see a 2-D table of items,

AND the ranked items are listed from top to bottom on the left side of the table

AND from left to right along the top

AND in the intersection, some indicator of which is preferred over the other

OR blank if there is no data concerning the relationship

**##### STORY – Back Button #####**

**AS A User**

**I WANT a back button**

**SO THAT I can change my answer because I realized that I clicked the wrong one**

GIVEN a user in the middle of a test

WHEN the user sees a comparison between A and B

THEN the user can select a “back” button to revisit the previous pair of items

AND can change their answer, if they are so inclined

AND that answer REPLACES their previous answer! (Important)

GIVEN a user in the middle of a test

WHEN the user sees a comparison between A and B

THEN the user can select a “back” button to revisit the previous pair of items

AND can see their previous answer

AND can change their answer, if they are so inclined

AND that answer REPLACES their previous answer! (Important)

GIVEN a user in the middle of a test

WHEN the user sees a comparison

AND clicks the “back” button

AND sees the previous pair

AND clicks the “back” button again

THEN the user is prompted if they want to keep or discard the current answer

AND if they discard, it is deleted from the database of saved answers

**##### STORY – Result So Far #####**

**AS A User**

**I WANT to be able to view my results so far while comparing items**

**SO THAT I gain some useful information about my preferences if I have to exit the test early**

**AND I am encouraged to finish taking the test so that I can get complete results**

GIVEN a user taking the test

AND their answers so far do not tell us enough to sort the items

WHEN a user sees the next pair of items

THEN the only options are to select one, the other, or “I can’t decide”

GIVEN a user taking the test

AND their answers let us infer the ranking order

AND do not cover all comparison possibilities

WHEN a user sees the next pair of items

THEN an additional option is available, such as “view results so far”

… additional criteria needed – what happens when they “view results so far”

**##### STORY – Custom Comparison Presentation #####**

**AS A Business**

**I WANT to build custom compare screens**

**SO THAT I can present the comparison in a way that makes the most sense**

GIVEN a set of N items to compare

WHEN I go into the test configuration tool

THEN I can add a custom comparison option

AND I can define a custom way of describing the two items that are being compared

AND I can define custom response text for selecting item A, item B, and “neither”

AND I can enable or disable random response ordering

GIVEN the system has a custom comparison defined for two items

WHEN the system is asking the user to compare those items

THEN the system displays the custom comparison

AND if response order randomization is enabled, the responses are presented in random order

**##### STORY – Custom Comparison with Images #####**

**AS A Business**

**I WANT to add images to my custom compare screens**

**SO THAT I can make taking the test more interesting and enjoyable**

**AND increase the likelihood that users will take the time to complete the test**

GIVEN the application is an online tool (ignore if not the case)

WHEN I configure a custom comparison description

THEN I can add images

GIVEN I have already added an image once,

WHEN I go to add an image to another custom compare screen

THEN I can choose to select the existing image

**##### STORY – Image Library / Management #####**

**AS A tool admin**

**I WANT to be able to manage the photos efficiently**

**SO THAT I am not wasting time or experiencing frustration while using the system**

GIVEN that I have added an image to a comparison between A and B

AND a different image to C and D

AND a different image to E and F

WHEN I am building a comparison between A and C

THEN I am given the option of the image that was previously attached to the A/B test

AND the image attached to the C/D test

AND not the E/F test

AND I can click “show all” to see all images

AND I can click “add new” to add a custom image

GIVEN that I no longer need a photo

WHEN I go into the admin tool

THEN I can browse the image collection

AND remove a photo that is not associated with any custom comparisons

AND I can see which comparisons an image is associated with

**##### STORY – Bias Reduction / Confidence Increase #####**

**AS A Business**

**I WANT to be able to compare the same items multiple times with different custom comparisons**

**SO THAT I can be assured that the results are accurate and are not an artifact of how they are presented**

GIVEN two items

AND those items have a custom comparison defined

WHEN I try to add a custom comparison

THEN I have the option of editing the existing one, or adding a new one

AND when I choose to add a new one, the comparison can be added

GIVEN two items that have multiple custom comparisons defined

AND the user has never compared these two items before

WHEN the system selects those two items

THEN the system selects one of the custom comparisons at random

GIVEN two items that have multiple custom comparisons defined

AND the user has compared these two items before

WHEN the system selects those two items

THEN the system selects one of the custom comparisons that the user has not already seen,

AND selects it at random from available choices

GIVEN two or more custom comparisons defined per item pair

WHEN the system is looking for a pair of items to compare

THEN the system does not deem the user “done” until all custom comparisons have been evaluated

**##### STORY – Progress Meter #####**

**AS A User**

**I WANT to know how close to “complete” I am**

**SO THAT I can have a sense of making progress**

**AS A Business**

**I WANT to be able to display a progress indicator to the user**

**SO THAT I can evaluate if the progress indicator causes people to complete more or less responses than without it**

GIVEN N items

AND M possible combinations

AND X combinations have been compared

AND Z combinations are unknown

WHEN the progress indicator is shown

THEN it shows a typical blue progress bar for X

AND empty for Z

**##### STORY – Cumulative Statistics #####**

**AS A science geek**

**I WANT to be able to display the cumulative results for the population of test takers**

**SO THAT I can evaluate trends**

**AND compare an individual to the population as a whole**

GIVEN a decent body of test results

WHEN I display the results page

THEN I can see statistics like

* what percent of the population rank each item first
* what percent of the population rank item X over item Y for all pairs

**##### STORY – Multiple Concurrent Evaluations #####**

**AS A Business**

**I WANT to support different tests**

**SO THAT I can use the same system to evaluate other sets of preferences**

GIVEN a second set of N items

WHEN I go into the Admin tool

THEN I can define a second set of N items

AND custom comparison screens

AND users can take the one test

AND users can also take the other test

AND I can view the results of either, separately