

Documentation for Pairwise Compare Web Application

Important nomenclature:

Measurement tests: One of the two styles of test available. Uses two different sets of data and compares known objects from one to a range of unknowns in the other.

Comparison tests: The simpler of the two test types, that compares each entry in a data set to all the others.

Reference Table: The table associated with a Measurement test that stores data about the reference objects.

Object Table: Contains data about unknowns for both Comparison and Measurement tests.

Tag: A single-word unique identifier for tests.

Taking Tests

1. Create a new username for yourself, if you haven't already. The sign-up is easy and confidential.
2. Log in.
3. Select your test.
4. Choose the appropriate answer to the question asked.
5. Repeat step 4 until the test ends, or until you feel you must stop. The results of your testing are recorded on the fly, and even a partial data set is useful.

Creating Tests using the Web Interface:

1. Decide on which type of test is most appropriate for your application:
 1. A “measure” test, that compares unknown or approximate values to measured, ranked, or otherwise known reference ones, using two tables. An example is a test that compares the sizes of various objects to a set of reference rods. The advantage to this test is that ranges of values can be chosen to cut out unnecessary comparisons.
 2. A “compare” test, which uses one table and compares each value with all the others. An example is a test comparing the severity of different crimes, or one comparing movies to each other.
2. Create the table(s) required for the test. A measurement test will require two tables, and a comparison test will require one. Use a spreadsheet program to save the tables, and save them in .csv (Comma Separated Value) format.
 1. The measurement test uses one table of reference objects, laid out with 4 columns: 'id','Description','Low','High'. This order is important. You must have an id column. The 'Low' and 'High' refer to the range of id values that you will compare this object to from the other table. The second table simply contains 'id' and 'Description' columns. The second table must be in order.
 2. The comparison test uses a single table, with just two columns, 'id' and 'Description'. No particular order is necessary.

3. Go to the Pairwise Comparison website (<http://web.uvic.ca/~tpelton/pairwise/> at the time of this writing) and login.
4. Click on the “Make Test” link.
5. Enter in the required information. The “Name” of the test is what will appear on the test selection page. The tag can be anything, but preferably something related to the test, and is limited to a maximum of 10 characters. The tag should be in lowercase, with no punctuation. The “Test Question” is what the test will ask to visitors; “Which is Longer”, “Which is More Severe”, etc. The test type will let you choose which manner of test described above you will be making. The admin password is whatever is hardcoded in the script. It is “pelpel” at the time of this documentation.
6. You will be greeted with a screen that prompts you to upload your table(s). They must be in CSV format, although the extension need not be .csv; .txt will work just as well.
7. You're done! The test should appear on the entry.php screen.

The Results Database

The database can be accessed by going to <https://phpmyadmin.uvic.ca/> and logging in as 'tpelton' on the csmgenr2.uvic.ca server. The database for this project is called 'pairwise.' The password can be found in any of the php source scripts that needs to connect to the database.

Explanation of Database Tables:

The tables CTests and Tests store information about the tests available to users. CTests contains information about 'comparison' tests, and Tests is for 'measurement' tests. Functionality for both of these tests is segregated in both the database and in the application scripting. These databases contain each test's name, tag, Question, and type.

The tables named “measure_ref_[tag]” and “measure_obj_[tag]” contain information about an individual test. The tag for that test is the word substituted for the [].

The tables named “compare_obj_[tag]” are used in comparison tests. They are structurally identical to “measure_obj_[tag]” tables.

The users table stores login information for users, and ensures unique test results.

The tables named “measure_[username]_[tag]” are the results of that user taking that particular test. If the user takes the test again, this will be overwritten.

Other Administration

It may be necessary at times to enter the database and change things to make the test work. The most common error seems to be the reversal of High and Low columns in reference tables for measurement tests (at the time of creation), a condition which will simply make the test unusable. The fix for this is to simply delete all information about the test and redo it. Deleting a measurement test entails dropping the measure_ref and measure_obj tables, as well as deleting the entry in the Tests table. For compare tests, delete the compare_obj table and the entry in CTests. Deleting the results tables for the attached test is optional but recommended.