# How the new improved test must work

## Rules

1. Use as little as possible JS and Ajax. Use it only where absolutely needed.
2. No more question-answer tracking in JS
3. No more progress tracking in JS
4. No more JS object that feeds the next text question
5. There are only 2 Ajax actions:
   1. Start Test
   2. Save and Fetch Question
6. The only other JS used is to track the timing, if timing is used on the test.

## Start Test Action

### Input

* User ID
* Test ID

### Output

* Directly: User-Test-ID
* Indirectly: Output from Save and Next Action

### Actions

* Insert a new user-test record
* Grab the new user-test-id
* Log test start-time
* Call Save and Next Action

## Save and Next Action

### Input

* User-Test-ID
* Test-Question-ID (optional)
* Answer (optional)
* Pretest question object (object)

### Output

* User-Test-ID
* Test-Question-ID
* Progress
* Is Pre-test Question
* Pre-test question object

### Actions

* Has Answer? (is the start of the test?)
* Update the answer record with the answer and timestamp
* Calculate the test progress
* Check if a pre-test question should be sent
* If a pre-test question must be sent
  + Get next pre-test-question
* If not pre-test question
  + Determine the next question
  + Get question object

## Things to remember

* passing a question manually
* Auto pass question when timer runs out
* Pausing a test
* Un-pausing a test
* Pre-Test Questions
* Update test progress after each question is saved
* Fix the progress on the test list page – take skipped questions into account. User the progress indicator on the user-tests table