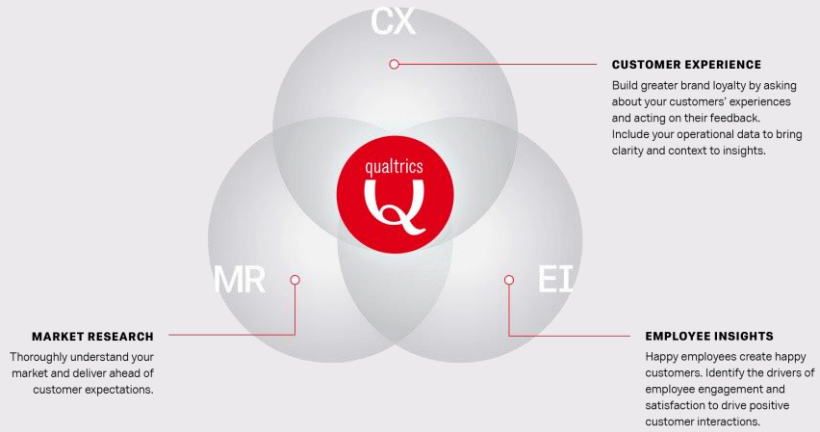
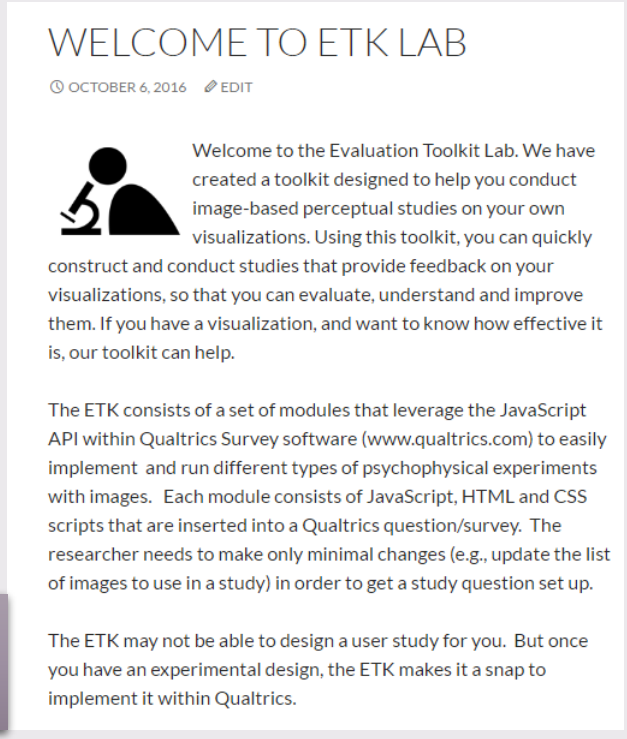
Tutorial: Creating a 2-Alternative Forced Choice Experiment using **ETK**: the **Evaluation Toolkit**

Overview of steps:

- Create a Qualtrics project
- Add a Question
- Add the ETK CSS file
- Add the ETK HTML file
- Add the ETK JavaScript file
- Add output variables
- Get a URL link and put into Amazon Mechanical Turk





WELCOME TO ETK LAB

OCTOBER 6, 2016 EDIT

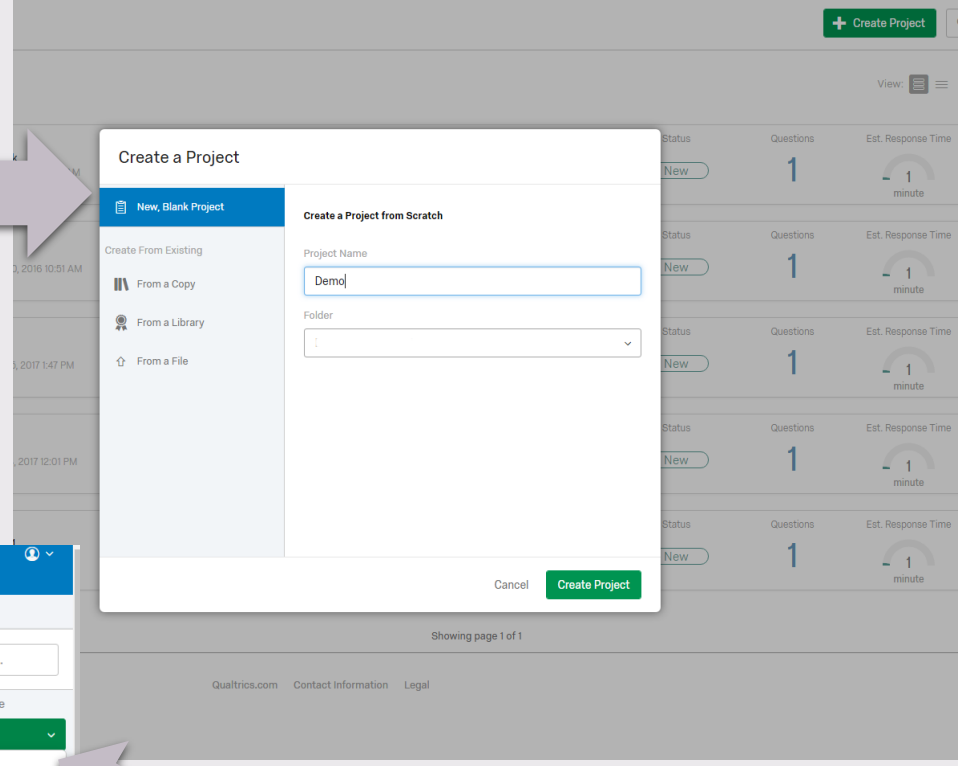
Welcome to the Evaluation Toolkit Lab. We have created a toolkit designed to help you conduct image-based perceptual studies on your own visualizations. Using this toolkit, you can quickly construct and conduct studies that provide feedback on your visualizations, so that you can evaluate, understand and improve them. If you have a visualization, and want to know how effective it is, our toolkit can help.

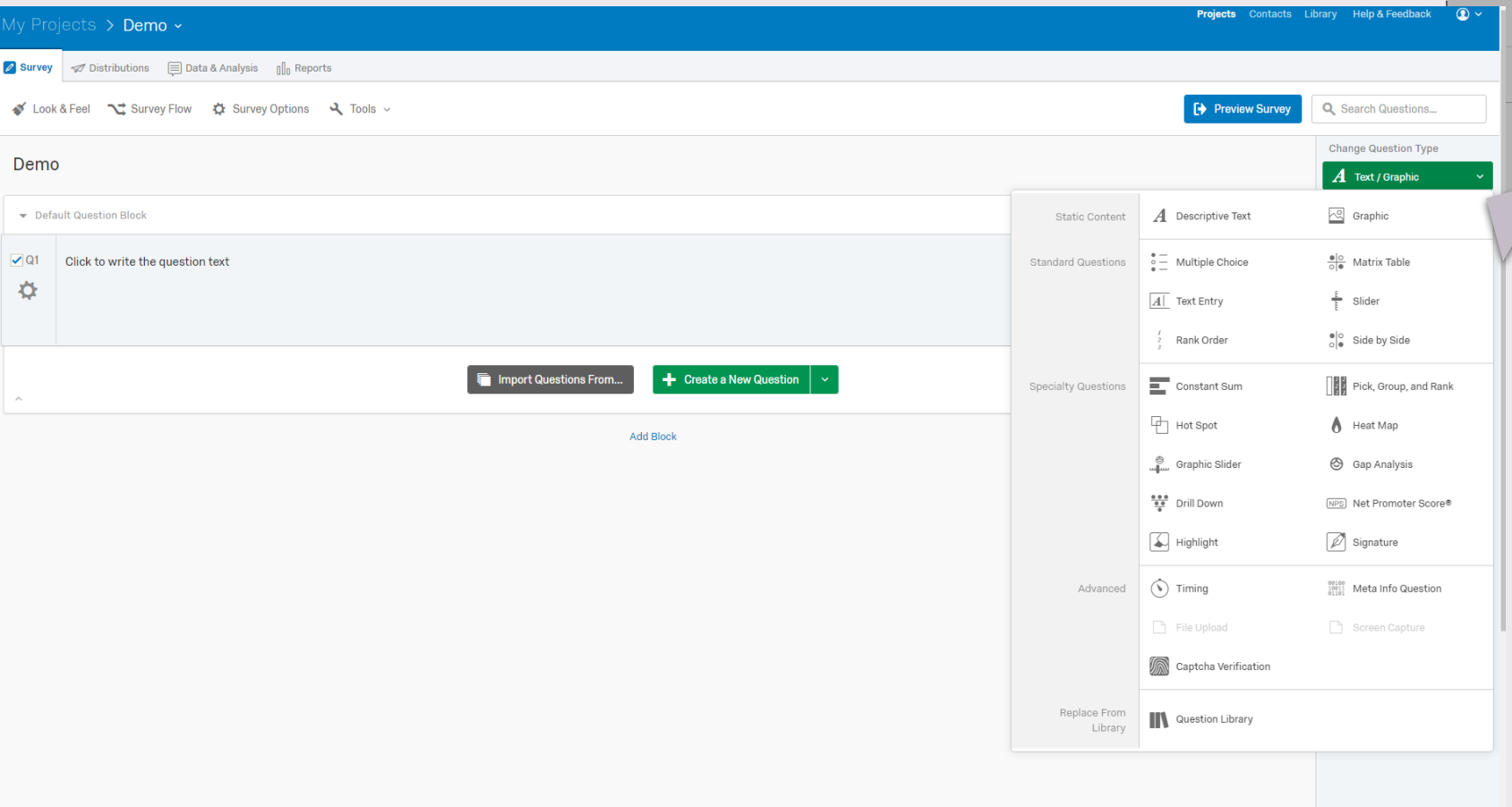
The ETK consists of a set of modules that leverage the JavaScript API within Qualtrics Survey software (www.qualtrics.com) to easily implement and run different types of psychophysical experiments with images. Each module consists of JavaScript, HTML and CSS scripts that are inserted into a Qualtrics question/survey. The researcher needs to make only minimal changes (e.g., update the list of images to use in a study) in order to get a study question set up.

The ETK may not be able to design a user study for you. But once you have an experimental design, the ETK makes it a snap to implement it within Qualtrics.

ETK homepage: etklab.org
GitHub: github.com/ascr-ecx/etk

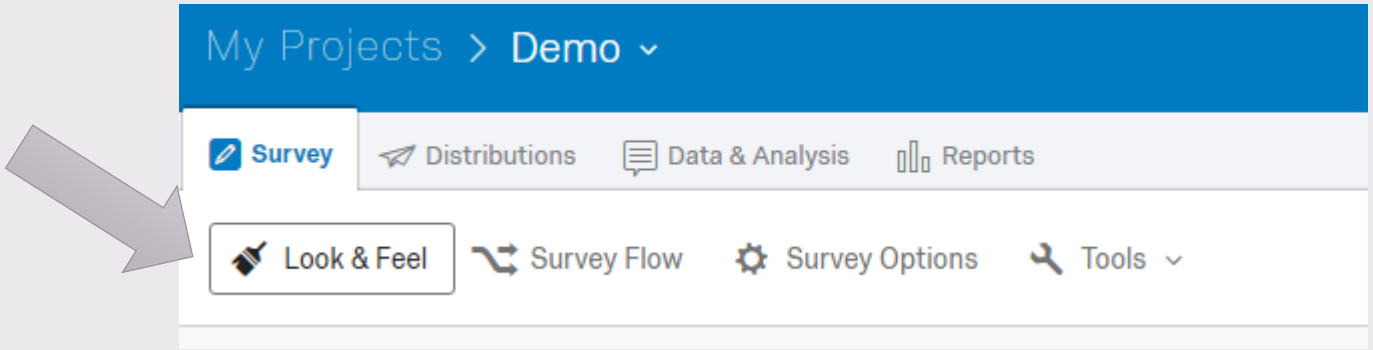
Create a new project



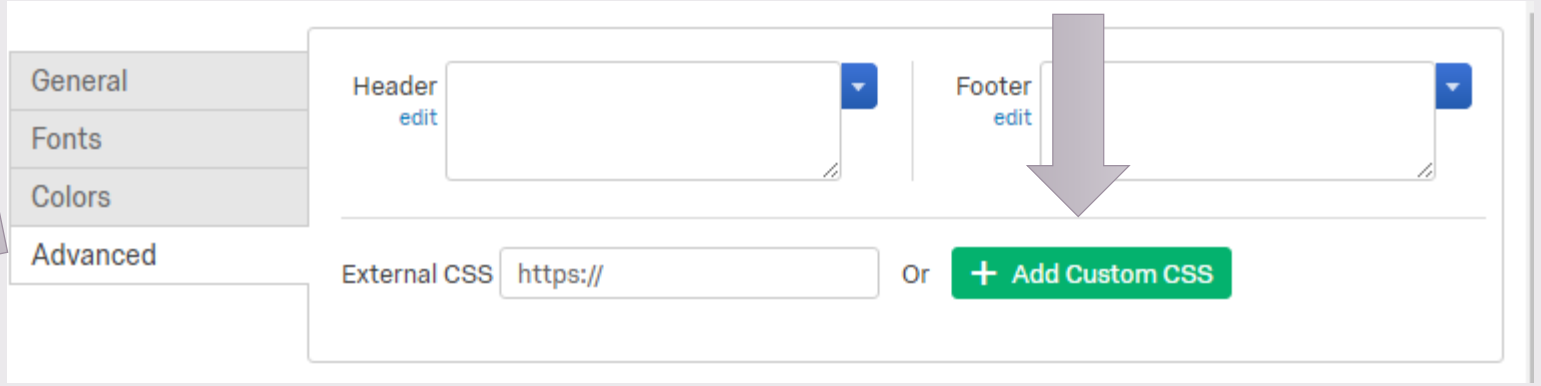


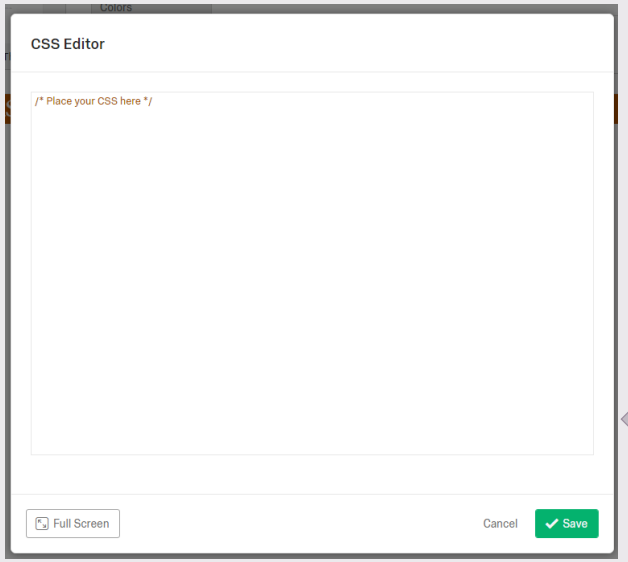
And add a Descriptive Text Question

Look & Feel tab leads to the

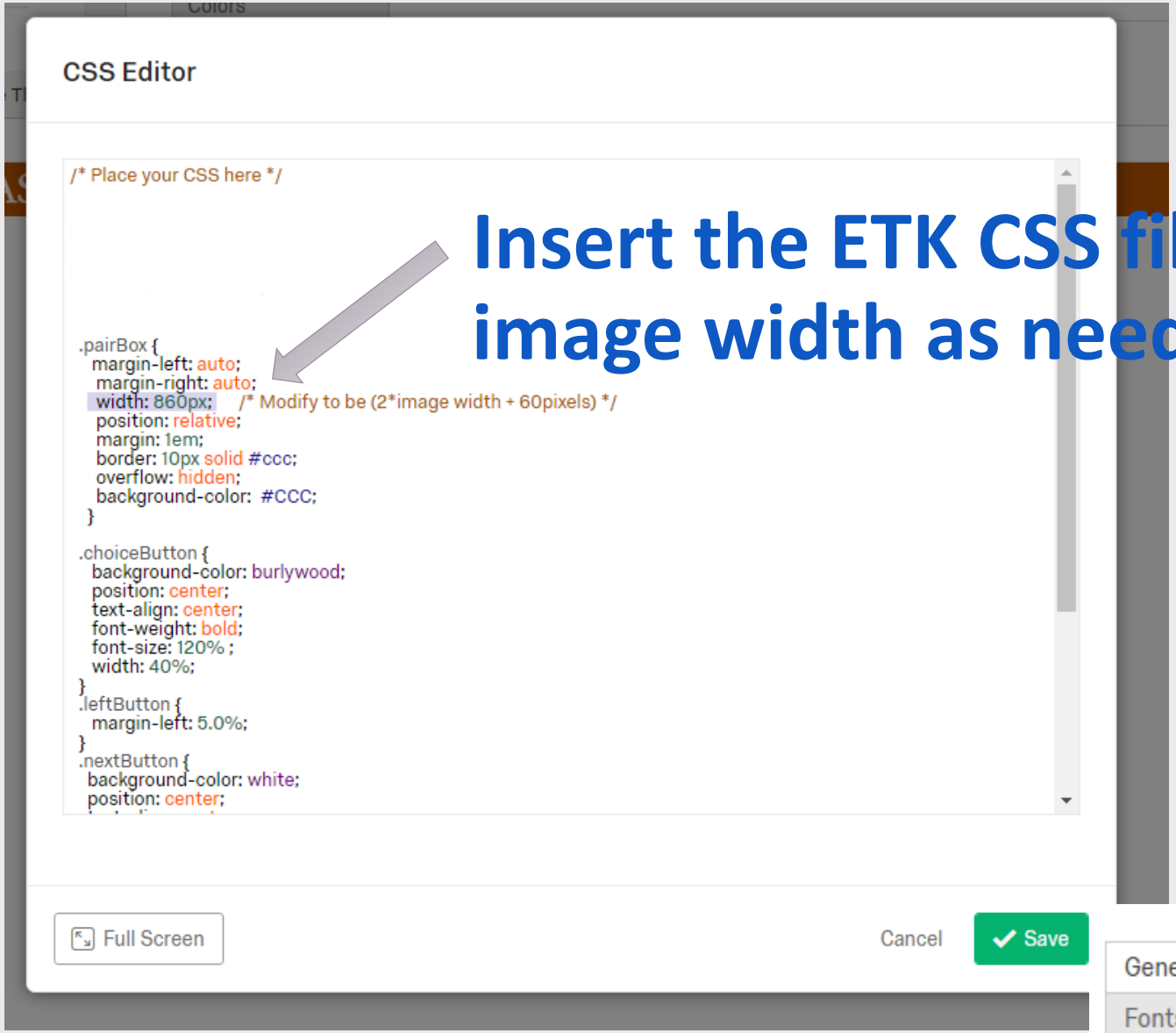


Advanced tab leads to + Add Custom CSS



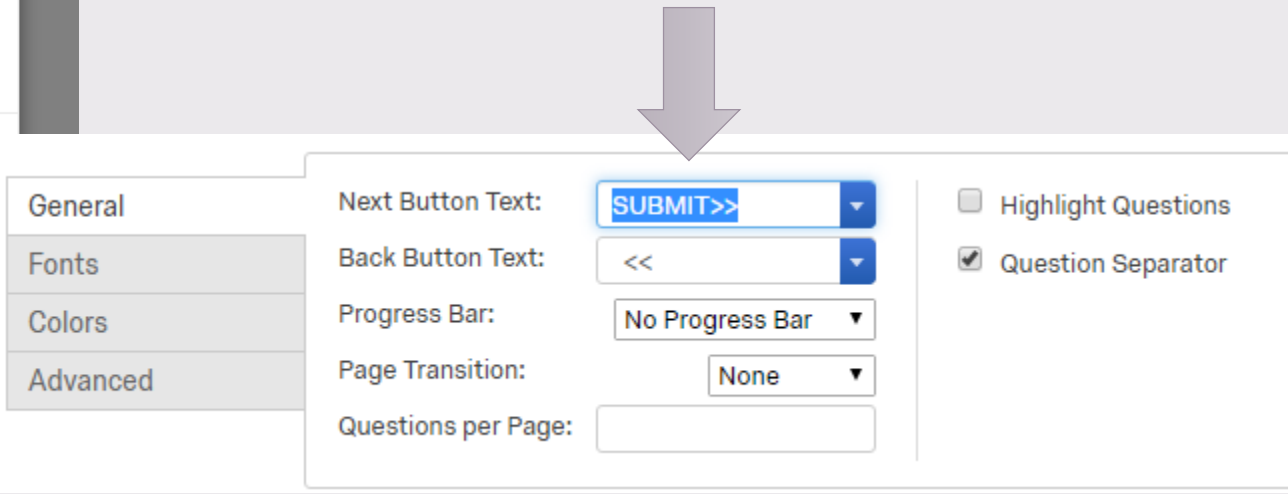


+Add Custom CSS opens up CSS editor

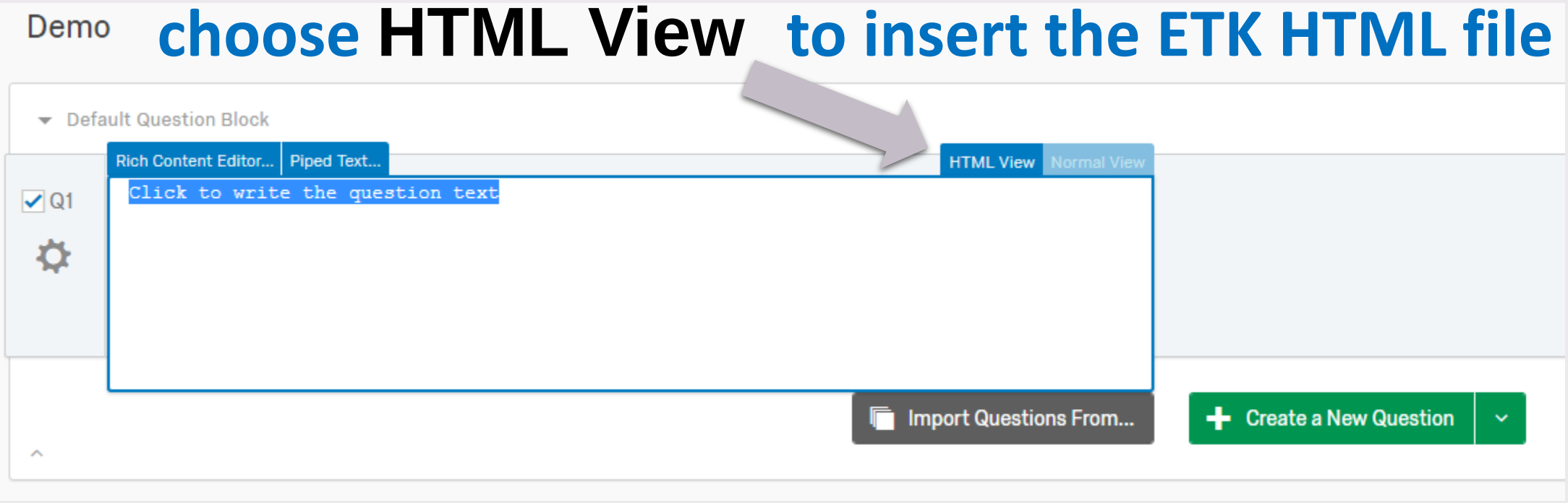


Insert the ETK CSS file; modify image width as needed

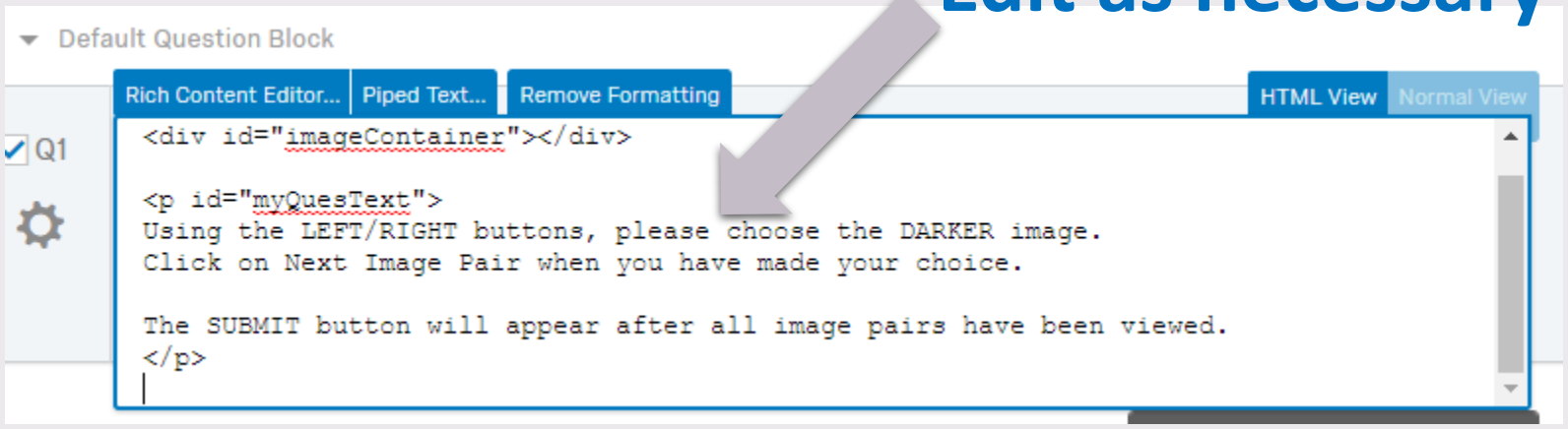
Can also change Next Button to SUBMIT>>

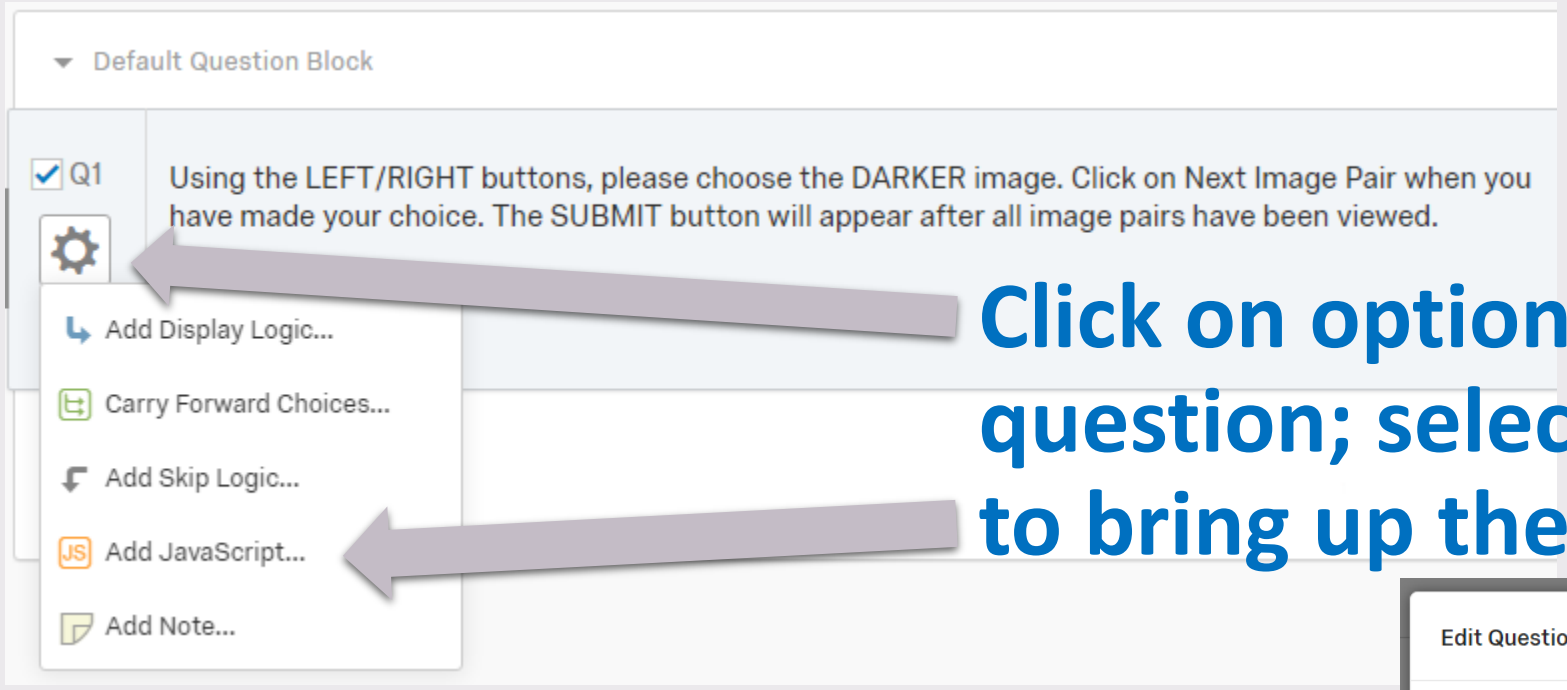


Click on the question to bring up the question editor; choose **HTML View** to insert the ETK HTML file



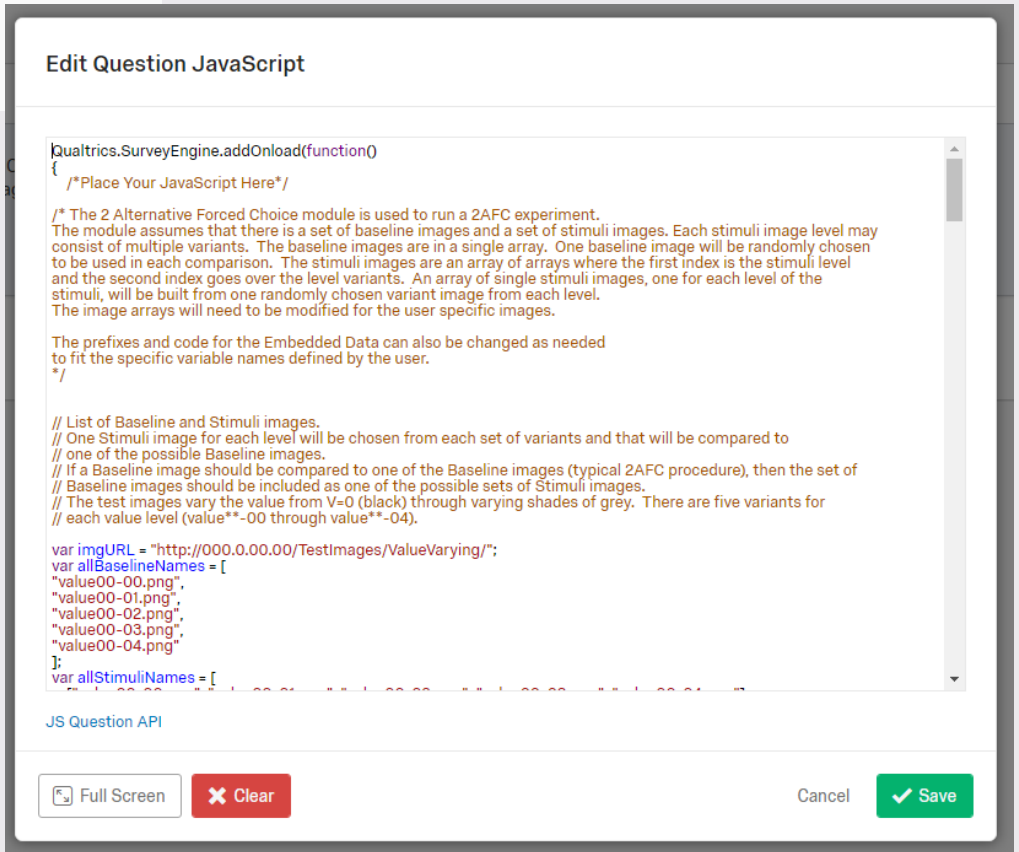
Edit as necessary for your question text.

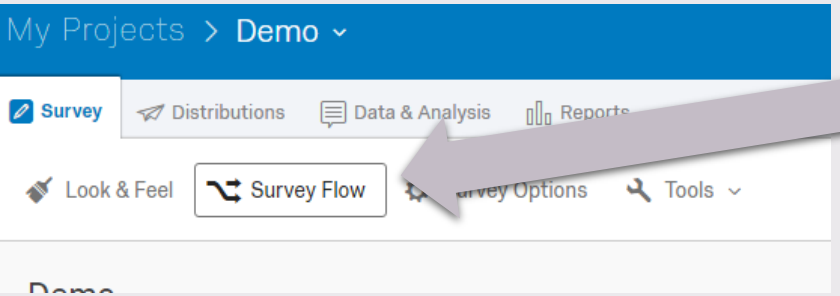




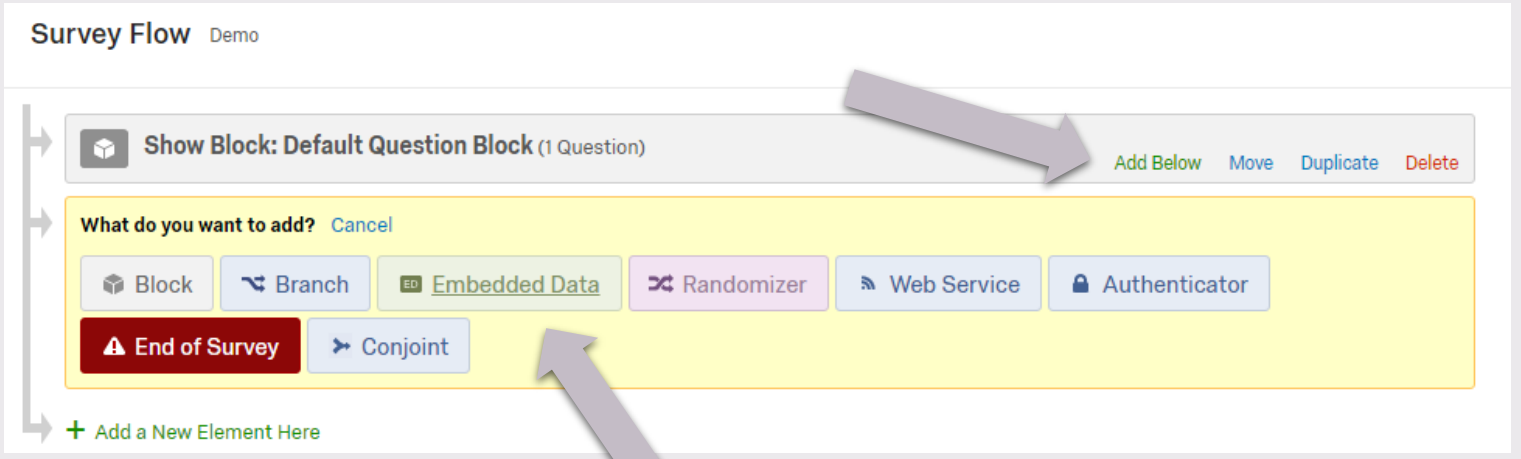
Click on option icon to left of the question; select Add JavaScript… to bring up the JavaScript editor

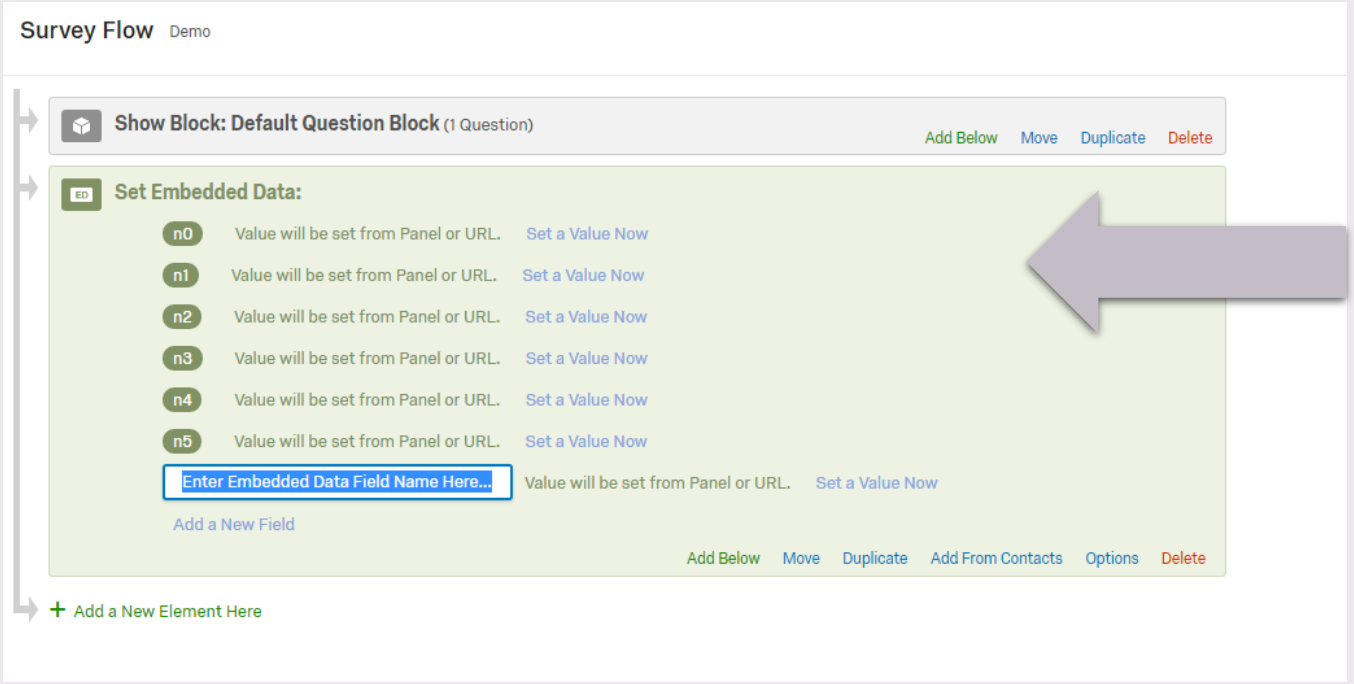
Insert the ETK JavaScript file and edit as necessary to point to your image arrays and change any relevant options.



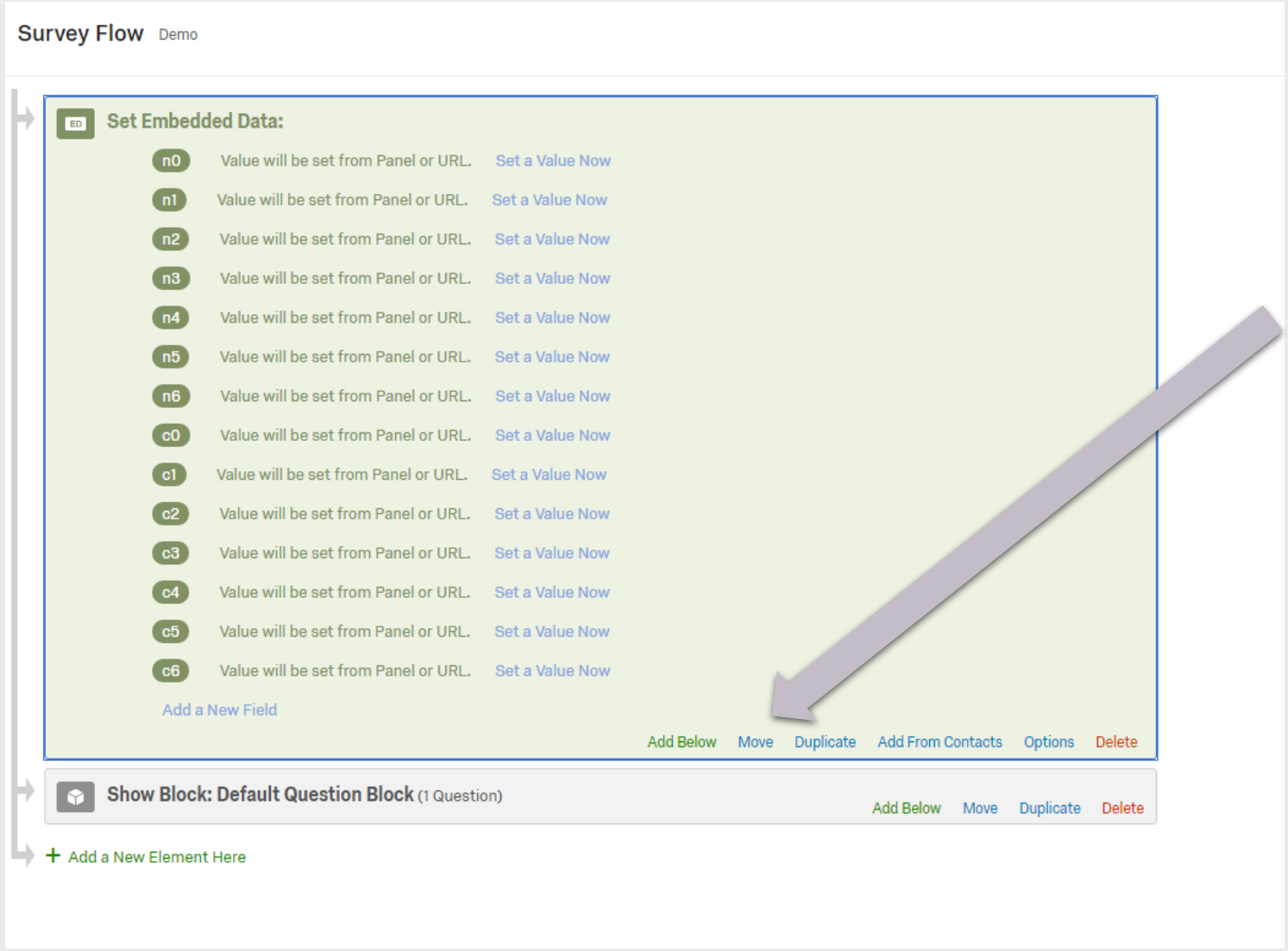


Click on Survey Flow to open the Survey Flow editor in order to add Embedded Data variables and control how the survey unfolds

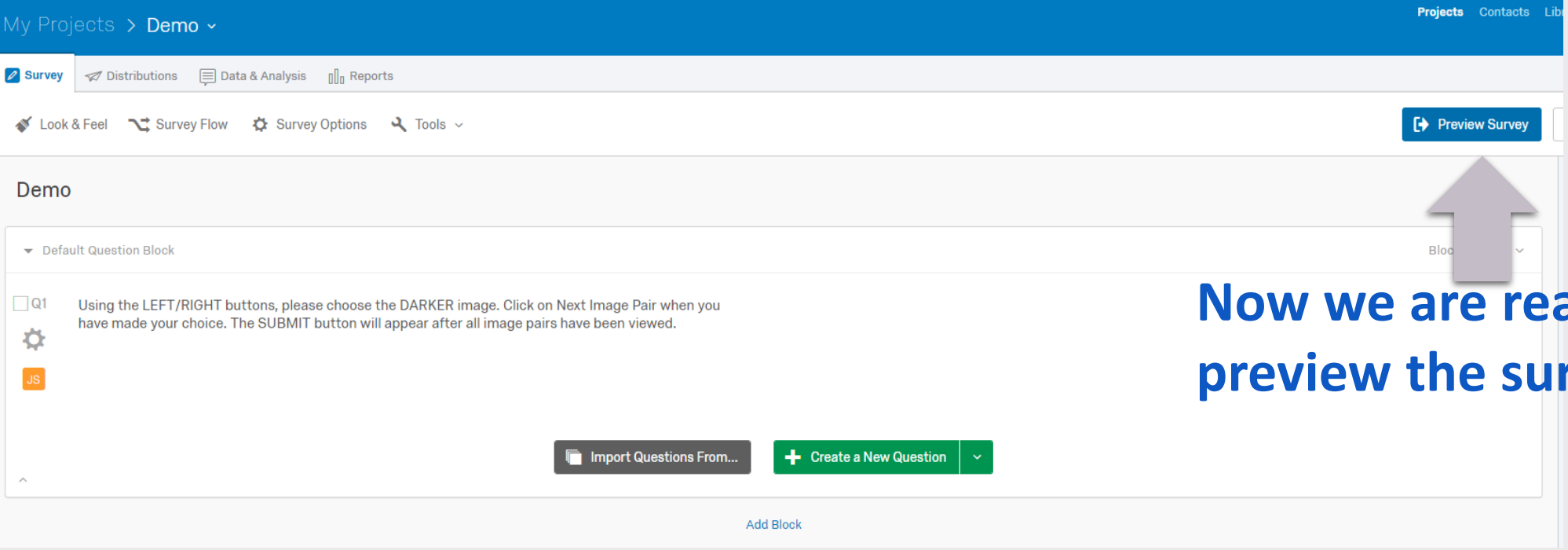




Add Below will allow you to create an Embedded Data block where you can add the Embedded Data variables for ETK output

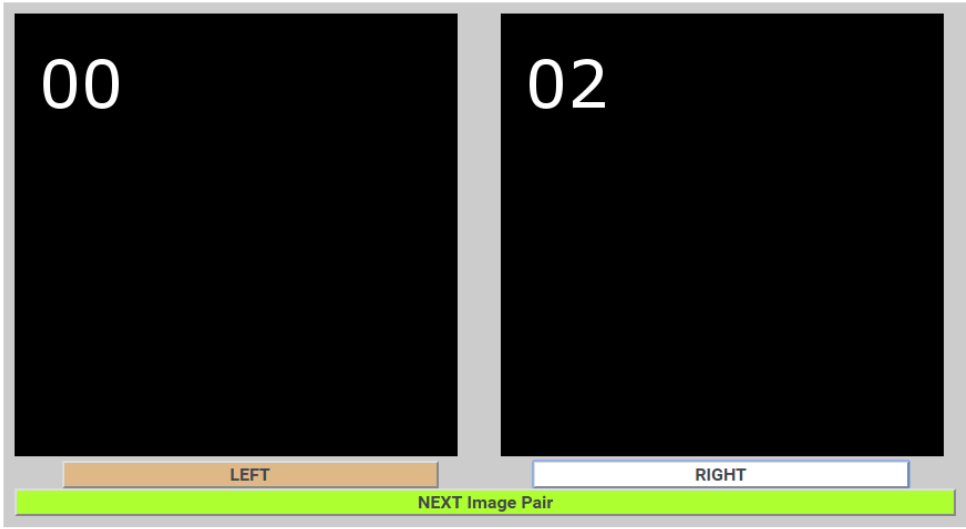


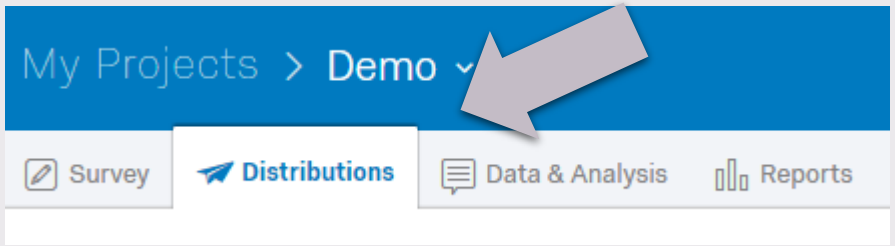
Be sure to move the Embedded Data block ABOVE the Question Block so that the Embedded Data variables are created before the question sets their values.

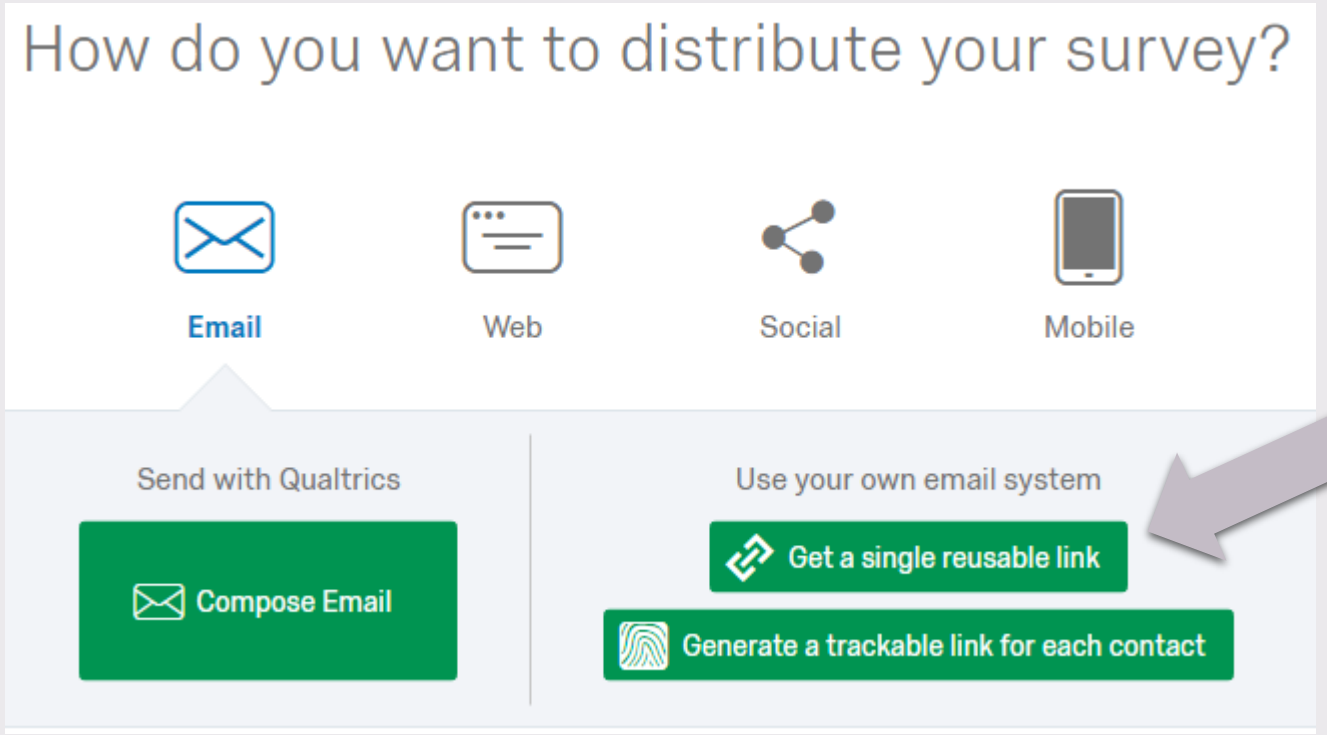


Now we are ready to preview the survey!

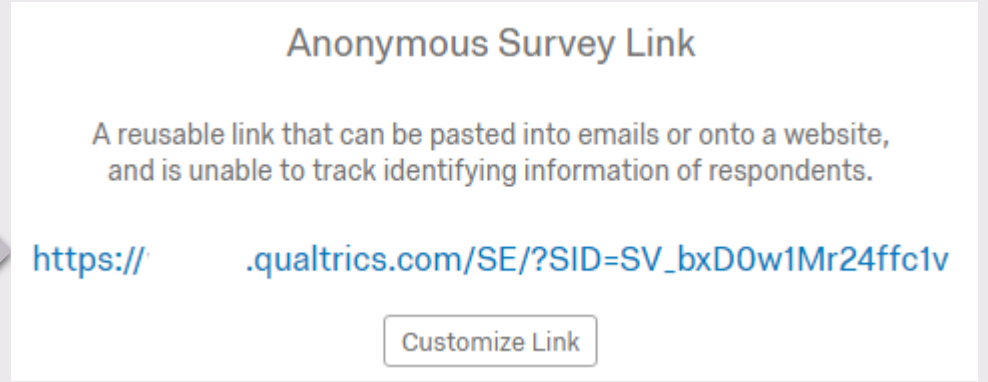
Study screenshot: This 2AFC study runs through the trivial example of determining the Value threshold at which study subjects can discriminate between black and grey. Can you tell which is the darker image?



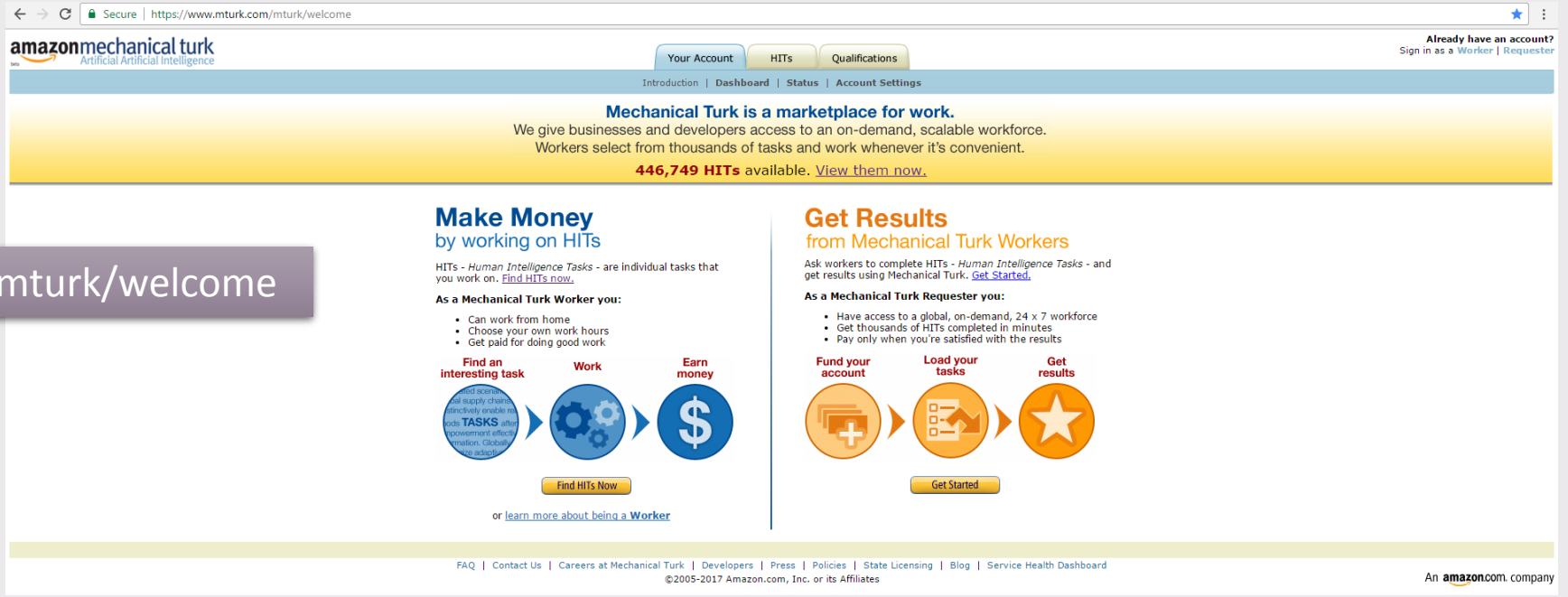


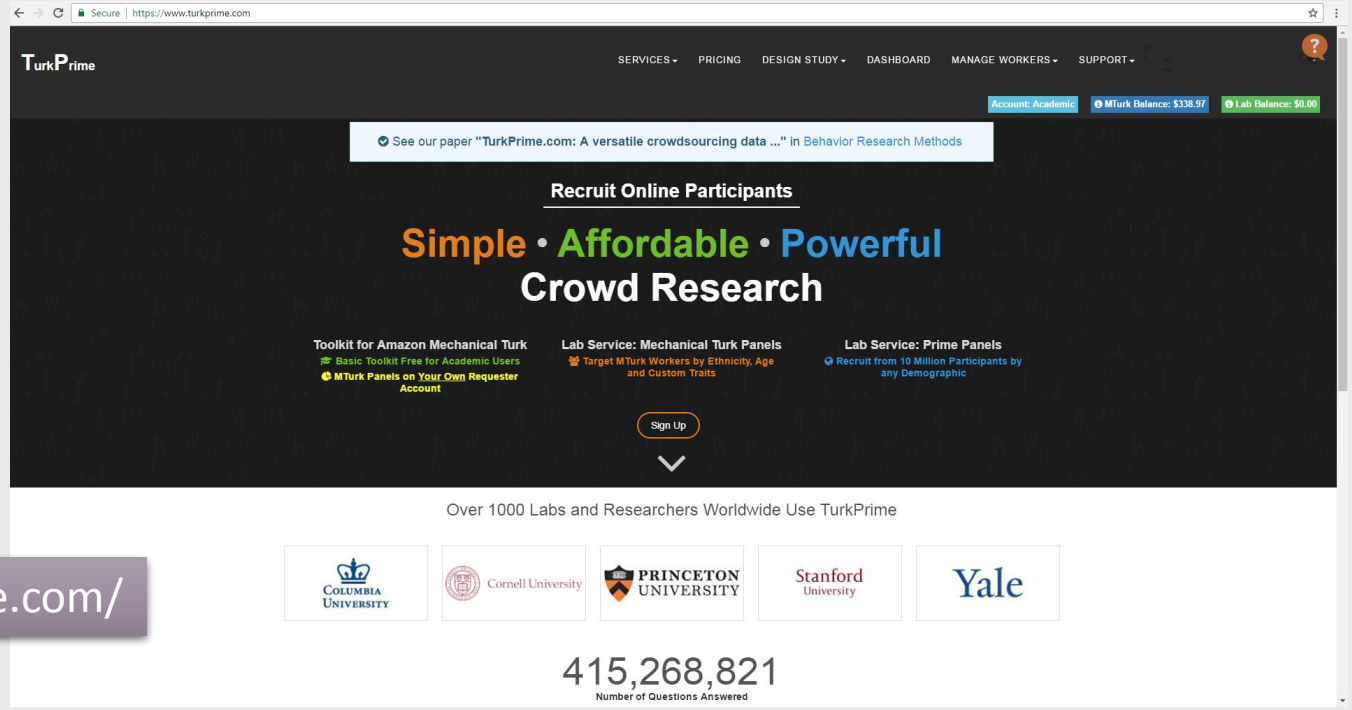


After building your complete study, select the Distributions tab to get the distribution options.
Choose Get a single reusable link



https://www.mturk.com/mturk/welcome



The Qualtrics URL link can be input into Amazon Mechanical Turk, either directly through Mturk or through TurkPrime, a useful data acquisition interface for Mturk.

https://www.turkprime.com/