Experiment Flow

This document outlines the structure of performance experiments we conduct on Mechanical Turk.

Figure 1: High-level view of the experiment flow
1. Consent

Figure 2: A standard consent form is displayed at the beginning of the experiment.
2. Demographics

Figure 3: Collecting demographics. All questions are optional to encourage honest reporting. No participants are denied reimbursement based on their answers, however some may be excluded from the analysis: e.g., participants with medical conditions.
3. Instructions

Instructions

What do I need to do?

You need to use your mouse to select an item from a dropdown menu as quickly as possible while avoiding errors. You will perform 190 such selections in total, divided into four sections (one practice and three main sections).

Which item should I select?

At every step the item you need to select will be displayed in the grey square box in the center of the screen.

Where do I select the item?

You can find the item you need to select in one of the three categories of the dropdown menu. You might also be able to find the same item in the quick access toolbar, which will help you select it faster. Use it to save time!

Anything else before I start the practice section?

Please remember to:
1. Work as quickly as possible
2. Avoid errors
3. Focus on the task and avoid distractions

Start a practice block

Figure 4: The instructions section explains the task.
4. Practice

Figure 5: The practice section serves two purposes. First, it allows the participant to acquaint himself with the interface and the nature of the task. Second, it tests whether the participant understood the instructions.

Figure 6: If the participant failed to demonstrate comprehension of the instructions (specifically, if the participant fails to use the Quick Access Toolbar at least once), he is asked to repeat the practice section until he passes.
5. Experiment Block 1, 2, ..., N

Figure 7: After successfully passing the practice section, the participant completes N experiment blocks, in which the variables of interest (speed, accuracy, etc.) are measured. Depending on the experiment the first few blocks and/or the first few trials of each block may be discarded as they serve as a warm-up and may not be indicative of the actual performance. If this is a within-subjects experiment, different blocks will represent different test conditions.

Implementation issues:

- All HTML resources (images, scripts, etc.) are preloaded before the participant begins each block.
- Performance data (logs) are sent back to the server asynchronously, at regular intervals.
- If the experiment is graphics-intensive (uses HTML5 Canvas), the browser rendering performance in terms of Frames per Second (FPS) is recorded.

Figure 8: After each block the participant receives a progress update.
6. Feedback

Figure 9: At the end of the experiment, the participant has the opportunity to provide any feedback on the Amazon Mechanical Turk HIT page. The participant most commonly comment about the difficulty or enjoyment of the experiment. Occasionally, there are reports of technical issues.