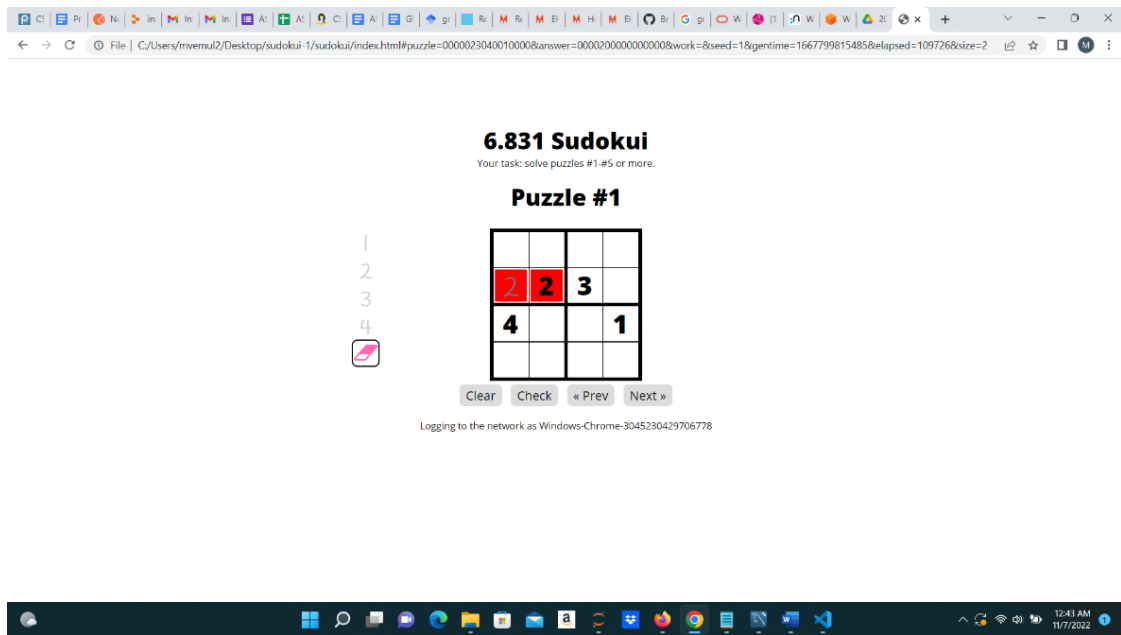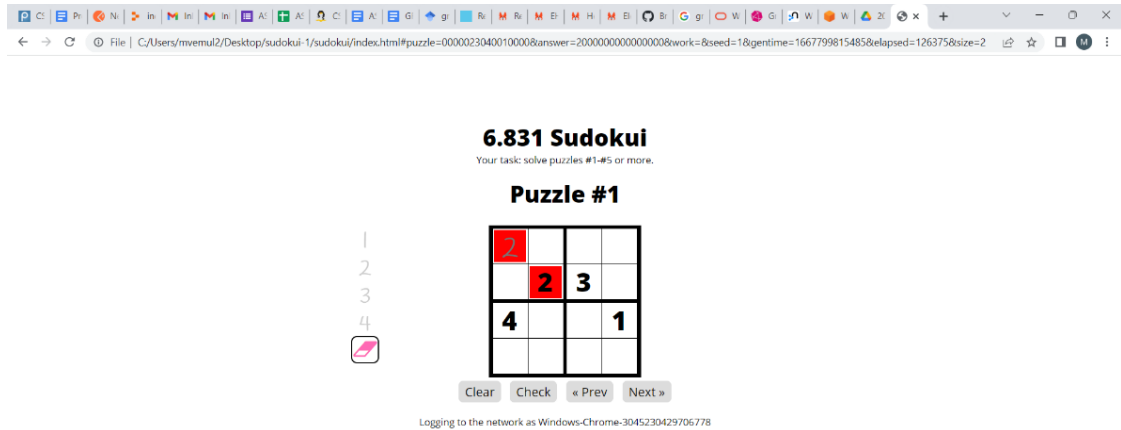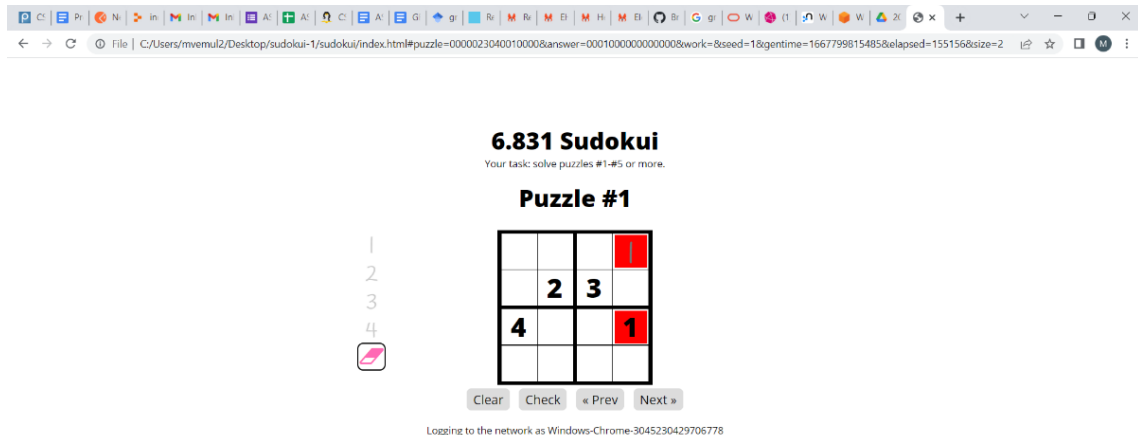# AS1-Report

1. **Problem:** I chose to work on and improve sudoku interface.

2. **Collaborators:** I had no collaborators.

3. **Illustration:** Conflicting cells will be highlighted in red as shown in screenshots.

While filling the cells with digits, when duplicates appear in the same row, the cells are highlighted in red indicating that there is an error as shown in the above screenshot.

While filling the cells with digits, when duplicates appear in the bold-bordered square, the cells are highlighted in red indicating that there is an error as shown in the above screenshot.

While filling the cells with digits, when duplicates appear in the same column, the cells are highlighted in red indicating that there is an error as shown in the above screenshot.

4. **Experimental Hypothesis:** B version implements a hinting system that highlights the conflicting cells in red for resolving the errors quickly which improves the player's efficiency to view errors on the board as it provides continual information.

5. **New Logged Events:**
   a. **cell_changed** - an event that fires when a cell's value is changed

   ```JSON
   {
      answerBefore - cell's answer before update
      answerAfter - cell's answer after update
      workBefore - cell's work before update
      workAfter - cell's work before update
   }
   ```

   b. **conflicts** - event that is fired when there are conflicts in the board state

   ```JSON
   {
      errors - contains an array of positions with conflicting values
   }
   ```