SOFE 3950U Operating Systems 2021
Tutorial 4: Jeopardy

Group # 14

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Github Link:

We added questions in the following manner:

```c
//category 1

strcpy(questions[0].category, categories[0]);
strcpy(questions[0].question, "This is the language Linux is written in.\n");
strcpy(questions[0].answer, "C");
questions[0].value = 100;
questions[0].answered = false;

strcpy(questions[1].category, categories[0]);
strcpy(questions[1].question, "This is the most popular language.\n");
strcpy(questions[1].answer, "Javascript");
questions[1].value = 200;
questions[1].answered = false;

strcpy(questions[2].category, categories[0]);
strcpy(questions[2].question, "This is the language Emacs is written in.");
strcpy(questions[2].answer, "Emacs Lisp");
questions[2].value = 300;
questions[2].answered = false;

strcpy(questions[3].category, categories[0]);
strcpy(questions[3].question, "This is the organization that specifies CSS.");
strcpy(questions[3].answer, "CSS Working Group");
questions[3].value = 500;
questions[3].answered = false;
```

We implemented the following functions:

display_categories();

```c
// Displays each of the remaining categories and question dollar values that have not been answered
void display_categories(void)
{
    for (int i =0; i<NUM_CATEGORIES; i++){
        printf("%s \n", categories[i]);
    }
    // print categories and dollar values for each unanswered question in questions array
}
```

display_question();

```c
107    // Displays the question for the category and dollar value
108    void display_question(char *category, int value)
109    {
110        printf("inside: %s \n", category);
111        printf(" %d ", strcmp(categories[0], category));
112        if (strcmp(categories[0], category) == 80){
113            printf("inside sqqq: %s \n", category);
114            for (int i = 0; i<4; i++){
115                if (!questions[i].answered && questions[i].value == value)
116                printf("%s \n", questions[i].question);
117            }
118        }
119        else if (strcmp(categories[1], category) == 0){
120            for (int i = 4; i<8; i++){
121                if (!questions[i].answered && questions[i].value == value)
122                printf("%s", questions[i].question);
123            }
124        }
125        else if (strcmp(categories[2], category) == 0)
126        {
127            for (int i = 8; i < 12; i++)
128            {
129                if (!questions[i].answered && questions[i].value == value)
130                printf("%s", questions[i].question);
131            }
132
133        }
134    }
```

already_answered();

```c
// Returns true if the question has already been answered
bool already_answered(char *category, int value)
{
    // return true if the 'answered' member is true for any question.
    if (strcmp(categories[0], category) == 0){
        for (int i = 0; i<4; i++){
            if (questions[i].answered && questions[i].value == value)
            return true;
        }
    }
    else if (strcmp(categories[1], category) == 0){
        for (int i = 4; i<8; i++){
            if (questions[i].answered && questions[i].value == value)
            return true;
        }
    }
    else if (strcmp(categories[2], category) == 0)
    {
        for (int i = 8; i < 12; i++)
        {
            if (questions[i].answered && questions[i].value == value)
            return true;
        }

    }
    // lookup the question and see if it's already been marked as answered
    return false;
}
```

We have implemented all functions.

```
[fazemahn@localhost tutorial4]$ ./jeopardy.out
fazal
mihir
ashwin
esam
testplayer
programming
algorithms
databases
Enter the Value and Cateogry
100 programming
   programming, 100
inside:  programming
 80 inside sqqq:  programming
This is the language Linux is written in.

Please Provide Answer
What is C
got muh inpuuutsss: What is C
final Token: C
```

The score update function is not working properly due to type mismatches that are very specific to C.