

Who wants to be a millionaire?

This is a short description of React game “Who wants to be a millionaire?”, which is a supplement to the video demonstration of the game.

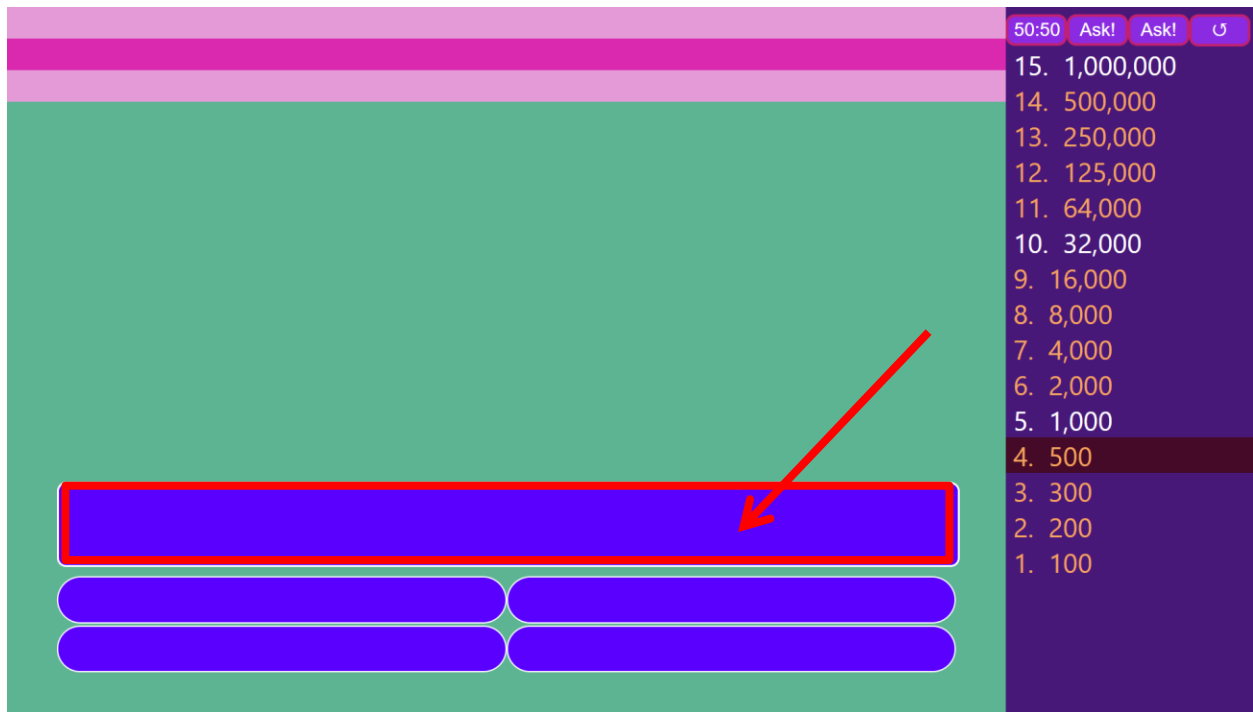
The game includes 3 sets of sample questions (named *Questions2-1.js*, *Questions2-2.js*, *Questions2-3.js*) and 3 sets of questions for ‘Switch’ lifeline (named *QuestionsSw2-1.js*, *QuestionsSw2-2.js*, *QuestionsSw2-3.js*).

To change a question set, it is enough to change a digit in the App.js file:

```
6 import Questions from '../data/Questions2-3.js';  
7 import QuestionsSw from '../data/QuestionsSw2-3.js';  
8
```

To hide functionality from players, there are no visible buttons on the screen to move to the next question or to show text.

In order to show the question text, **a large rectangle (where the text will appear) has to be clicked**:



For the **options** to appear, the **question text has to be clicked once again**.

To confirm the (final) answer, an answer box must be clicked (in the picture, option D is to be clicked):

The screenshot shows a game interface with a brown background. At the top, there is a black bar with a timer '50:50' and two 'Ask!' buttons. Below this, a list of money values is displayed on the right side, ranging from 15. 1,000,000 down to 1. 100. The value 8,000 is highlighted. In the center, a question box asks: 'What is the name of a short story, featuring a region in Czech Republic and fictional detective Sherlock Holmes?'. Below the question, there are four answer options: A. An Uproar in Moravia, B. An Adventure in Transylvania, C. The Events in Masuria, and D. A Scandal in Bohemia. Option D is highlighted with a red box, and a red arrow points to it from the right.

50:50 Ask! Ask! U

15. 1,000,000
14. 500,000
13. 250,000
12. 125,000
11. 64,000
10. 32,000
9. 16,000
8. 8,000
7. 4,000
6. 2,000
5. 1,000
4. 500
3. 300
2. 200
1. 100

What is the name of a short story, featuring a region in Czech Republic and fictional detective Sherlock Holmes?

A. An Uproar in Moravia B. An Adventure in Transylvania
C. The Events in Masuria D. A Scandal in Bohemia

To reveal the correct answer, the answer box has to be clicked again.

To go to the next question, a money value text which has appeared has to be clicked.

The screenshot shows the same game interface as before. The question and answer options are the same. However, option D 'A Scandal in Bohemia' is now highlighted in green. A red box highlights the value '- 16,000 -' in the center of the screen, and a red arrow points to it from the right. The money value list on the right is the same, with 8,000 still highlighted.

50:50 Ask! Ask! U

15. 1,000,000
14. 500,000
13. 250,000
12. 125,000
11. 64,000
10. 32,000
9. 16,000
8. 8,000
7. 4,000
6. 2,000
5. 1,000
4. 500
3. 300
2. 200
1. 100

- 16,000 -

What is the name of a short story, featuring a region in Czech Republic and fictional detective Sherlock Holmes?

A. An Uproar in Moravia B. An Adventure in Transylvania
C. The Events in Masuria D. A Scandal in Bohemia

There are 3 kinds of lifelines:

- Fifty-fifty (50:50)
 - Removes two **random** incorrect answers
- Ask a friend
 - A friend can give advice on the question
- Switch
 - A new question with the same difficulty level will be given
 - The player is still asked to choose an answer to the swapped question and the answer is revealed.

Structure of questions

I use the MS Access database to store questions. Currently, the database has almost 200 questions, and I am expanding it from time to time (it is not included in GitHub yet).

An example of database (easiest questions (of difficulty level 1) are selected):

ID	Question	A	B	C	D	R	Diff	Topic	Comments	isUsed	Click to Add
166	Which rabbit is well-known for his phrase, 'What's up, Doc'?	Bugs Bunny	Brer Rabbit	Roger Bunny	Peter Rabbit	A	1	Fi/Ar		<input checked="" type="checkbox"/>	
100	Which of these is an aquatic fish?	Copperfish	Steelfish	Silverfish	Goldfish	D	1	Biolo		<input checked="" type="checkbox"/>	
101	Who achieved fame as a film tramp with a smudge moustache, twirl	Charlie Chaplin	Charlie Parker	Charlie Higson	Charlie Sheen	A	1	Fi/Ar		<input checked="" type="checkbox"/>	
108	Which of these vegetables can make a person cry?	Cabbage	Beetroot	Onion	Carrot	C	1	Biolo		<input checked="" type="checkbox"/>	
132	The wolf belongs to which animal family?	Dog	Weasel	Horse	Cat	A	1	Biolo		<input checked="" type="checkbox"/>	
133	Which of these is an Andrew Lloyd Webber musical?	Wolves	Cats	Rabbits	Bears	B	1	Music		<input checked="" type="checkbox"/>	
136	What scary creatures were the focus of 'Jurassic Park'?	Aliens	Ghosts	Sharks	Dinosaurs	D	1	Fi/Ar		<input checked="" type="checkbox"/>	
98	What is the Spotify online platform used for?	Following the n	Listening to the	Watching films	Playing comput	B	1	IT/Ma		<input checked="" type="checkbox"/>	
154	With which flowers is the Netherlands particularly associated?	Irises	Tulips	Lilies	Roses	B	1	Geogr		<input checked="" type="checkbox"/>	
82	How many lives are cats said to have?	3	5	7	9	D	1	Langu		<input checked="" type="checkbox"/>	
31	What element does letter 'O' represent on periodic table?	Oxygen	Osmium	Ozone	Oganesson	A	1	Ch/Ph		<input checked="" type="checkbox"/>	
57	Which fast food restaurant is known for its Big Macs?	Pizza Hut	KFC	Subway	McDonald's	D	1	Fo/It		<input checked="" type="checkbox"/>	
58	How many signs are there in the Zodiac?	9	12	15	18	B	1	Misc.		<input checked="" type="checkbox"/>	
59	Which month has an additional day every 4 years?	February	March	October	December	A	1	IT/Ma		<input checked="" type="checkbox"/>	
74	To which kingdom does a human belong?	Fungi	Plant	Animal	Monera	C	1	Biolo		<input checked="" type="checkbox"/>	
75	What is the leading male or female called in a pack of wolves?	Delta	Alpha	Beta	Omicron	A	1	Biolo		<input checked="" type="checkbox"/>	
151	Which Disney film is about a race car named Lightning McQueen?	Cars	Crash	Jam	Traffic	A	1	Fi/Ar		<input checked="" type="checkbox"/>	
****							0			<input checked="" type="checkbox"/>	

There are 9 difficulty levels for questions:

Difficulty level	Question number in the game
1	1
2	2
3	3 or 4
4	5 or 6
5	7 or 8
6	9 or 10
7	11 or 12
8	13 or 14
9	15

Additionally, in order to test knowledge of various areas, for questions 7-15, each question must have a different topic (for example, sport, entertainment, geography, music, ...).

Before the game, I export the database into .csv format, then I launch a C++ program that reads the questions from the .csv file, sorts them based on topic and difficulty level, and randomly selects a set of 15 questions that haven't been used before and comply with restrictions mentioned before.

Then file Questions[number].js is generated which is later used for the game.

Of course, there are many things to be improved. To list a few:

- Compatibility with different screen resolutions. My intention was to host the game on my own laptop in full-screen mode, and I wasn't planning to launch this game from a different computer. Therefore, if the screen resolution is different, visual flaws are very likely.
- There should be a more visible difference between questions 13 and 14 (there is a slight change of music theme, though).
- A slider on the right side of the screen can be removed.