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.

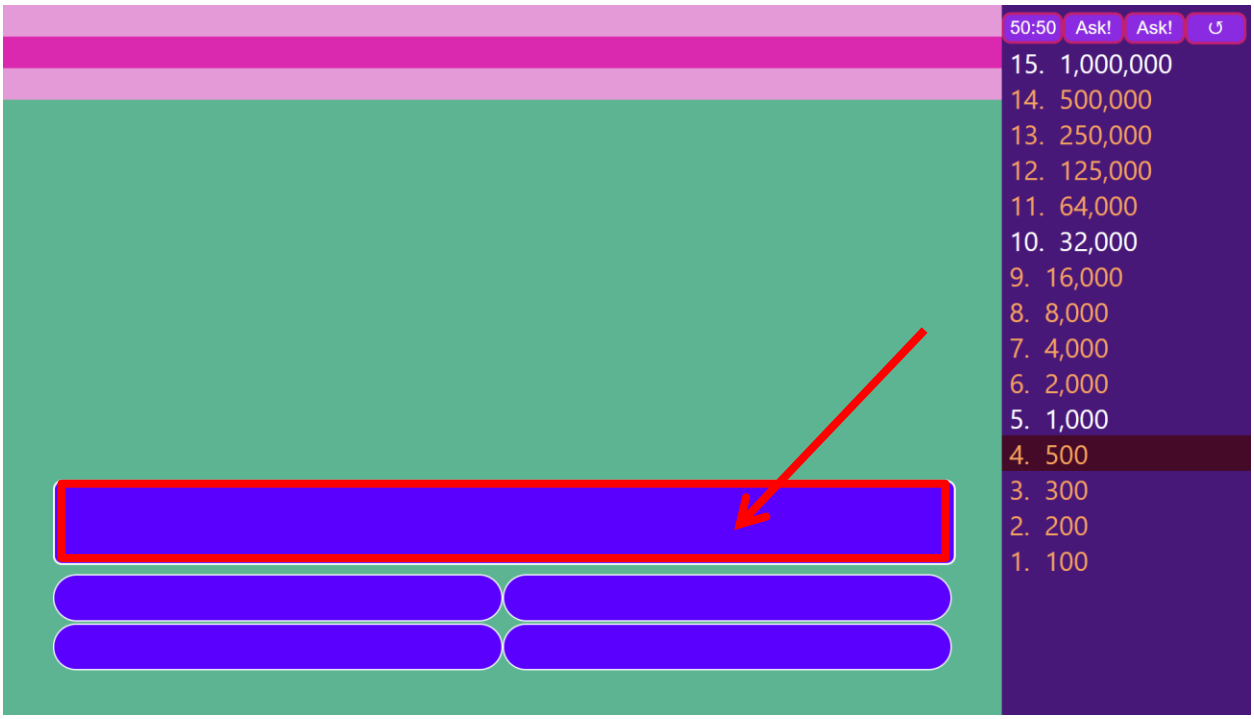
The game includes 3 sets of sample questions (named *Questions2-1.js, Questions2-2.js, Questions2-3.js*) and 3 sets of questions for ‘Switch’ lifeline (named *QuestionsSw2-1.js, QuestionsSw2-2.js, QuestionsSw2-3.js*).

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
```

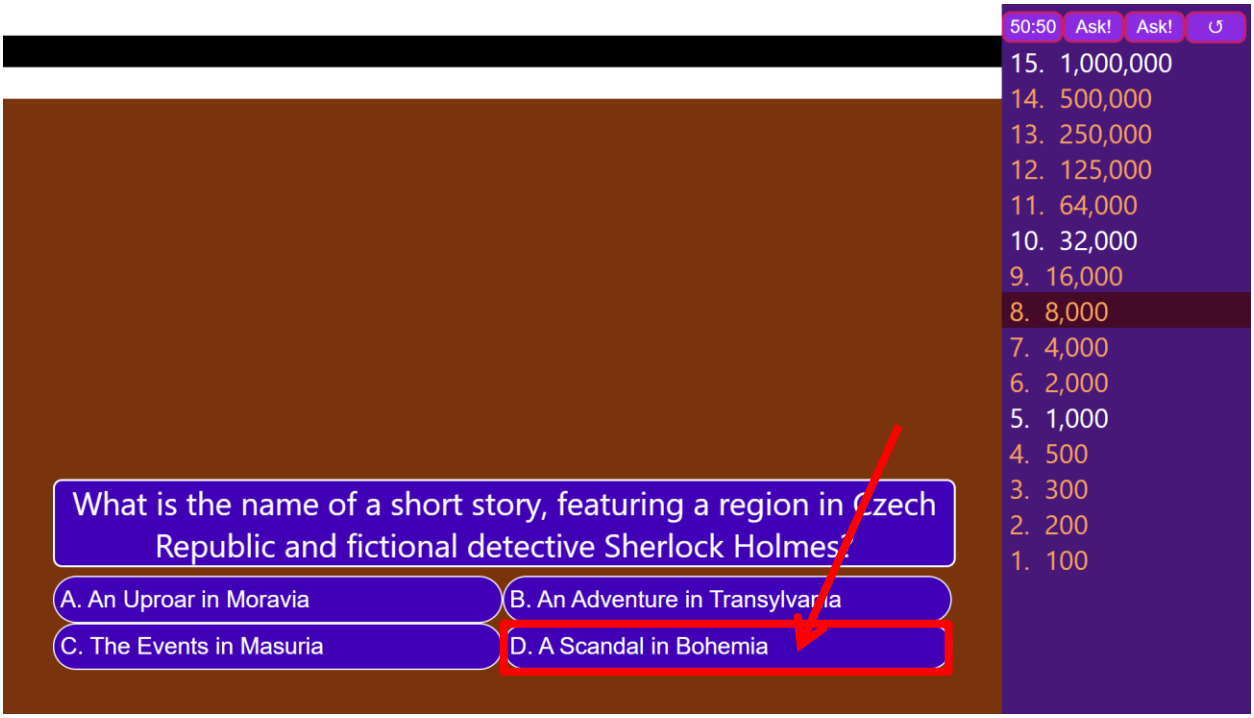
To hide functionality from players, there are no visible buttons on the screen to move to the next question or to show text.

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



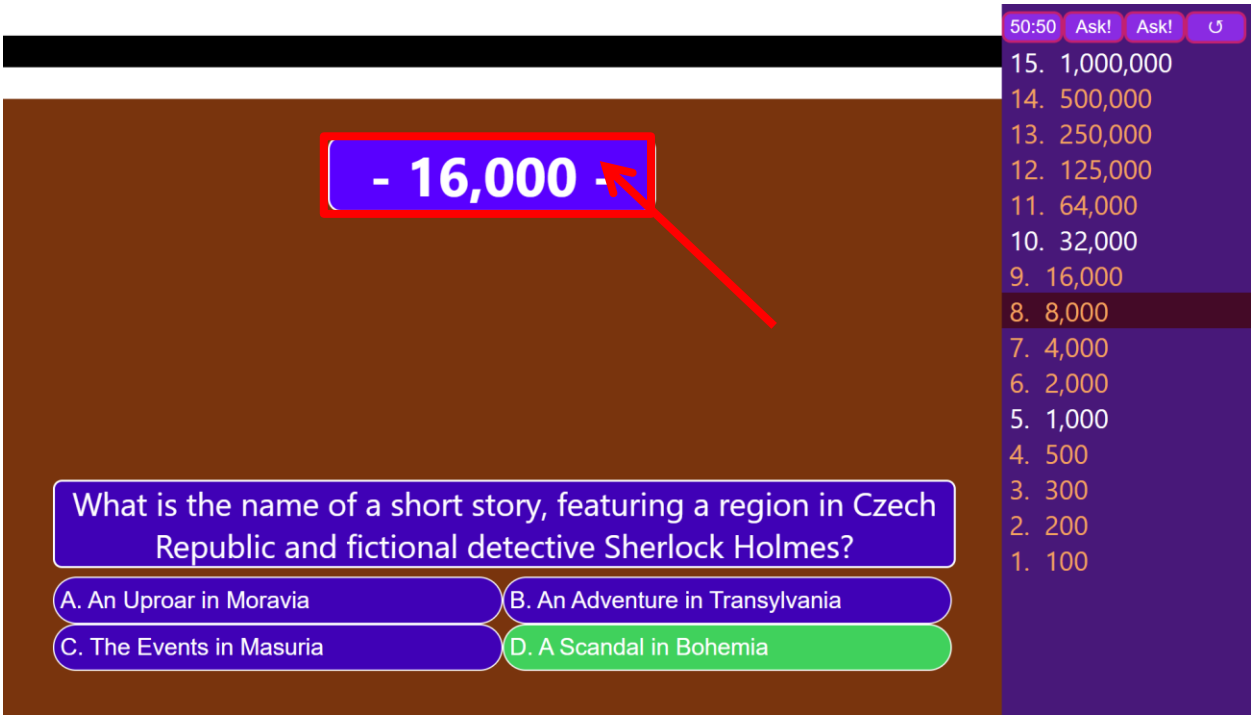
For the **options** to appear, the **question text has to be clicked once again**.

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



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.



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

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.