

## Assignment 5: IndexDB and Canvas

### The assignment

Build a web page that uses IndexDB to give silly answers to questions, remembering the answers so that the same question always returns the same answer. This page should have a graphic component using a canvas.

### Details

- (1) The web page must have an input region for the user to pose a question.
- (2) The initial 8 answers are these: Maybe, Could be, Definitely not, If the weather is good, Depends on the phase of the moon, Why do you ask?, Go ask someone else, I couldn't possibly fail to disagree less.
- (3) If the question has not been answered before, the page should choose and display an answer randomly (for the probabilistically inclined: chosen from a uniform distribution) from the set of possible answers.
- (4) If the question has not been answered before, the user must be able to provide an answer, which the web page must then add to the set of possible answers.
- (5) If the question has been answered before, the web page must provide the same answer it gave before. The association between questions and answers must be stored in an IndexDB database so it survives reloads of the web page.
- (6) There must be a button the user can click to reset the database back to the initial set of answers.
- (7) The web page must have a canvas containing some content that changes every time the page answers a question. It is permissible to repeat the canvas content, and it does not need to depend on either the question or the answer.
- (8) The web page may not consult any back-end CGI-bin program.
- (9) Try to make the user interface simple and appealing. You can be fancy, looking up questions in the database as they are typed (binding a JavaScript program to key-up events in the input region) or you may provide a "submit" button. It is a good idea to use Bootstrap to help organize the page and make it responsive to different-sized devices, but Bootstrap is not required.
- (10) You get extra credit for anything spectacular in the user interface. You will not lose credit for terrible designs.