

## **RUBY ON RAILS CODING TEST**

## **Environment:**

- The latest stable version of Ruby and Ruby on Rails
- Any database, MongoDB is preferred

## Task description:

- 1) A webpage should be created which will implement a simple calculator consisting of:
  - a) two input fields, called a and b
  - b) four buttons labeled sum, difference, multiplication and division
  - c) one textarea element with edit mode disabled (read-only)
- 2) Calculator must operate only on non-negative integer numbers lower than 100. When the form is invalid, the four buttons mentioned above should be disabled.
- 3) When user fills the form and clicks one of the buttons, the form content should be sent to the server with AJAX POST call; and the server response put directly into *textarea* element.
- 4) Server-side code should work in following way:
  - a) in case of invalid data provided "error" text should be returned
  - all calculations previously made should be stored in the database; if an operation with given parameters hasn't been made yet, it should be saved; otherwise calculation result should be fetched from DB
  - c) server response should equal to 4 lines of text in following format:

Operation: A

Result: B

ID: C

Count: D, where:

- i) A will be equal to text interpretation of the operation (e.g. in case of sum of numbers 24 and 23 A should be equal to "24 + 23"
- ii) B will be equal to calculation result
- iii) C will be an DB document/record ID where given operation data is stored
- iv) D will equal to number of previous calls for given operation
- 5) The form should be inactive during the data calculation on the server side, i.e. the user is not allowed to request another calculation if the previous one is not finished
- 6) Write tests to the apps functionality, using whatever technology you prefer
- 7) Source code of the application above should be sent in form of a ZIP archive file