Example of entry test questions on Web-UI/Ruby direction

Version 5.0

For

***SoftServe IT Academy***

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Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 30/06/2014 | 2.0 | Full new version of Web-UI course | Yuriy Bezhachnyuk |
| 06/10/2014 | 2.1 | Updates of incoming tests | Yuriy Bezhachnyuk |
| 03/06/2015 | 3.0 | New version of Web-UI Essay test | Yuriy Bezhachnyuk |
| 22/12/2015 | 4.0 | New version of Web-UI Intensive test. Full English version of this document | Yuriy Bezhachnyuk |
| 30/01/2018 | 5.0 | Ruby incoming test has been added to section2 | Maryana Lopatynska |
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# AIM

This document is created to make the procedure of enrolling to SoftServe IT Academy for Web-UI direction simpler and more understandable for candidates. Here are described the requirements for knowledge level of candidates, given examples of questions, recommended some free on-line quizzes for self-evaluation and necessary literature and materials.

# Example of entry test questions

**TERMS**

Entry test consists of two parts:

1. The first part – set of questions referring to HTML markup language, language for defining cascading style sheets – CSS, JavaScript language, Structured Query Language – SQL, general questions referring to Object Oriented Programming and questions about network communications according to TCP/IP stack. This part contains the following types of questions.
   1. Closed type (need to choose one or more answers from the offered variants)
   2. Set of questions for comparison with etalon answer

The first part of this quiz is checked automatically. In this test there are given 45 questions. Duration of test: 30 minutes. The maximum score of this part – 400 points. If a candidate gets not less than 60% score, he/she can take a second part of exam.

1. The second part – set of questions concerning Ruby language. This part contains the following types of questions:
   1. Closed type (need to choose one or more answers from the offered variants). ()
   2. Set of questions for comparison with etalon answer
   3. Input field for entering answer
   4. Open type – it is necessary to write some fragment of program code using Ruby language to solve the task.

Types of questions a, b, c are checked automatically and d is checked by the teacher. In this test there are given 11 questions. Duration of test: 50 min. The maximum score of this part – 600 points.

3. All questions given in quizzes are provided in English.

**eXAMPLE OF QUESTIONS**

Questions example of the first part of the quiz:

**1**. **What does <fieldset> tag define?**

1. Groups semanticly relative elements of HTML document
2. Groups related forms in a form
3. Groups related elements in a form
4. Defines a set of forms

**2**. **What is the correct HTML for making a drop-down list?**

1. <select>
2. <list>
3. <input type="dropdown" />
4. <input type="list" />

**3. The ... atrribute of image tag specifies the text to be shown in case of failure of displaying image?**

**4. What is a document flow?**

1. It's a the model by which elements are rendered by default in the CSS specifications
2. Content - Margin - Padding - Border
3. It's a model by which elements are rendered as inline.
4. It's a model by which elements are rendered in HTML4 mode.

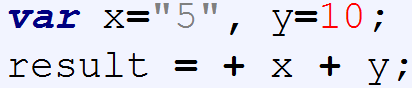
**5. Which SQL statement is used to return only different values?**

1. SELECT UNIQUE
2. SELECT DIFFERENT
3. SELECT DISTINCT

**6. How to hide element so it will still takes up the same space as before?**

1. visibility:hidden;
2. display:inline;
3. display:block;
4. display:none;

**7. Consider this code:**

****

**What value does result refer to?**

**8. There is a list of IP addresses is given in answers. Please select all valid IP addresses according to IPv4 protocol**

1. 87.240.131.99
2. 192.30.257.99
3. 8.8.8.8
4. 192.30.252.128
5. 194.44.222.333
6. 256.147.0.1
7. 194.240.294.101
8. 192.168.0.1

**9. Please answer to the question: What are the basics concepts of Object-Oriented Programming**

1. Reliability
2. Encapsulation
3. Polymorphism
4. Inheritance
5. Traceability
6. Abstraction

Questions example of the second part of the quiz:

1. It’s legal for a method name to end in ?,! or =

* True
* False

1. Fill in the gaps

s="SoftSErve"

if s.**\_\_\_**?

"The variable is nil"

elsif s.empty?

"The string is empty"

elsif s.include?"Soft"

"The string includes 'Soft'"

end

1. Which will be result of the next code ?

def pronounce(words)

words = words + "!"

return

puts words

end

pronounce("Hello!")

* “Hello!”
* **nil**
* Syntax Error
* “Hello!!”

1. Which will be result of the next code ?

[88, 45, 6, 0].find\_all { |number| true }

1. Some questions about class realization in Ruby…
2. Create a method named 'sort\_words' which accepts a String and rearranges all the words in descending order, by length. Let's not treat the punctuation marks any different than other characters and assume that we will always have single space to separate the words.

# References and sources

HTML/CSS/JavaScript

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* Sams Teach Yourself HTML5 in 10 Minutes (5th Edition) by Steven Holzner ISBN-13: 978-0672333330
* JavaScript Pocket Reference 3rd edition by David Flanagan ISBN-13: 978-1449316853
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Ruby

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* <https://www.ruby-lang.org/en/documentation/>