Example of entry test questions on Web-UI 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 |
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| 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 |
| 23/11/2018 | 5.0 | New version of Intensive Web-UI Essay Test | Yuriy Bezhachnyuk |
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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 JavaScript language, web pages design and algorithms. This part contains the following types of questions:
   1. Open type – it is necessary to write some fragment of program code using JavaScript language to solve the task or HTML/CSS code to design some little web-page.

The second part of this quiz is checked by the teacher. In this test there are given 2 questions. Duration of test: 35 minutes. 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.

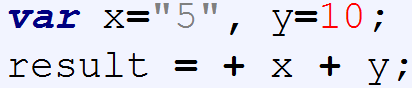
**5. Which SQL statement is used to return only different values?**

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. Provide your solution to solve the task**

Write class GeometricFigure, define private properties for set center of the figure. To access these properties, define necessary methods.

Create two new classes Rectangle and Circle, based on class GeometricFigure. In these classes, define specific private properties. (For example, length of diagonal for Rectangle and radius for circle). Add public method info() to each class, which displays all available information about figure.

**2. Please write the front-end part of the application for the To-Do list.**

The graphic part of the application:



Functional requirements:

* when clicking on the button, the application sends request with data to the server using AJAX technology:
  + endpoint URI: /api/todo
  + HTTP method: POST
  + data is sent in JSON format, the structure:

{ "item": "valueFromTextBox" }

* the server returns data in JSON format, the structure:
  + if the client has sent data that is not yet listed:

{ "message": "Added" }

* + if the client has sent data that is already in the list:

{ "message": "Already added" }

* after receiving data from the server, the application adds a new item to the list or displays a red error message (as shown in the picture to the right of the button).

# References and sources

* Sams Teach Yourself CSS in 10 Minutes by Russ Weakley ISBN-13: 978-0672327452
* 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
* <http://www.w3schools.com/>
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