Assignment "PHP Address Database"

Starting Position

To complete this assignment, you will need an executable PHP/MySQL work platform (e.g. XAMPP). You may use the Internet and books for assistance. The assignment must be completed independently and without help from outside parties.

Log your workflow and thoughts in a work report (maximum 1 A4 side). Organize the work report as you wish. It is important that we can follow your train of thought. Include in your work report how long it took for you to complete the assignment. Comment your source code.

Objective

Your objective is to implement a small web-based contact book whose contacts can be added manually through a web form or automatically through an XML file. You will be assessed on the procedure, the correctness, the completeness and the promptness of your submission.

Time Limit

You may work on the assignment for a maximum of 4 hours.

The Assignment

The following description of the assignment sets out what must be done, step by step.

- Prepare a file under C:\xampp\htdocs with your surname and name (surname_name)
- Important mappings:
  - Your listing in the browser: http://localhost/surname_name
  - PHPMyAdmin: http://localhost/phpmyadmin
- Prepare a MySQL-Database with the name "exercise". Within this database, create a table called "contact" with the following fields: "contact_id", "firstname", "lastname", "address", "email" and "phone".
  - You are to choose the best data types and field lengths. The field "address" should contain only the address (street + house number).
  - The field "contact_id" is the table primary index and must be incremented automatically.
  - Post code and location are not a concern for this table.
  - All fields except "address" and "phone" are mandatory.
- Write a PHP script to interact with the database. Such a script must provide users with a form with the following fields: "first name", "surname", "address", "email" and "telephone number". Subsequently, the result will be checked, evaluated and written into the database by a PHP script.
  - The email field must be checked as a syntactically correct email address.

- ○ The form must be reviewed to ensure that all compulsory fields have been completed.
  - ○ In the event of mistakes, the user must be informed as to which data was entered incorrectly.
  - ○ If the user has to correct any entries, the form must not lose any data.
  - ○ As soon as the data has been entered successfully, a confirmation message should be shown.
- In addition, your script must be able to receive through the URL an XML file with information about new contacts (e.g. yourscript.php?xml=test.xml). The format of the XML file must be as follows:

  ```
  <contact>
          <firstname>Silvan</firstname>
          <lastname>Wyden</lastname>
          <address>Überlandstrasse 10</address>
          <email>silvan.wyden@braintec-group.com</email>
          <phone>+41 (0)44 552 01 20</phone>
  </contact>
  ```

  - ○ The script must also check that this information is valid before it writes the data into the database.
  - ○ Pre-defined XML Parsers and/or classes may be used.
- The whole assignment must be accomplished in an **object-oriented** manner. There must be an object "contact" which prepares the methods to create forms, check form fields, read XML files and save data into the database.

Submission

We expect the following documents:

- Work report as PDF
- Source files (e.g. directory C:\xampp\htdocs\surname_name)
- SQL statements to create the database.

Please send a compressed file (.zip) by e-mail to *silvan.wyden@braintec-group.com*. Once you have e-mailed everything, you can delete all files (including the database) irretrievably.