

Submission 03

Accessing Quotes from a MongoDB Database and Implementing a Feedback Form

Submission Description

In this submission you will continue your website enhancement by making the following additions/changes:

- First, the collection of quotes from which you choose the random quote each day must be moved from a regular JSON textfile into a MongoDB database, and the daily random quote must be chosen from that database, once again using PHP.
- Second, the menu item **Feedback Form** under the **About Us** dropdown group of menu items must be activated (both in the dropdown, and, of course, on the **Site Map** page). This "activation" involves a number of things:
 - The link itself must take the user to a feedback form, as seen on the Amazing Stuff website, version 3, which must be set up to collect the same information seen there. In order to submit the form, the user must choose a salutation and fill in all of the single-line textboxes, except possibly the one for a telephone number (we assume the user may or may not have a phone, but we do assume he or she has an e-mail address). The information in all of the one-line boxes, except the **Subject:** box, is also validated, using the `pattern` attribute with an appropriate regular expression. Note that there are new HTML5 `input` elements for telephone number and e-mail, but we cannot be sure all of our site visitors will be using a browser that has implemented these features, so using the `pattern` attribute is currently a "safer" alternative. Clearly it makes no sense to try to validate what goes into either the **Subject:** box or the **Comments:** box, but we do require these two boxes to contain some input. The checkbox requesting follow-up may or may not be checked. Unless all of these requirements are met, the form data must not be submitted to the server for processing.
 - When a form containing all the necessary and valid data is submitted, the first thing a user must see is a simple HTML page confirming the feedback submission. Feel free to add some CSS styling to this page if you like.
 - Second, the user must also get an e-mail message confirming the feedback submission. This confirming e-mail message will be sent to the e-mail address that the user has entered into the submitted form. The user may wish to keep such an e-mail as a record of contact with the business.
 - Third, the "business" must receive an e-mail as well, containing the feedback information. [See Additional Notes below for details.]
 - Fourth, the feedback information must be recorded in a file on the server, in case the business wishes to process all of the feedback received from users at some later time. [See Additional Notes below for details.]

A Note About the Feedback Form

You will note that if you submit the form and then go back to the form (to make another submission, perhaps) or if there is a problem of some kind with the submission and you want to go back to the form and start over, you may have to "really" start over, in the sense that the values you previously entered into the form may no longer be there. If this happens, it can obviously be bit of a pain for the user. Browsers seem to be getting better at "remembering" recent form data, so it may or may not be a problem. In any case, as a web developer you can arrange that the form data is retained after an attempted submission that may or may not have succeeded, and we will see more about this later.

Required File(s)

In addition to all of the directories and files from version 2 of your website, this third version must also have the following additions/changes:

1. A new PHP script file in your `scripts` subdirectory to get the random daily quotation from the MongoDB database. This script replaces the one that got the random daily quotation from the JSON file in the previous version of your website.
2. A new file in your `pages` subdirectory containing your feedback form, and a new PHP script file in your `scripts` subdirectory to process the data from this form when it is submitted.
3. A new file in your `resources` subdirectory called `quotes_mongo.json` containing your quotes in the JSON format that you used to load them into your MongoDB database. [Of course, once the quotes have been so loaded, the file containing them is no longer necessary, but since it is an "original" resource for your site, it should be retained, and the `resources` subdirectory would thus seem to be the logical place to keep it.]
4. A new subdirectory called `data` containing a new file called `feedback.txt`. This is the file that contains the stored-on-disk information, in chronological order, of the feedback information from every site visitor who filled out and submitted your feedback form.
5. A new `readme.txt` file, in the usual place, with the usual contents.

File Placement for Submission

Submit the required directories and files by copying them into the `submission03` subdirectory of the `submissions` subdirectory in the `public_html` directory of your personal Linux account `u##`, where the `##` are the last two digits in your Linux account username for this course.

Be sure to develop outside the `submission03` directory and **copy** your directories and files to the `submission03` directory when you are ready to submit, so that there is nothing in the `submission03` directory but the directories and files required for the submission. And be sure to test again **after the copy** to make sure everything still works.

Additional Notes, Requirements, Specifications and/or Hints (if any)

- Here are the instructions to ensure the script that processes your feedback form is able to write to the proper location on disk.

In the same directory as your `my_business.php`, issue the following Linux commands, which set up the required subdirectory and file, with their necessary permissions, for PHP to log user feedback submissions:

```
mkdir data
cd data
touch feedback.txt
chmod 664 feedback.txt
```

- Here is the e-mail address you should use for your "business e-mail address" (`uxx` is, of course, **your** username):

`uxx@mail.cs.smu.ca`

And you can check that your "business" has received the e-mail by following these steps:

1. First, browse to `http://mail.cs.smu.ca/mail`. The message you see at at this point will vary, depending on your browser.

2. Second, "click through" to accept whatever security restrictions are presented. These steps will vary from browser to browser as well, but you should only have to do them once for a given browser on a given machine.
3. Third, when you get the **roundcube** mail client prompt, log in with your full username `uxx@mail.cs.smu.ca` and your initial account password.

- As you get each stage working, be sure to copy your files to the submission directory and re-test to ensure that things continue to work in that location. Remember that the marker, as one of your "users", will want to fill out a feedback form and submit it, and will be expecting to get an e-mail from your site in his role as "the business", as well as in his role as a user of your site. To ensure that he can see that "the business" got its e-mail, you must of course, change the email address of "the business" in your script to the email address the marker is using for this purpose, and here it is:

`u50@mail.cs.smu.ca`

But be sure to do this *only* as the *very final action* in the *submitted version* of your website.

Best Practice

Develop your files and directories in the directory `submissions/03`, and when you're finished, copy the contents of this directory to `submissions/submission03` and test/revise to make sure everything is still working in the new location.

Submission 03 Checklist

Files and directories

1. Is there a new `readme.txt` file in the home directory?
2. Is there a `quotes_mongo.json` file in the `resources` subdirectory containing quotes in an appropriate JSON format?
3. Is there a form feedback page in the `pages` subdirectory?
4. Is there a PHP script to process the feedback form in the `scripts` subdirectory?
5. Is there a data subdirectory containing a `feedback.txt` file?

Home page appearance

1. There are no new home page display requirements, but you may wish to revise some aspects of your home page based on feedback.

Home page functionality: Feedback Form link now active

1. Does the **Feedback Form** link under **About Us** go to a feedback form analogous to the AS3 feedback form?

Other pages: Feedback Form page now functional

1. If the user clicks on the **Send Feedback** button without entering any information, do all of the form controls highlight in red (except for the telephone number box), indicating that all information except possibly the telephone number must be supplied?
2. Do all the fields requiring text entry have the required popups indicating how to fill them in, or simply that they must be filled in?
3. When the form is completed with valid input and then submitted by clicking on the **Submit Feedback** button, does an HTML confirmation page appear?

4. When the form is completed with valid input and then submitted by clicking on the **Submit Feedback** button, does the user receive an email confirmation of the feedback submission?
5. When the form is completed with valid input and then submitted by clicking on the **Submit Feedback** button, does the "business" (as represented by your `uXX` account, and eventually by the `u50` account in the case of the marker) receive an e-mail confirmation of the feedback submission?
6. When the form is completed with valid input and then submitted by clicking on the **Submit Feedback** button, is the `data/feedback.txt` file updated with this latest feedback information? [Note that although the "business e-mail" will be to the `u50` account for testing purposes, the `feedback.txt` file will be the one in the account where the website is located.]

Behind the scenes

1. Is the website now accessing its daily random quote from a collection of quotations of appropriate size in the MongoDB database associated with the student account?
2. Do the **First Name**, **Last Name**, **E-mail Address**, and **Phone Number** entry boxes on the Feedback Form validate their entries as required by using the pattern attribute and an appropriate regular expression in each case?
3. Are all files well formatted?

Final questions

1. Are "look and feel", responsiveness, and validation maintained across the website?
2. In addition to the above new features, are there any clearly outstanding issues from the previous version of the website that have not yet been resolved?
3. Did the `readme.txt` file adequately describe the state of the website?