Lesson Number 6

Name:

CRUD Review

Description:

COMP-1006 Helpful Links

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Term Test Rules

This test is 3 hours and timed. During the test the following must be complied:

1. FOR NO REASON can you leave during the test
2. Cellphones must be off and kept away
3. Only the links provided are allowed to be open within the browser
4. The example files we have worked with are for STUDY PURPOSES ONLY. They cannot be open during the test
5. This test is closed book, meaning any resource not strictly provided is unusable
6. This test is an independent exercise prohibiting collaboration
7. There is no talking or communicating during the test unless with the instructor
8. There is a maximum allotment of 3 hours for the test (the test will auto-submit after the 3 hours and the link will disappear once the class is over)
9. Any late entry will cause you to have less time to complete the test

ACTIVITY - Awesome Fun CRUD Review!!!

Exercise - Collaborative Exercise

1. Get into the groups of 4 defined by the instructor (collaboration with diverse groups is a great way to gain some industry insight) **(2 minutes)**
2. Choose a Project Manager in your group **(2 minutes)**
3. Take **20 minutes** to come up with an idea on how to build the application based on one of these challenges
    - I require an application to store my products, but I need to be able to catergorize them
    - I require an application to store provinces/states, but I need to be able to retrieve them by country
    - I require an application to store players, but I need to be able to retrieve them by team
    - I require an application to store people and their multiple hobbies. I need to be able to retrieve the person and view all the hobbies they have
    - I require an application to store tv shows and the actors that played in them. It should have a link to the TV show's description
4. **APPLICATION REQUIREMENTS**
    - The ability to add parent items and children items

- Verification and sanitization to aid the user
- A view for all the rows within the parent table
- A view to see all the children resources for one parent resource
- The ability to update both a parent resource and a child resource
- The ability to delete either a parent or a child
- 5+ rows of example data in the parent table, and 2+ rows per parent of example data for the child table

5. **RESTRICTIONS & PROJECT REQUIREMENTS**
   - **You can ONLY use the HTML Help links that the instructor has provided. YOU CANNOT USE LAB/PROJECT/IN-CLASS/NOTES/EXAMPLES to aid in this exercise**
   - **You must find a way to collaborate your code with the other members of the group. ALL GROUP CANIDATES MUST HAVE A WORKING COPY OF THE CODE BY THE END OF THE EXERCISE.**
   - **ALL TEAM MEMBERS MUST CONTRIBUTE TO THIS EXERCISE.**
   - **Each group must have a working copy of the exercise on a remote server (Azure or Dreamhost) and be able to present it**
   - **A single remote database shared for all contributors is prohibited as this is inherently a bad idea. In a dev shop, developers will develop locally and rarely touch the production database as it is client facing. This is also true with staging databases as they tend to mimic the content on the production database and therefore require being and accurate reflection.**
   - **Each member must hand in the project for a total of 3.5% (1 quiz & 1 lab)**
6. **PRESENTATIONS**
   - Each group must present its application and answer the following questions
     - How did you organize the exercise and deliver tasks?
     - How did you collaborate/share code?
     - **INDIVIDUALLY ANSWER:** Do you feel that you have a better understanding of CRUD, and do you attribute that to working in a group setting?
7. **HELPFUL TIPS:**
   - A project manager should have an understanding of the technology needed to complete the project
   - Dividing tasks is important
     - views
     - scripts
     - validation
     - example data
   - Email, GIT, Dropbox, Google Drive are all good solutions for sharing code between users
   - In order to get this to work on all users machines, the database connection strings will need to be modified
   - The SQL will need to be executed for each users database

Exercise - Review Questions With the Instructor (divide the class into two teams)

1. What HTTP methods are destructive?
2. What does idempotent mean?
3. What does non-idempotent mean?
4. What HTTP methods are considered idempotent?
5. What scripting languages are used for server-side programming?
6. What scripting languages are used for client-side programming?
7. What is the application flow for CREATing a resource?
8. What is the application flow for READing a resource?

9. What is the application flow for UPDATing a resource?
10. What is the application flow for DELETing a resource?
11. One contestant from each team:
    - Build a URL containing a query string
    - Build a second query string and append it to the first
12. When validating and sanitizing user input, what are some convenient PHP functions we use?
13. What is levenshtein?
14. What HTTP methods are available in most major browsers?
15. What HTTP method do we use for UPDATing and DELETing resources?