Homework 7

Congratulations – you've just been hired to work on the IT team at Vanderprise Rent-A-Car!

The CEO, Brad Vander Zanden, is relying on you to help expand his rental car market share by allowing customers to make reservations online. You have two weeks to get a Web site mock-up ready to show at the next board meeting. The architectural staff has decided that the website should be written in PHP.

For starters, customers will be taken through a three-step sequence of Web pages:

1. An initial page that allows a user to input information about the desired reservation.
2. A payment page that allows the user to enter credit card information.
3. A "confirmation" page that displays information about the reservation and flags any errors.

Here are the other technical points that were mentioned at the last staff meeting:

- The Web site content should be valid XHTML 1.0 Transitional.
- Your scripts should use PHP's session handling software, rather than cookies, to save session information.
- The following form elements should be used on the first page to gather information about the reservation.
    - A text field for the airport code or city.
    - Two sets of selection lists for choosing the pickup and drop-off dates. Each set of selection lists should allow the user to specify a month (Jan, Feb, Mar, …, Dec) and a day (01, 02, 03, …, 31). Each set of selection lists should also include a radio button that allows the user to choose morning, afternoon, or evening. *Note*: You don't have to worry about preventing the user from choosing invalid dates such as February 31.
    - A selection list to choose the rental class: economy, compact, luxury, van, sport utility, and truck.
    - Check boxes for equipment options: in-car navigation system, satellite radio, child seats, and non-smoking.
- The credit card page should contain form elements to gather information about the user's credit card:
    - The credit cards we accept are MasterCard, Visa, and AmericanExpress
    - The credit card number, which should be 16 digits, in groups of 4, with dashes between the digit groups. For example, 1234-5678-9012-3456.
    - The credit card security code, which should be a 3 or 4 digit number.
    - The billing address, which should consist of the card holder's name, street address, city, state, and 5 digit zipcode. To keep life simple, you need include only 10 states (use AK, AL, FL, GA, KY, MS, NC, OH, SC, TN) in what should be a menu element.
    - The expiration date, which should be a month from 1-12 and a year from 09-12.
- The confirmation page should echo the reservation and credit card information back to the user and flag any data it cannot validate. The data that it cannot validate should be colored red and should explain the problem (e.g., enter credit card numbers as xxxx-xxxx-xxxx-xxxx, enter a numeric zip code, or select a valid state). You can use an internal style sheet to get red-colored text. The confirmation page doesn't need to allow the user to change reservation information. This script that generates this page will need to have some extra code to validate the values submitted from the reservation and credit card page. In particular, your code needs to perform the following checks:
    - Drop-off date after pickup date: For example, if the pick-up date is March 21, then the drop-off date must be later than March 21. If someone picks up the car on Dec. 30 and drops it off Jan. 3, it is fine to flag it as invalid. A real site would also have a year for the pickup and drop off, but I did not include it in order to simplify the problem.
    - Legal values for the following fields:
        - credit card number
        - zip code
        - security code
        - states
        - rental class

Hackers might insert illegal field values, such as `motorcycle or CA`, into the URL so you must ensure that each field has a legal value. In the real world you would need to type check every field but this list will give you a taste of what's involved without getting too tedious.

- o "Safe" strings: Strip all html and PHP tags from the person's name and street address strings. No further validation of any strings are needed. Again in the real world you would need to strip the tags from all the strings.

Your script can retrieve the reservation information from the $_SESSION table.

Use Your Imagination

There are no screen snapshots for this assignment. I want you to design your own forms based on what you have learned thus far in the course about selecting and laying out form elements. For example, you may want to use a legend element to group some of your form elements.

What to Submit

You should submit three files:
1. reservations.html: The html document for the reservations page
2. reservations.php: The php script that handles the reservations page and generates the credit card page
3. creditcard.php: The php script that handles the credit card page and generates the confirmation page