

# **BDPA Midwest Regional Computer Competition**

## **2008 Problem Statement**

### **BDPA Networking Website**

#### **Introduction**

The BDPA frequently receives calls from former computer competition participants who are interested in the chapter's latest news, as well as, how to get in touch with their peers. As a result, BDPA has decided to create the BDPA Networking website. The main goal of this site is to allow BDPA HSCC team members to reconnect with old friends, previous team members, and to make new friends with at least one thing in common: the BDPA!

The site should allow a BDPA member to login to the system, create a personal profile and search for other members. The personal profile will allow a member to post information including their BDPA chapter, years they participated in the HSCC, current job, and contact information.

Your project will be to create the first release of the BDPA Networking website. The application will allow a BDPA member to:

- Login to the application
- Update their profile information
- View a report listing other BDPA members

Your application will need to contain forms and controls such as text boxes, radio buttons, or checkboxes. You will need to check the requirements for each form to make sure that the user has correctly entered all the necessary information into the form. You will then need to report on this information.

It is up to you to design your user interface. Remember your application should be user friendly. The forms and the reports should be easy to read. You will need to access all of the forms and reports through one primary page. This page will link to the other parts of the application, as well as, the application being able to take you to the next step in the process.

Your work is to include the following:

- A web server
- A browser
- Software code (PHP) that selectively runs the forms and then reports on the information gathered in the forms
- A database (MySQL)

*Reports that are static web pages are unacceptable (in other words, don't hard code or create Access reports and paste them into HTML pages)! The reports need to be generated from a database by your program in real time.*

## ***Form 1 – Login***

A member should be able to logon using their user id and password. If they only enter their user id they should be prompted for their password. Usernames are in the form of first initial and last name, for example Charles Anderson will be canderson.

If the user id and password are correct, the application should connect with the home page.

If the user should be able to reset their password when necessary.

## ***Form 2 – Home Page***

This form is the home page for the BDPA Networking website. It should provide access to the BDPA Member Profile form, as well as, the BDPA Chapter Member list.

To access the BDPA Chapter Member list form the user should choose from a list of the BDPA chapters.

## ***Form 3 – BDPA Member Profile***

On the BDPA Member Profile form the user will be able to **update their contact information**. The following information should be displayed:

- User ID
- First Name
- Last Name
- Email Address
- Phone Number
- Current Job
- BDPA Chapter Name
- HSCC Years of Participation

The user should be able to edit all fields except the user id. First name, last name, and BDPA Chapter are required. For the BDPA Chapter Name, the user should be able to choose from a list.

The user should also be able to change their password.

Updates to a user's profile should be saved to the Profiles table. The blank fields in the Profiles table contain null values.

## ***Report 1 – Chapter's Member List***

This report is the result of a query, which produces a list of registered members from a specific BDPA chapter. The user will select the BDPA chapter on the Home Page. The application will transfer to this form and will display all registered members for the selected chapter.

The report should display the following information:

- BDPA Member Name
- Email
- Phone Number
- Current Job
- Years they participated in the competition
- BDPA Chapter

Sample Report:

User ID	Name	Email	Current Job	Participation	Chapter
dbentley	David Bentley	dbentley@example.com	Senior Systems Software Engineer	2007,2010	West Region Virtual Community
dcooke	Devin Cooke	dcooke@example.com	Senior Programmer Analyst	2007,2010	West Region Virtual Community
halison	Hanna Alison	halison@example.com	IT Support Manager	2010,2013	West Region Virtual Community
uslater	Unity Slater	uslater@example.com	Cloud System Engineer	2013,2016	West Region Virtual Community
zmadden	Zorita Madden	zmadden@example.com	Technical Support Engineer	2013,2016	West Region Virtual Community

After viewing the report, the form should provide the ability to go to the Home Page or the Member Profile page.

## Database Tables and Diagram

There are two tables in this problem. You do not have to create this database, nor do you have to create the initial database records. The laptops contain the tables and database records.

**Database Name:** bdpa

profiles

Field Name	Type	Description
user_id	varchar(25)	userid to which this profile belongs – primary key to this table
password	varchar(10)	password is used with userid to login
first_name	varchar(25)	First name of user
last_name	varchar(25)	Last name of user
email	varchar(50)	Email address of user

phone	varchar(25)	Phone number of user
current_job	varchar(100)	What the user currently does for a living
bdpa_chapter_key	int()	The key of the BDPA chapter that this user belongs to. Join this table to bdpa_chapters using this column.
years_participated	varchar(100)	Free form field to hold the years that the user participated in the BDPA. (i.e. “2003-2005” or “2003, 2004, 2006” etc.)

#### bdpa\_chapters

Field Name	Type	Description
bdpa_chapter_key	int()	Key to the bdpa_chapters table. bdpa_chapter_key is a number.
bdpa_chapter_name	varchar(50)	The name of the chapter associated with bdpa_chapter_key (i.e. Cincinnati, Chicago, etc.)