If everything was successful with the update, instead of using echo or print to display a message, the program will set SESSION['message'] with the message, which will then be displayed by lab.php.

```
header("Location: lab.php");
```

The application is then redirected back to lab.php. lab.php will verify that is was called from dog\_interface and then display "Dog \$dog\_name Insert/Update was successful<br />" at the top of the page. (\$dog\_name is replaced with the actual dog name.)

If the request is delete, a similar process occurs.

else if(\$\_POST['delete'])
{
 \$properties\_array = \$dog\_index;

The dog\_data delete method only needs the position in the array to determine what to remove. Thus, \$properties\_array is set to the value in \$dog\_index. Even though \$properties\_array is now a string and not an array, the processRecords method in dog\_data uses polymorphism to accept an array or a string. This allows the code to be very similar to the update and insert code.

```
$lab = $container->create_object($properties_array);
$_SESSION['message'] = "Dog $dog_name Deletion was successful<br />";
header("Location: lab.php");
```

As seen with update and delete, \$container (which is an instance of dog\_container already created) calls the create\_object method to create an instance of the dog class and pass \$properties\_array (which is really a string). If the delete is successful, \$\_SESSION['message'] is set with the delete message. Then the lab.php program is called. lab.php will verify that dog\_container called it and then display "Dog \$dog\_name Deletion was successful<br/>/>" at the top of the page. (\$dog\_name is replaced with the actual dog name.)

These are the only code changes needed in the dog\_interface program in order to handle the request to insert, update, or delete. dog\_interface must also accept the dogs list box and complete dogs array from the data tier to format and send to lab.php.

dog\_interface must request the dogs array information by calling the display method in dog\_data.php.

```
$container = NULL;
```

The container pointer, \$container, can be reused after the request to return the breeds list has been processed. By setting it to NULL, it will free up the current container (an instance of dog\_container with properties set for retrieving the breeds information).

```
$container = new dog_container("dog");
```

A new instance of the dog\_container passes "dog" instead of "selectbox". This lets the container know than an instance of the dog class will be created, not an instance of the breeds class.

```
$properties = "dog";
$lab = $container->create_object($properties);
```