

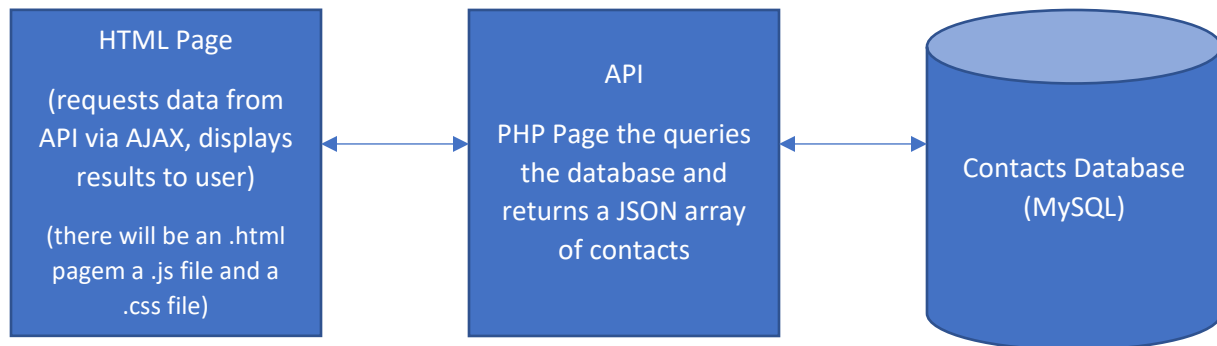
## COMP 2513 Web-Centric Programming

### Assignment 5 – Due 11 PM November 16<sup>th</sup>

Write a PHP page that retrieves data from a database and displays it in a table. There will be three steps:

- Create the **database**. There is a .SQL file that will create a new database and create a table called "contacts".
- Create the **service** page (API). This page is PHP and should connect to your database, returning all of the Contacts records as a JSON array.
- Create a **client**/consumer page. This page shall use AJAX to make a request to the service page (API) and output the results to the page.

To get started, fire up AMPPS and go to <http://localhost/phpmyadmin>. At PhpMyAdmin, you'll want to import the SQL file, which will create the database (contacts) and table (contact) with 100 rows of data.



#### Hint:

- Your API is very similar to the service.php in serviceExample (on Acorn).
- Your HTML page should be very similar to the one you used in Assignment 3 (or the Weather JSON example, where you retrieve data from a URL and display the data on an HTML page).

#### Your solution should contain the following:

1. Your project should be posted on falcon (but get it running locally on APPS first!)
  1. This will require some modification to your .sql script (see notes)
2. Your project should be both submitted to the drop box for grading (should contain an .html, .js, .css, and a .php file).

**Marking Scheme:** The marking of this assignment is **out of 20** will focus on meeting the requirements listed above, the fact that all components work and work together and effort/creativity exercised by the student. The following points will be awarded: 0 (poor), 1 (average) or 2 (well done) points for each of requirements listed above.

## COMP 2513 Web-Centric Programming

### Assignment 5 – Due 11 PM November 16<sup>th</sup>

**Submission:** You will need to place your solution for the assignment on falcon so that the TA can review it for marking. Place it in a directory <http://falcon.acadiau.ca/~username/Assignment5/>. We will not go searching for websites. Please ensure the website is assessable as requested or marks will be deducted. After you have successfully completed the assignment and ensured that it is web accessible, zip up all of the components and submit it to acorn.acadiau.ca. This must be received by the due date in order for the assignment to be marked.

Please contact me or your TA if you need help, and feel free to utilize the discussion forum. You may also use the various files and templates on Acorn and any material from the lectures.

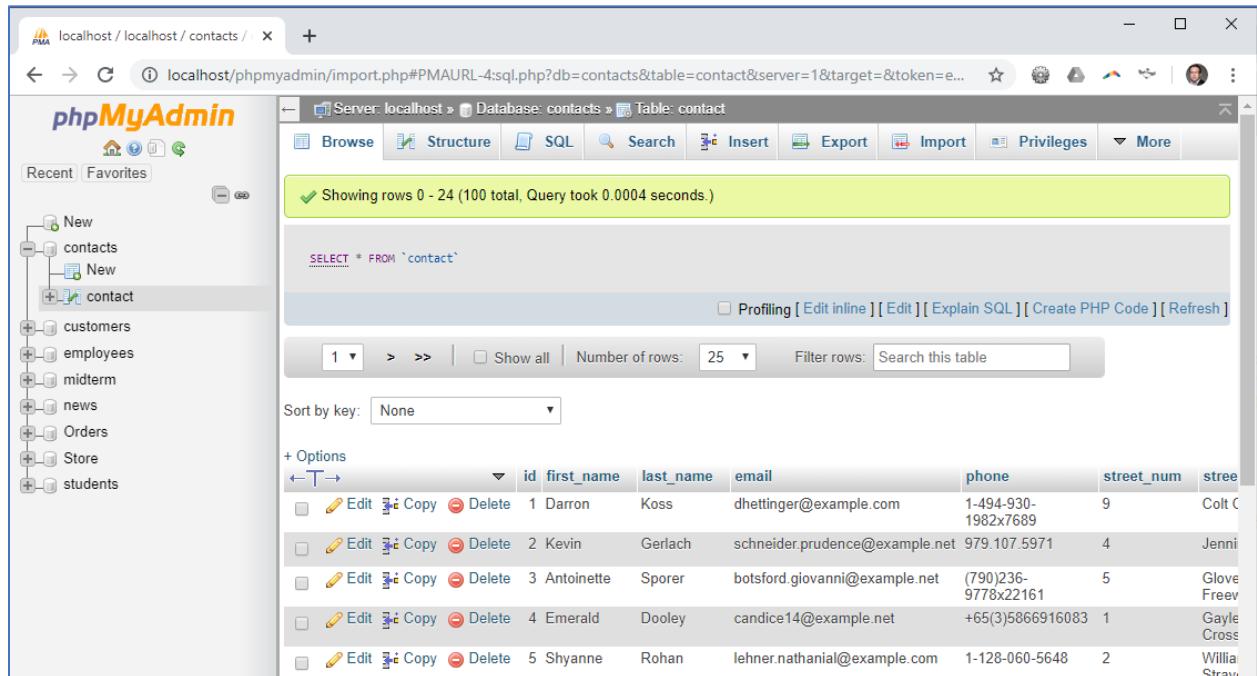
*Notes: You only have one database on Falcon, likely your username\_db. There's a .txt file in your falcon root folder with the db name and password. You'll need to **comment out** the create database part of the SQL **and** the create user part, and modify the USE statement, using your db name. Then you can SSH into falcon, log into MySQL, and run the source script (SQL – upload the file to your root directory first). The create table and insert statements in the script will generate a table with data in your falcon database. Update the connection strings in your service.php page accordingly (db name). Host will remain as "localhost", as both your php page and db are on the same server (falcon).*

# COMP 2513 Web-Centric Programming

## Assignment 5 – Due 11 PM November 16<sup>th</sup>

### More Info

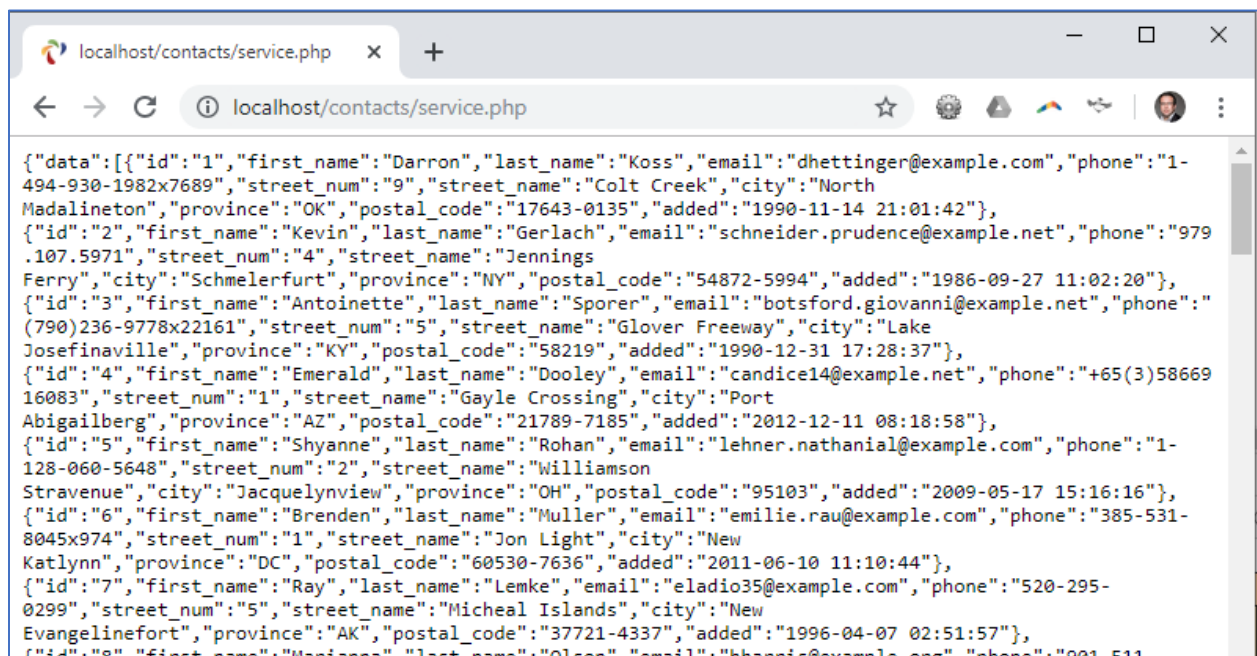
You should see your database in PhpMyAdmin after importing the .SQL file:



The screenshot shows the PhpMyAdmin interface for a database named 'contacts'. The 'contact' table is selected, and the SQL query 'SELECT \* FROM `contact`' is displayed. The table contains 5 rows of data. The interface includes a sidebar with a tree view of the database structure, a top navigation bar with various tools (Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, More), and a bottom section for sorting and filtering options.

	id	first_name	last_name	email	phone	street_num	street_name
<input type="checkbox"/>	1	Darron	Koss	dhettinger@example.com	1-494-930-1982x7689	9	Colt Creek
<input type="checkbox"/>	2	Kevin	Gerlach	schneider.prudence@example.net	979.107.5971	4	Jennings Ferry
<input type="checkbox"/>	3	Antoinette	Sporer	botsford.giovanni@example.net	(790)236-9778x22161	5	Glover Freeway
<input type="checkbox"/>	4	Emerald	Dooley	candice14@example.net	+65(3)5866916083	1	Gayle Crossing
<input type="checkbox"/>	5	Shyanne	Rohan	lehner.nathaniel@example.com	1-128-060-5648	2	Williamson Stravenue

Your API should return JSON, such as this:



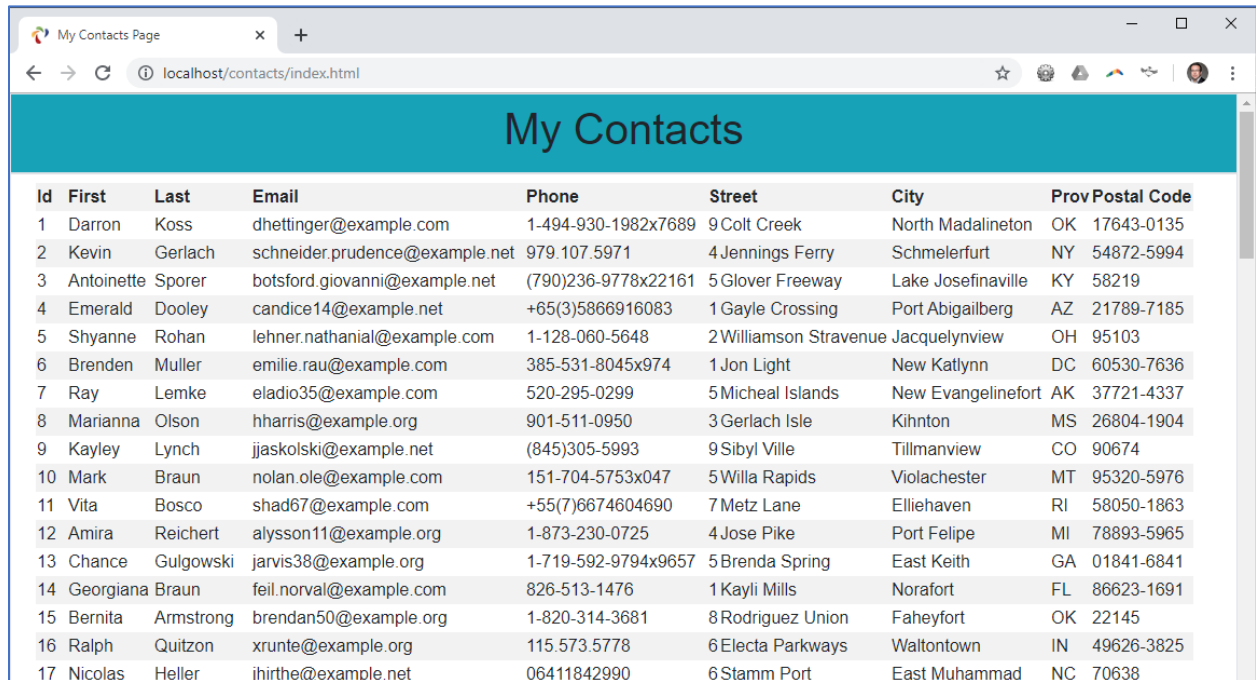
The screenshot shows a web browser displaying the JSON output of the API endpoint 'localhost/contacts/service.php'. The JSON array contains 8 objects, each representing a contact with fields for id, first\_name, last\_name, email, phone, street\_num, and street\_name. The data is identical to the data shown in the PhpMyAdmin screenshot.

```
{
  "data": [
    {
      "id": "1",
      "first_name": "Darron",
      "last_name": "Koss",
      "email": "dhettinger@example.com",
      "phone": "1-494-930-1982x7689",
      "street_num": "9",
      "street_name": "Colt Creek",
      "city": "North Madalineton",
      "province": "OK",
      "postal_code": "17643-0135",
      "added": "1990-11-14 21:01:42"
    },
    {
      "id": "2",
      "first_name": "Kevin",
      "last_name": "Gerlach",
      "email": "schneider.prudence@example.net",
      "phone": "979.107.5971",
      "street_num": "4",
      "street_name": "Jennings Ferry",
      "city": "Schmelerfurt",
      "province": "NY",
      "postal_code": "54872-5994",
      "added": "1986-09-27 11:02:20"
    },
    {
      "id": "3",
      "first_name": "Antoinette",
      "last_name": "Sporer",
      "email": "botsford.giovanni@example.net",
      "phone": "(790)236-9778x22161",
      "street_num": "5",
      "street_name": "Glover Freeway",
      "city": "Lake Josefinaville",
      "province": "KY",
      "postal_code": "58219",
      "added": "1990-12-31 17:28:37"
    },
    {
      "id": "4",
      "first_name": "Emerald",
      "last_name": "Dooley",
      "email": "candice14@example.net",
      "phone": "+65(3)5866916083",
      "street_num": "1",
      "street_name": "Gayle Crossing",
      "city": "Port Abigailberg",
      "province": "AZ",
      "postal_code": "21789-7185",
      "added": "2012-12-11 08:18:58"
    },
    {
      "id": "5",
      "first_name": "Shyanne",
      "last_name": "Rohan",
      "email": "lehner.nathaniel@example.com",
      "phone": "1-128-060-5648",
      "street_num": "2",
      "street_name": "Williamson Stravenue",
      "city": "Jacquelynvew",
      "province": "OH",
      "postal_code": "95103",
      "added": "2009-05-17 15:16:16"
    },
    {
      "id": "6",
      "first_name": "Brenden",
      "last_name": "Muller",
      "email": "emilie.rau@example.com",
      "phone": "385-531-8045x974",
      "street_num": "1",
      "street_name": "Jon Light",
      "city": "New Katlynn",
      "province": "DC",
      "postal_code": "60530-7636",
      "added": "2011-06-10 11:10:44"
    },
    {
      "id": "7",
      "first_name": "Ray",
      "last_name": "Lemke",
      "email": "eladio35@example.com",
      "phone": "520-295-0299",
      "street_num": "5",
      "street_name": "Micheal Islands",
      "city": "New Evangelinefort",
      "province": "AK",
      "postal_code": "37721-4337",
      "added": "1996-04-07 02:51:57"
    },
    {
      "id": "8",
      "first_name": "Marianna",
      "last_name": "Olson",
      "email": "bharris@example.org",
      "phone": "901-511-"
    }
  ]
}
```

# COMP 2513 Web-Centric Programming

## Assignment 5 – Due 11 PM November 16<sup>th</sup>

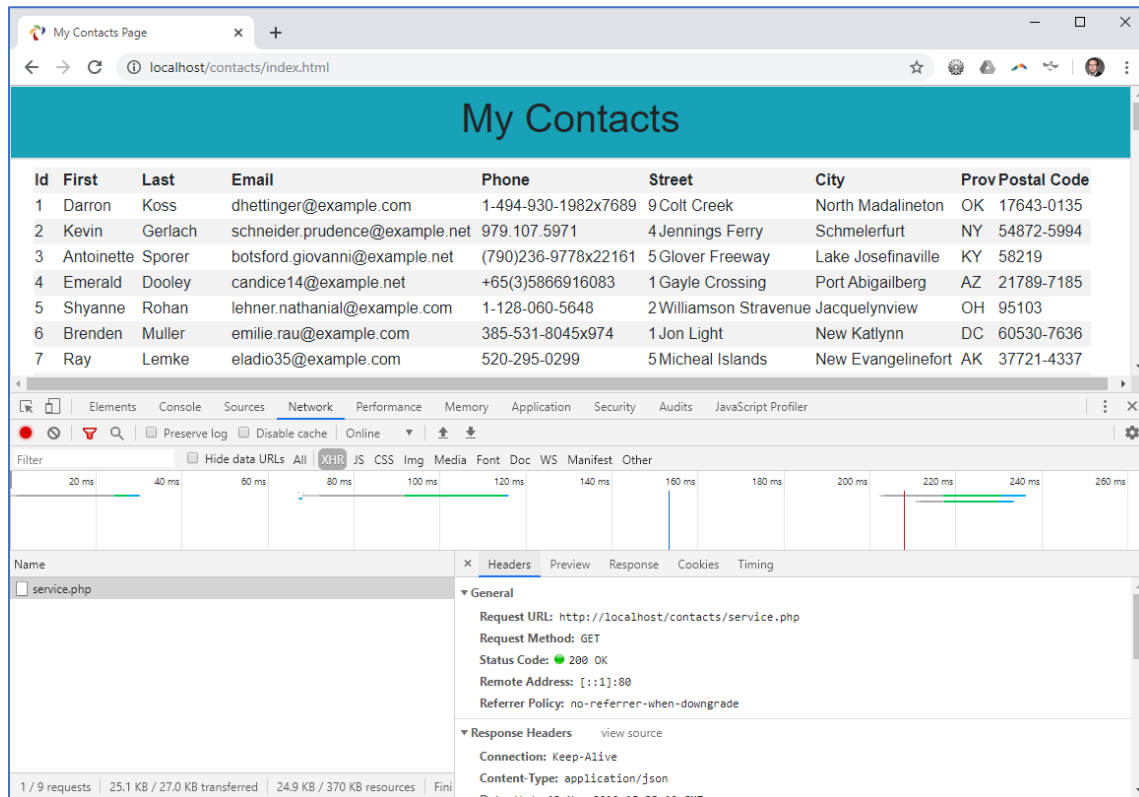
Your HTML page (when it loads) should retrieve the data from the API and display it in an HTML table:



A screenshot of a web browser displaying a page titled "My Contacts". The page has a teal header with the title. Below the header is a table with 17 rows of contact information. The table has columns: Id, First, Last, Email, Phone, Street, City, and Prov Postal Code. The data is as follows:

Id	First	Last	Email	Phone	Street	City	Prov Postal Code
1	Darron	Koss	dhettinger@example.com	1-494-930-1982x7689	9 Colt Creek	North Madalineton	OK 17643-0135
2	Kevin	Gerlach	schneider.prudence@example.net	979.107.5971	4 Jennings Ferry	Schmelerfurt	NY 54872-5994
3	Antoinette	Sporer	botsford.giovanni@example.net	(790)236-9778x22161	5 Glover Freeway	Lake Josefinaville	KY 58219
4	Emerald	Dooley	candice14@example.net	+65(3)5866916083	1 Gayle Crossing	Port Abigailberg	AZ 21789-7185
5	Shyanne	Rohan	lehner.nathaniel@example.com	1-128-060-5648	2 Williamson Stravenue	Jacquelynview	OH 95103
6	Brenden	Muller	emilie.rau@example.com	385-531-8045x974	1 Jon Light	New Katlynn	DC 60530-7636
7	Ray	Lemke	eladio35@example.com	520-295-0299	5 Micheal Islands	New Evangelinefort	AK 37721-4337
8	Marianna	Olson	hharris@example.org	901-511-0950	3 Gerlach Isle	Kihnton	MS 26804-1904
9	Kayley	Lynch	jjaskolski@example.net	(845)305-5993	9 Sibyl Ville	Tillmanview	CO 90674
10	Mark	Braun	nolan.ole@example.com	151-704-5753x047	5 Willa Rapids	Violachester	MT 95320-5976
11	Vita	Bosco	shad67@example.com	+55(7)6674604690	7 Metz Lane	Elliehaven	RI 58050-1863
12	Amira	Reichert	alysson11@example.org	1-873-230-0725	4 Jose Pike	Port Felipe	MI 78893-5965
13	Chance	Gulgowski	jarvis38@example.org	1-719-592-9794x9657	5 Brenda Spring	East Keith	GA 01841-6841
14	Georgiana	Braun	feil.norval@example.com	826-513-1476	1 Kayli Mills	Norafort	FL 86623-1691
15	Bernita	Armstrong	brendan50@example.org	1-820-314-3681	8 Rodriguez Union	Faheyfort	OK 22145
16	Ralph	Quitzon	xrunte@example.org	115.573.5778	6 Electa Parkways	Waltontown	IN 49626-3825
17	Nicolas	Heller	jhirthe@example.net	06411842990	6 Stamm Port	East Muhammad	NC 70638

With Dev Tools open (Chrome), you should see the service call being made when the page loads:



A screenshot of a web browser with Chrome DevTools open. The page displays the "My Contacts" table. The DevTools Network tab is active, showing a list of requests. The first request, "service.php", is selected. The "Headers" sub-tab is open, displaying the following information:

- General**
  - Request URL: `http://localhost/contacts/service.php`
  - Request Method: `GET`
  - Status Code: `200 OK`
  - Remote Address: `::1:80`
  - Referrer Policy: `no-referrer-when-downgrade`
- Response Headers**
  - Connection: `Keep-Alive`
  - Content-Type: `application/json`

The bottom of the DevTools window shows a summary: "1 / 9 requests | 25.1 KB / 27.0 KB transferred | 24.9 KB / 370 KB resources | Finish".