

Project Notes

Hi, we are so excited to see the results of your test.

Feel free to reach out with any questions you may have during the project.

Once you have reviewed the project, please let me know when you think you'll be done.

When the project is complete, please send me a zip file or a Git link to the project and we'll set up a meeting to go over the project.

User Object

- Build a class in PHP that manages “user” objects.
- Each object represents a unique row in a MySQL table called “users.”
- Each column in the table represents a property of the user object.
- Here is an [SQL](#) file for reference.
- The class should support a handful of actions including basic database CRUD functionality.
- Those actions are:
 - Get all object properties from the model
 - Get a single object property from the model
 - Set object properties in bulk in the model
 - Set a single object property in the model
 - Validation of the object's properties
 - Fetch a row from the database that sets the model properties
 - Create a row in the database from properties in the model
 - Update a row in the database from properties in the model
 - Delete a row in the database from the primary key in the model

User Management Form

- Build a basic form that allows for the creation, editing and deleting of user objects.
- The form should be responsive, look awesome on mobile, and use the design attached.
- Should handle validation

Again, feel free to reach out with any questions.

Call, text or send an email.

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Profile Info

Manage your personal information.

First Name

Brandon

Last Name

Kellogg

Email

bkellogg@slicktext.com

Mobile Number

814-730-1482

Address

Enter a location

City

State / Province

None



Postal Code

Save

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Kerry's Notes

Create environment

Start with creating the local environment to work on the project. I installed AMPPS (WAMP) server to install Apache, MySQL and PHP on my local Windows system. I prefer to work in Linux, but it is the spare system I had available and didn't want to run Virtual Box at this time. This will allow me to test the MySQL, PHP and input form being generated.

Generate code

I used ChatGPT to generate the code. Yes, I can write the code, but the amount of time saved in generating code versus testing and fixing code is a huge time saver. With the correct prompting and follow up questions, the code can generate the model, object, validation and the test data within minutes instead of hours. I prompted the system with the initial request stating the database creation of variable size and type, and requested the model creation just as it was stated in the project overview:

"Build a class in PHP that manages "user" objects. Each object represents a unique row in a MySQL table called "users." Each column in the table represents a property of the user object. Here is an SQL file for reference. The class should support a handful of actions including basic database CRUD functionality. Those actions are: Get all object properties from the model Get a single object property from the model Set object properties in bulk in the model Set a single object property in the model Validation of the object's properties Fetch a row from the database that sets the model properties Create a row in the database from properties in the model Update a row in the database from properties in the model Delete a row in the database from the primary key in the model"

This generated **models/users.php**. I cursorily look through the code and I noted that the zip code would not validate Canadian postal codes and it should include validation for phone numbers and requested an update. I would also recommend adding code to sanitize field like phone numbers for them to be consistent prior to entry into the database, e.g. 123-456-7890, (123) 456-7890, 123 456 7890, 1234567890 should all be entered as (123) 456-7890. If we are working with international numbers, we would need to account for additional digits.

Generate test data

I wanted to be able to test the functions and had ChatGPT generate a set of 50 random users to enter into the database. This is seen under **testing/generate_test_users.php**. Running this generated an error that was caused as the AI didn't show how to set up the database connection. This was set up in **db_conn/db_conn.php** and included in the generate script. This ran with no issues.

id	first_name	last_name	email	mobile_number	address	city	state	zip	created	last_updated
4	Jane	Smith	jane.smith@example.com	(399) 603-2301	789 Pine Dr	Chicago	FL	53868	2024-12-02 12:32:43	2024-12-02 12:32:43
5	Frank	Doe	frank.doe@example.com	(555) 149-7011	456 Oak Ave	Dallas	PA	68659	2024-12-02 12:32:43	2024-12-02 12:32:43
6	Eve	Smith	eve.smith@example.com	(857) 839-2824	202 Birch Rd	New York	OH	75800	2024-12-02 12:32:43	2024-12-02 12:32:43
7	Hannah	Miller	hannah.miller@example.com	(981) 806-2396	202 Birch Rd	Houston	OH	13123	2024-12-02 12:32:43	2024-12-02 12:32:43
8	Eve	Miller	eve.miller@example.com	(978) 213-9943	707 Willow Way	Houston	MI	37178	2024-12-02 12:32:43	2024-12-02 12:32:43
9	Grace	Smith	grace.smith@example.com	(237) 426-8069	303 Cedar Blvd	Phoenix	FL	56497	2024-12-02 12:32:43	2024-12-02 12:32:43
10	Hannah	Martinez	hannah.martinez@example.com	(101) 921-1668	202 Birch Rd	Austin	GA	73786	2024-12-02 12:32:43	2024-12-02 12:32:43
11	Eve	Garcia	eve.garcia@example.com	(626) 367-2670	202 Birch Rd	New York	GA	49272	2024-12-02 12:32:43	2024-12-02 12:32:43

Cleaning up AI

I requested that the AI give a little UI/UX to the form so that it was more appealing. It included it in the index.php which would normally be in some form of a bootstrap or other framework CSS management tool. When it did this, it rewrote the form to provide real time updates via ajax calls as users select from the drop down for the system to populate the form for edits. ChatGPT pulled via 'first_name last_name', so I modified to 'last_name, first_name' and ordered by last_name.

Select User:

--Select User--
--Select User--
Brown, Alice
Brown, Charlie
Brown, Alice
Davis, John
Davis, David
Davis, Bob
Davis, John

The CSS was also ok, but needed some tweaking so the inputs didn't show up outside the container.

User Details

First Name:

Testing

Ideally we would set up unit testing for any changes on a test environment with test data. This can be set up fairly easily and inexpensively to prevent pushing code to the public that could expose data, delete production information, or frustrate users when using the software.

For this, due to the lack of time available, I manually tested filling out the form, updating users, deleting users. Checking validation of information. I only set it up to validate on submission but would recommend on form entry, as well as on database entry for two levels of security and data sanitization.

I would also include additional UI/UX for highlighting where errors are in the form, such as required fields or fields that have specific requirements. There is nothing more frustrating than using a form and not knowing what I'm supposed to update.

I did check it out on Chrome Developer tools for use on mobile. I have personally seen where that is limited and have used BrowserStack for similar testing. I highly recommend this but do not currently have a license to use it for this project.

<https://www.browserstack.com/>

Notes

For this project, I have the database connection files in the root WWW directory. This would never happen in production, but wanted to show everything in the git repository for review. I could spend many, many hours on making this form the most amazing form using bootstrap, templates for UI/UX, jquery for interactive notifications on success and error (or just helpful tooltips). I hope that I get the opportunity to show you where I shine. Problem solving, learning new things, working with others, and making things work.