Discover object-oriented programming

using WordPress

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This is a sample from **Discover object-oriented programming using WordPress**

To learn more about the book and read the rest, head over to https://carlalexander.ca/object-oriented-programming-wordpress/

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How object-oriented programming solves problems

And this is where object-oriented programming makes its dramatic entrance! Like a knight in shining armor, object-oriented programming is here to save you! Well, not really.

But it's here to offer you an alternative to solving your problems. Instead of using steps, object-oriented programming uses classes. These classes work together to solve a problem or set of problems. (Yay for teamwork!)

Programming with Legos

The best analogy to describe object-programming has to be Legos. (I'd love to hear of other ones if you know any. Maybe they're better!) Solving a problem with object-oriented programming is a lot like building something with them. You piece them together like you would with a Lego set.

Object-oriented programming has two important concepts: classes and objects. If we continue with our Lego analogy, classes would be the types of Lego bricks that you can use. Each of them has its own set of properties such as color and dimension.

But the value of those properties will vary from brick to brick. For example, you can have two of them with the same dimension, but one is green, and the other is yellow. Or you could have two bricks of the same color, but one is a 2x2 brick, and the other is a 1x12.

In object-oriented programming, each brick would be an object. And you combine these bricks to solve problems just like you would with Lego bricks. Except those combine to make a Lego set. (Or your custom creation!)

Why is it hard to think this way?

A lot of us have played with Legos before. (Because Legos are awe-some!) They're pretty straightforward to use. Why isn't it the same with object-oriented programming?

Well, we already spoke about the fact that WordPress already wired your mind to think procedurally. This creates a mental obstacle that makes it hard to think in an object-oriented way. It's just easier for your brain to default to what it's already familiar with.

That said, that's not the only problem. Yes, we can say that object-oriented programming is like building with Legos. But it's only one element of using object-oriented programming. In reality, you have to:

1. Visualize the Lego set that you want to build.

- 2. Design the types of Lego bricks that your Lego set needs.
- 3. Assemble the Lego bricks to build your Lego set.

That's why it would be more appropriate to use the Lego Group as our analogy. That's what you are when you use object-oriented programming with WordPress. And this is what makes things more complicated for you compared to most other developers.

How most developers use object-oriented programming

Why does this make things more complicated for you compared to them? It's because they use object-oriented programming with an object-oriented framework. Using object-oriented programming that way is a different experience from using it with WordPress.

Why is that? It's because they've already done most of the work for you. They're the Lego Group in this scenario.

They give developers the Lego sets and a lot of the Lego brick types that they need. They also supply the instructions that explain how to use them. All that they have to do is assemble them to build cool stuff with them.

This means that a lot of these developers don't have much experience being a Lego Group either. They don't visualize these full Lego sets often. They also don't design that many types of Lego bricks either.

Some good news

This is a bit of a silver lining if you think about it. You might have thought that there was a big knowledge gap between you and a developer who uses such a framework. But that's not the case in reality.

That said, it doesn't change the fact that you still need to learn to think like a Lego Group. And that isn't an easy thing to do. But it's also the only way to use object-oriented programming with Word-Press.

Creativity and object-oriented programming

But what does it mean to think like a Lego Group? How is it different from what you do every day? The most significant difference is creativity.

We often think of programming as just a problem-solving exercise. After all, we more often than not get hired to solve problems. We do it using the code that we write. (I like to think that it's our superpower!)

But there's more to it when you have to think like a Lego Group. Visualizing a Lego set and designing types of Lego bricks aren't just problem-solving exercises. They're also creative exercises.

Creative exercises don't always have clear-cut answers. This is an-

other challenging aspect of using object-oriented programming with WordPress. You have to accept that there isn't a single correct answer.

Instead, you have a range of potential good answers. And the correct one is the one that works for you. But that also doesn't mean that it's the right solution for someone else.

Sketching with object-oriented programming

That's why you have to get used to the idea of sketching when using object-oriented programming with WordPress. You start with an idea for a Lego set, but the only thing in front of you is a blank page. From this blank page, you have to create a drawing that represents the Lego set that you had in mind.

But while we might all start with the same idea for a Lego set, how we get there will vary between you and me. It's not any different from a teacher asking us to sketch a tree in an art class. We're both given the same task, but the result will be different.

It's also worth noting that, when you sketch something, you don't always get it right on the first try. You have to discard a sketch and start over again. This can be disconcerting, but it's all part of the creative process.

Object-oriented programming with WordPress won't be any different. You'll have your new project and the solution (the Lego set) that you want to build. You'll keep iterating and refining things until you have a working solution.

But like sketching this won't always be a straightforward process. You might go in the wrong direction at first or make the wrong assumptions. This will force you to backtrack or even restart the work that you were doing.

The design process

It's important not to feel bad when this happens to you. Yes, it might be frustrating to backtrack or restart your work like that. But it's all part of the design process.

There's never a perfect answer in that context. This isn't mathematics where 2 + 2 = 4 is the only right answer. Like we said earlier, there's more than one way to build the Lego set that you have in mind.

That said, this doesn't mean that there aren't wrong answers either. For example, there are awful ways to store someone's password. You wouldn't want a solution that saves your password in plain text. That's just irresponsible. (I'd even go so far as saying unethical.)

Part of learning object-oriented programming with WordPress is getting familiar with all this. It's about understanding that, in design, there are always choices. And that those choices still have tradeoffs.

You can ask someone else what they would do in your situation. But they'll never know the context of the design decision as well as you do. That's why those choices are yours to make and not theirs.

Managing your expectations

There's a good chance that this isn't what you had in mind when you started reading this book. You were ready to hear about object-oriented programming theory. You weren't expecting to hear about how you solve problems, Legos or creativity.

But starting with the theory right away would have done you a huge disservice. Like we mentioned a few times already, you already know how to program. Sure, it's not in an object-oriented programming way, but that doesn't matter.

The fact is that you have something to fall back on when things get hard. (And things will get hard.) It's going to be tempting to revert to what you know already as you're trying to learn this. It's like trying to break an old habit. It takes time and dedication.

That's why this section matters so much. You should be aware of these issues so that you don't have the wrong expectations. But now that we've done that, we can dive into the theory!