

Austin, TX

Nov 3rd - 5th, 2022



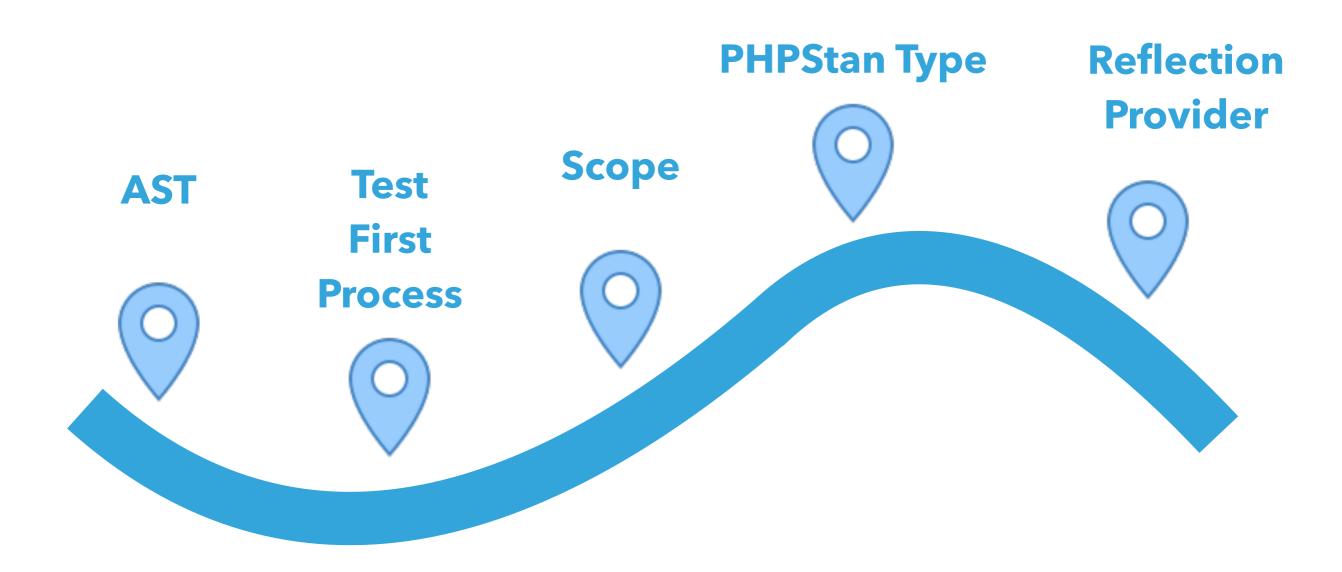
Dave Liddament

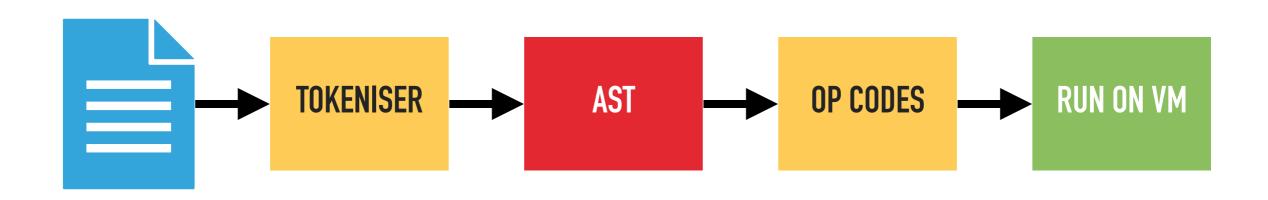
github.com/DaveLiddament/phpstan-rules-tutorial

Automated checks, language extension

Refactoring

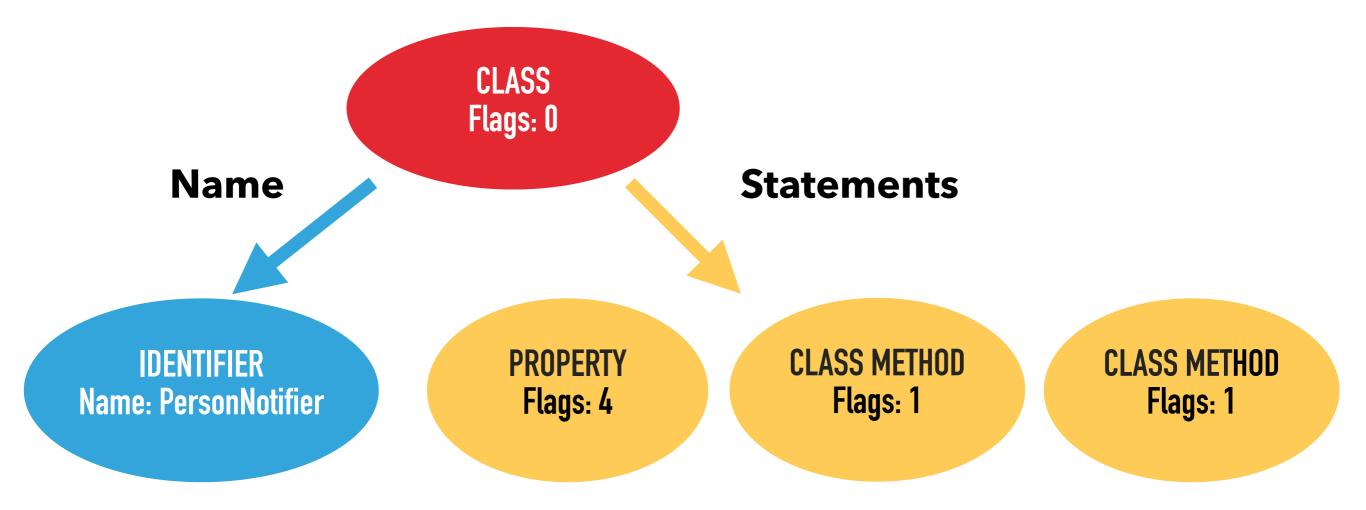
Prevent Bugs

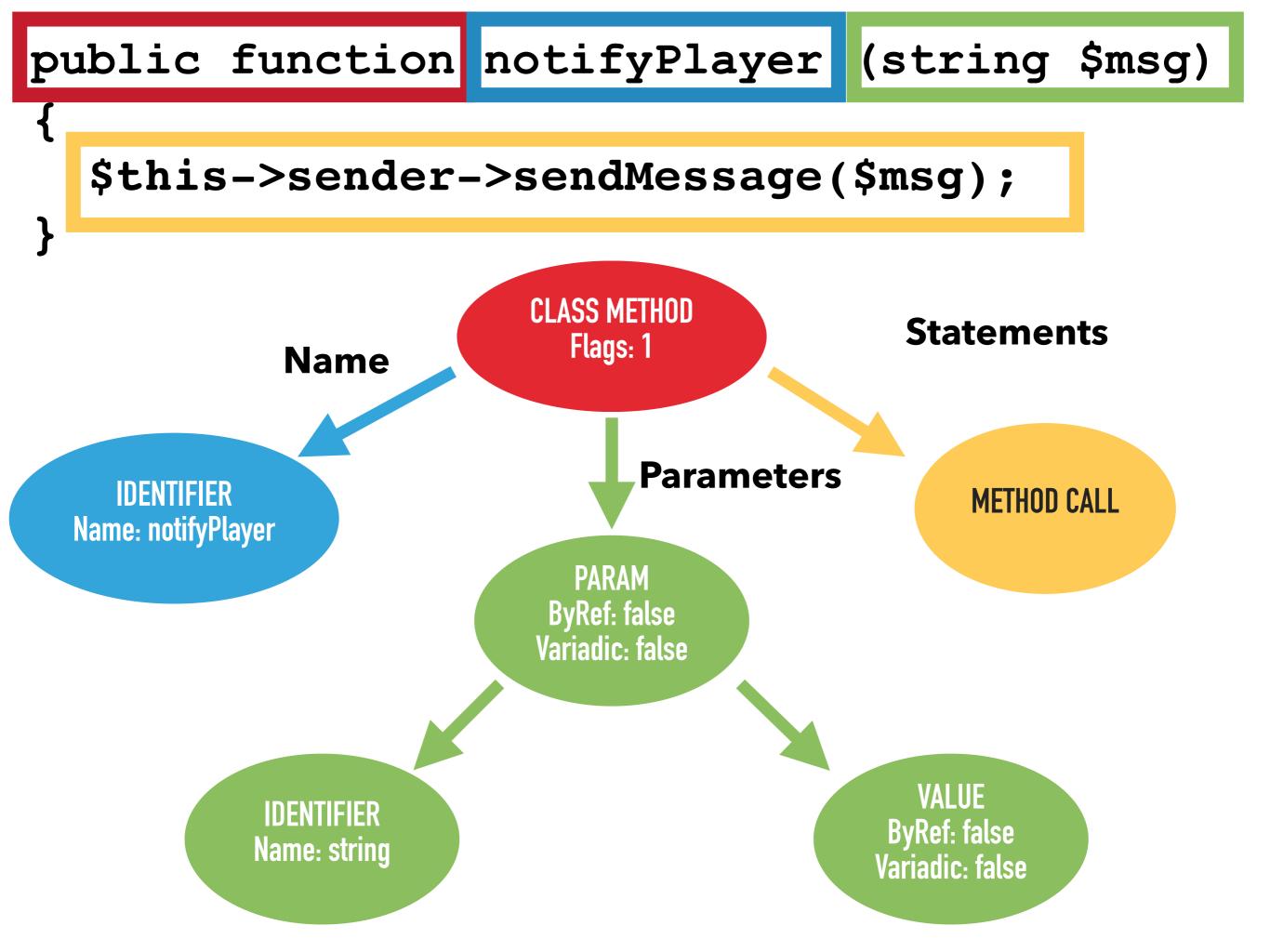




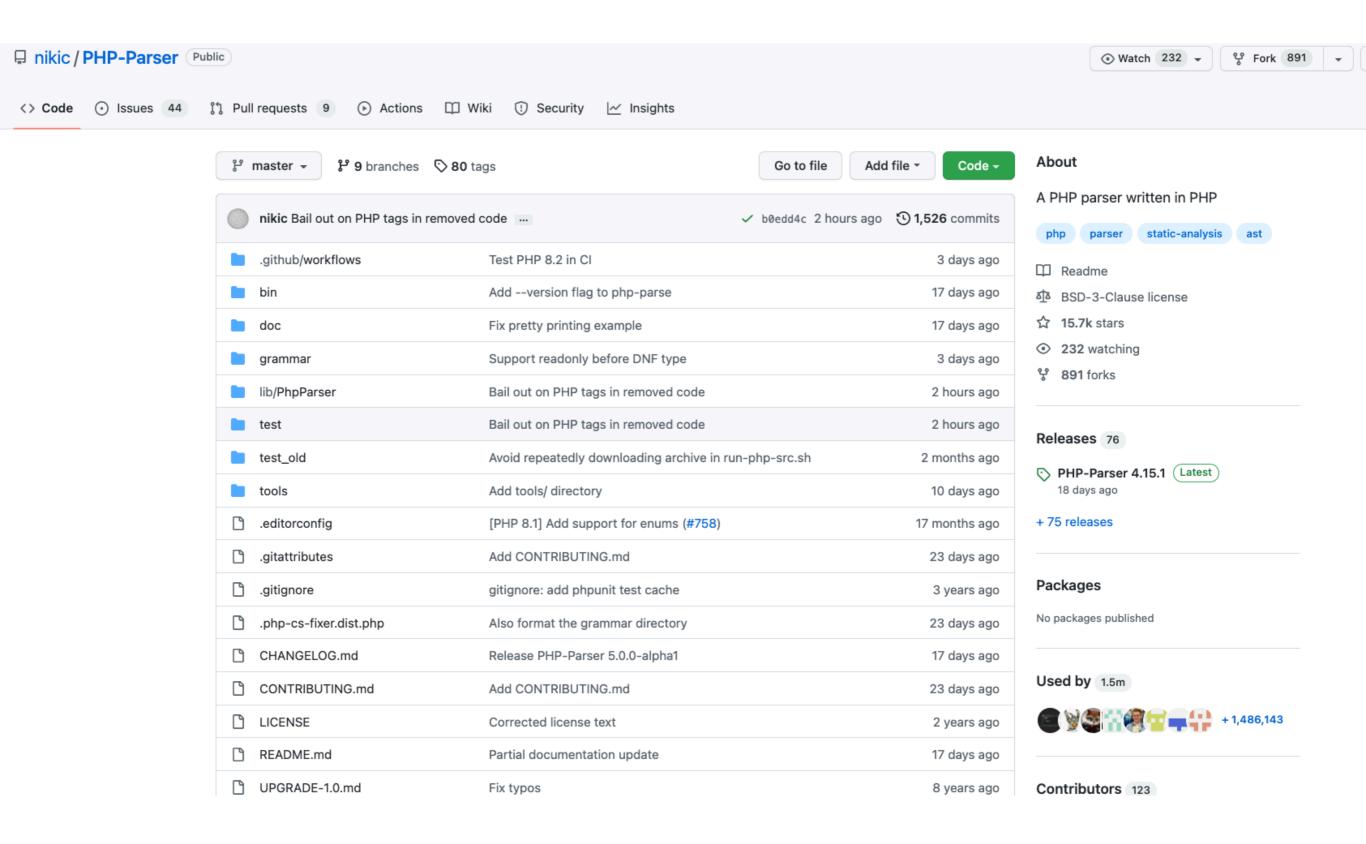
```
class PersonNotifier
```

```
private TextMessageSender $sender;
public function __construct() {...}
public function notifyPlayer() {...}
```

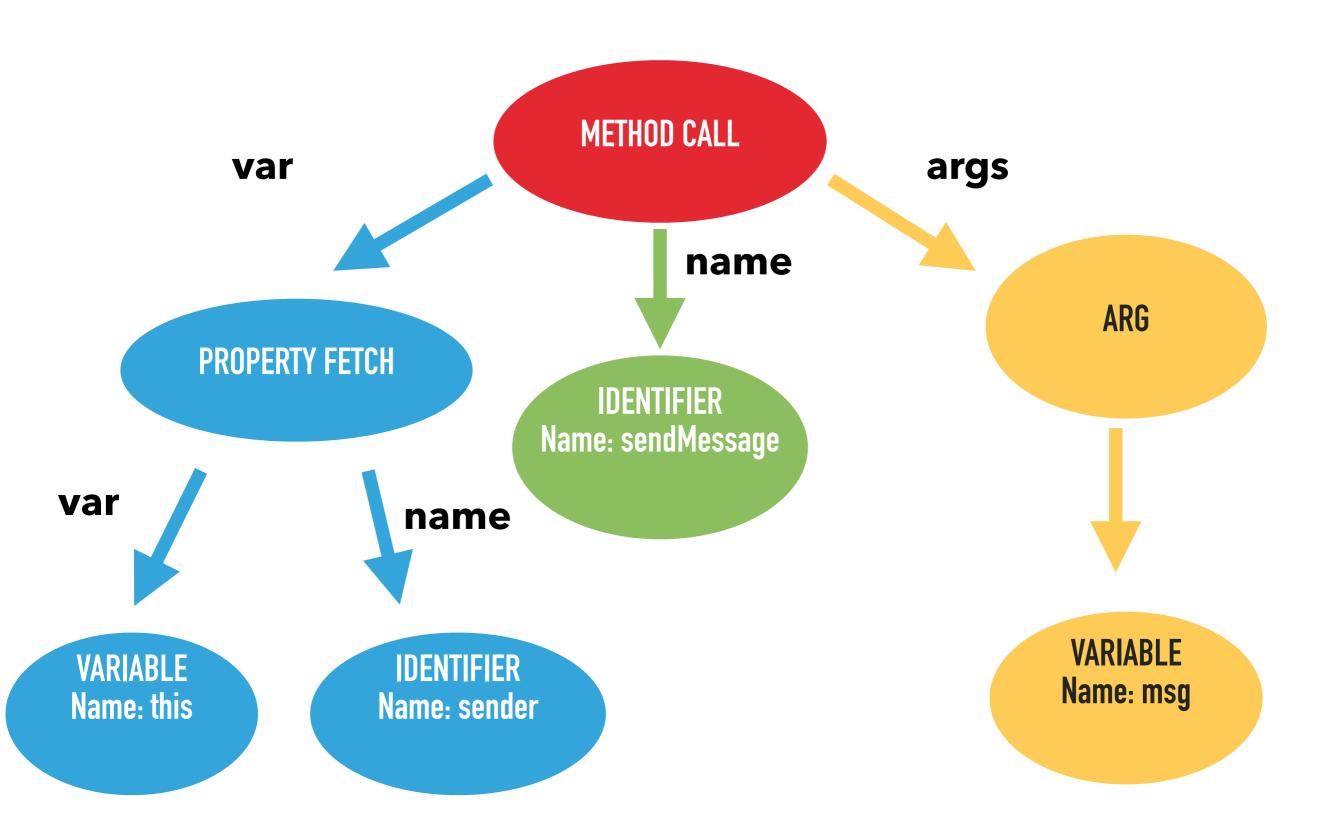




https://github.com/nikic/PHP-Parser

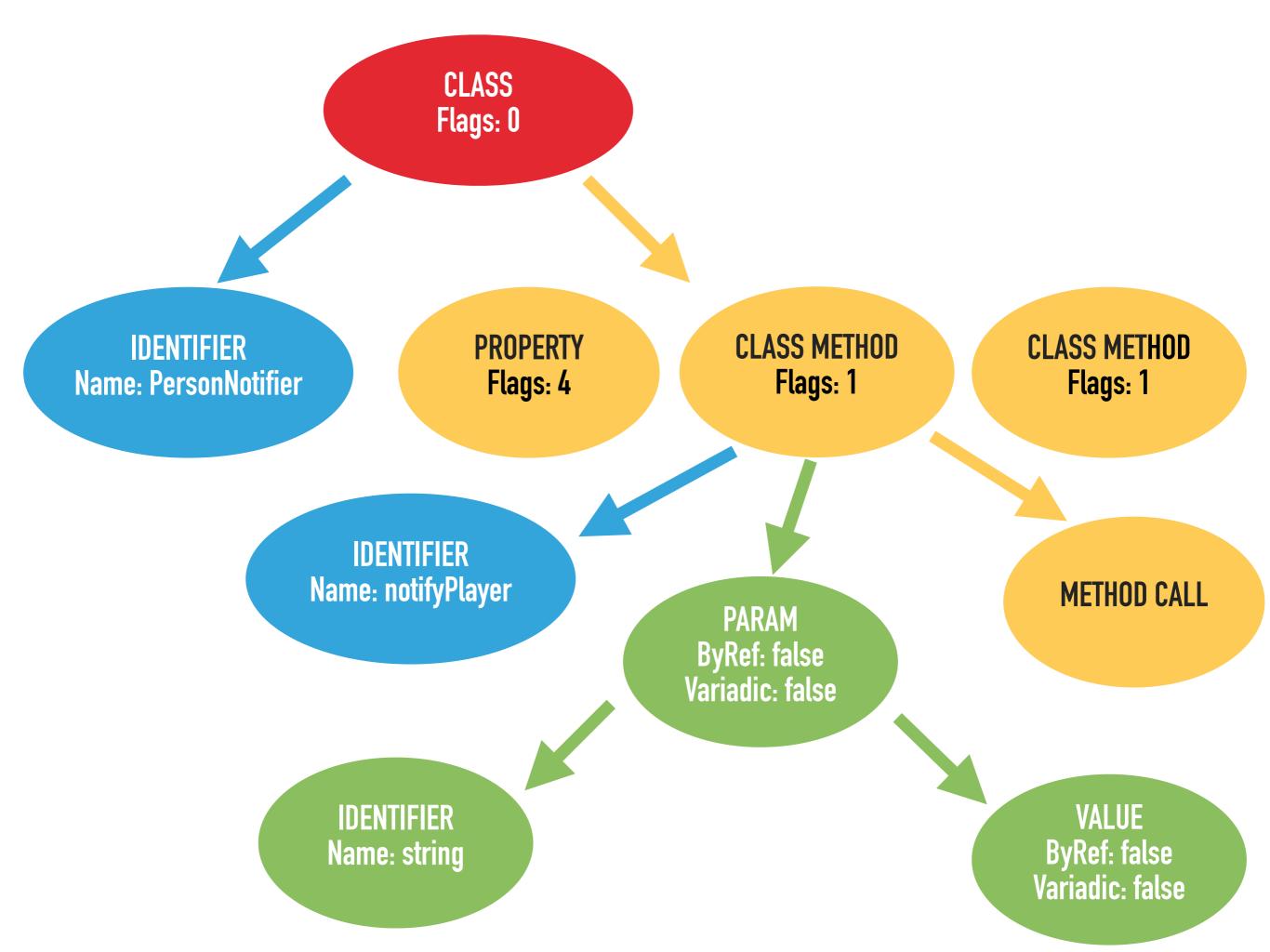


\$this->sender -> sendMessage (\$msg);



```
class MethodCall extends \PhpParser\Node\Expr\CallLike
   /** @var Expr Variable holding object */
   public $var;
   /** @var Identifier | Expr Method name */
   public $name;
   /** @var array<Arg | VariadicPlaceholder> Arguments */
   public $args;
    // Rest of class ...
   $this->sender -> sendMessage ($msg);
```

- PHP code can be represented by an AST
- Different types of Node
- Nodes contain information
- Each type of node has different information



```
interface Rule
 public function getNodeType() : string;
  /**
   * @return (string | RuleError)[] errors
   * /
 public function processNode(
   \PhpParser\Node $node,
   \PHPStan\Analyser\Scope $scope
   : array;
```

```
$scope->getType(
Expr $expression,
```

): PHPStan\Type\Type

```
function takesValue(mixed $value): void
 process($value); PHPStan\Type\MixedType
 if (!is bool($value)) return;
 process($value); PHPStan\Type\BooleanType
 if ($value === false) return;
 process($value); phpStan\Type\ConstantBooleanType
```

Further information

https://phpstan.org/developing-extensions/rules

