Defending Your Methods

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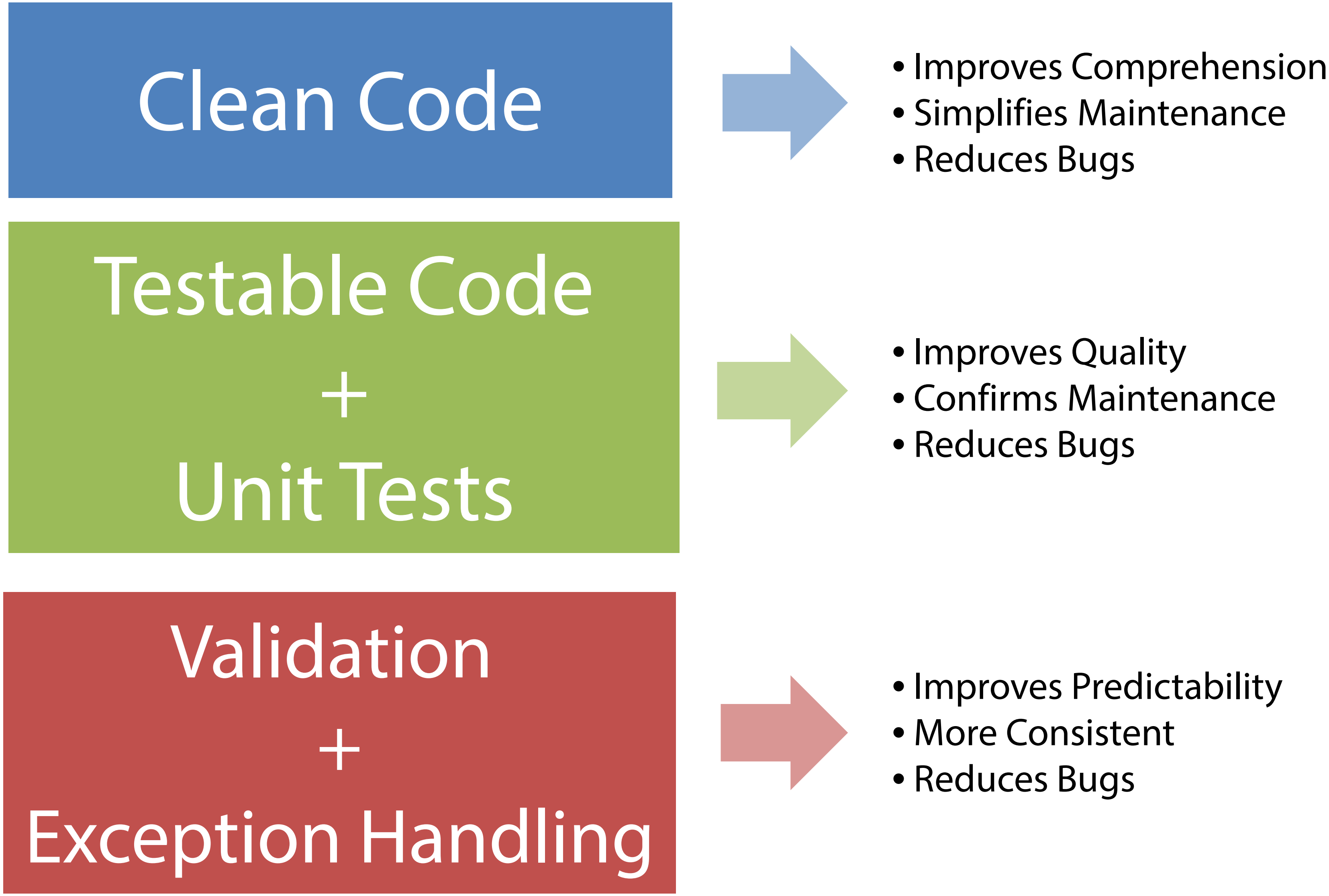
pluralsight
hardcore dev and IT training

Defensive Coding



Clean Code

- Improves Comprehension
- Simplifies Maintenance
- Reduces Bugs

Testable Code + Unit Tests

- Improves Quality
- Confirms Maintenance
- Reduces Bugs

Validation + Exception Handling

- Improves Predictability
- More Consistent
- Reduces Bugs

Defensive Coding

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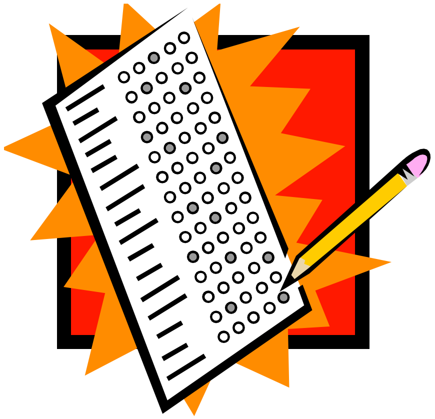
Defensive Coding

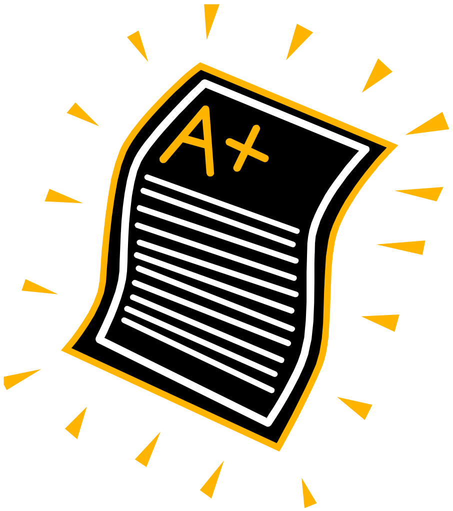
Testable Code

+

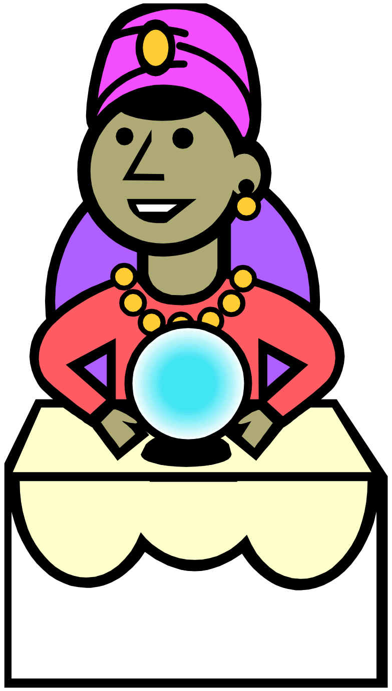
Unit Tests

- Improves Quality
- Validates Maintenance
- Reduces Bugs





Defensive Coding



Validation

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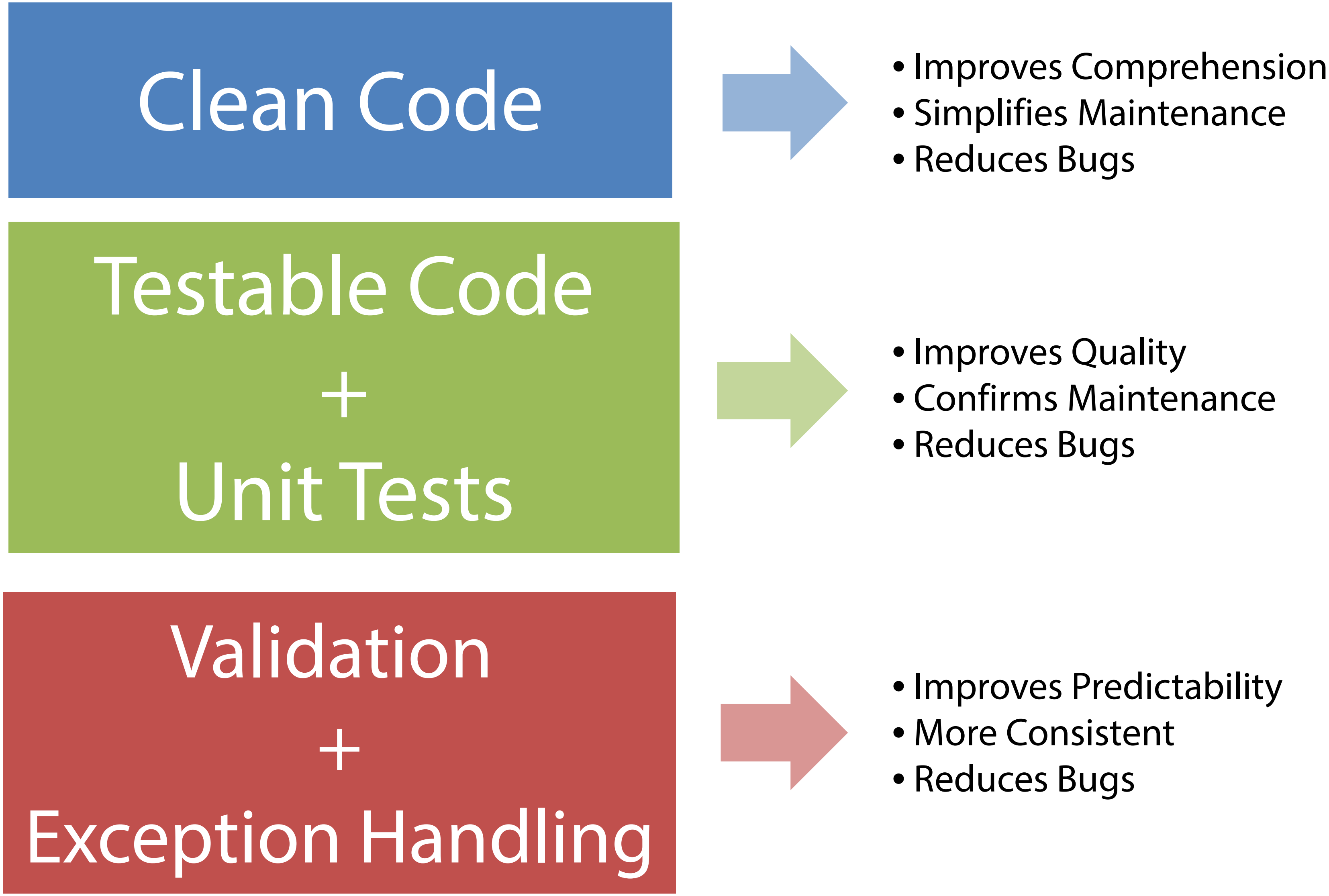
Exception Handling

- Improves Predictability
- More Consistent
- Reduces Bugs

Defensive Coding



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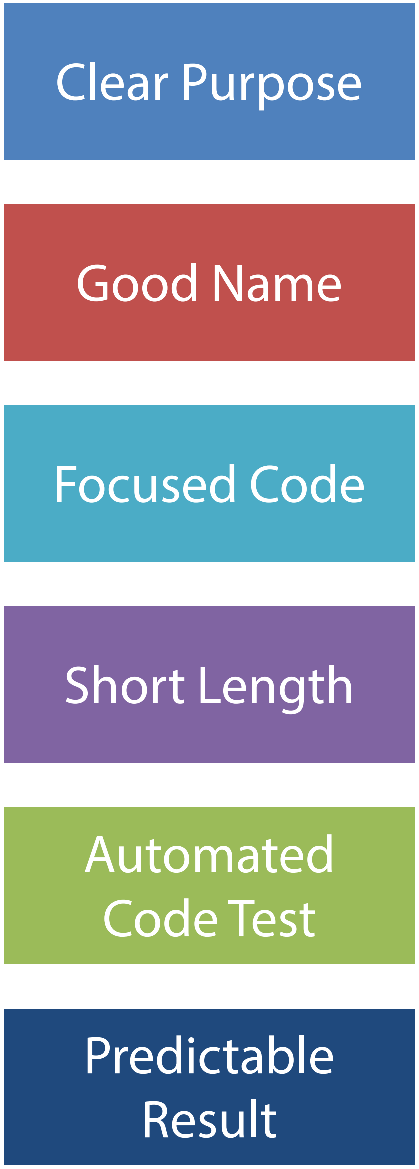
Clean, Testable, Predictable Methods



Clear Purpose

Good Name

Focused Code

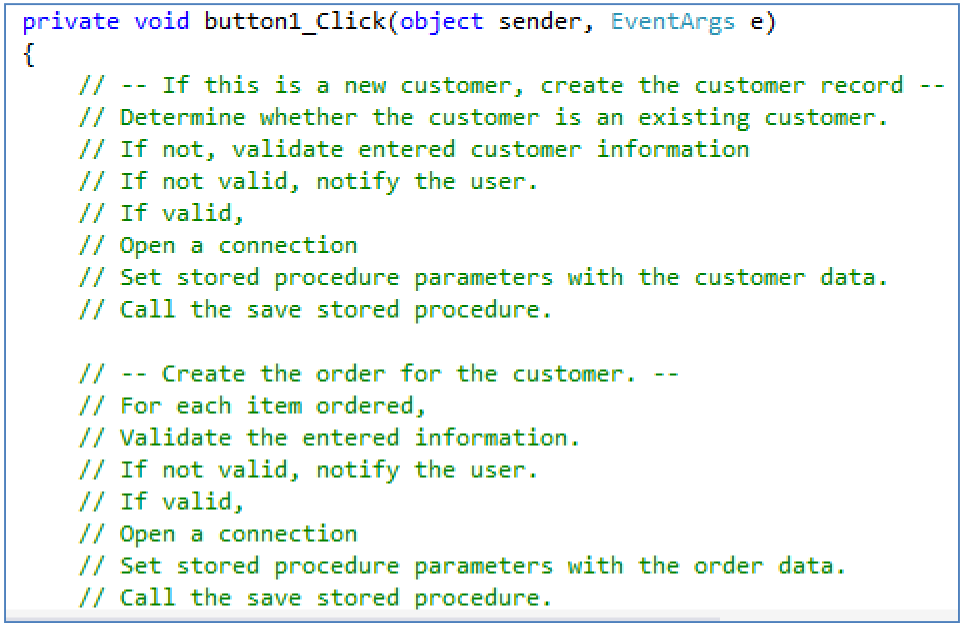
Short Length

Automated Code Test

Predictable Result

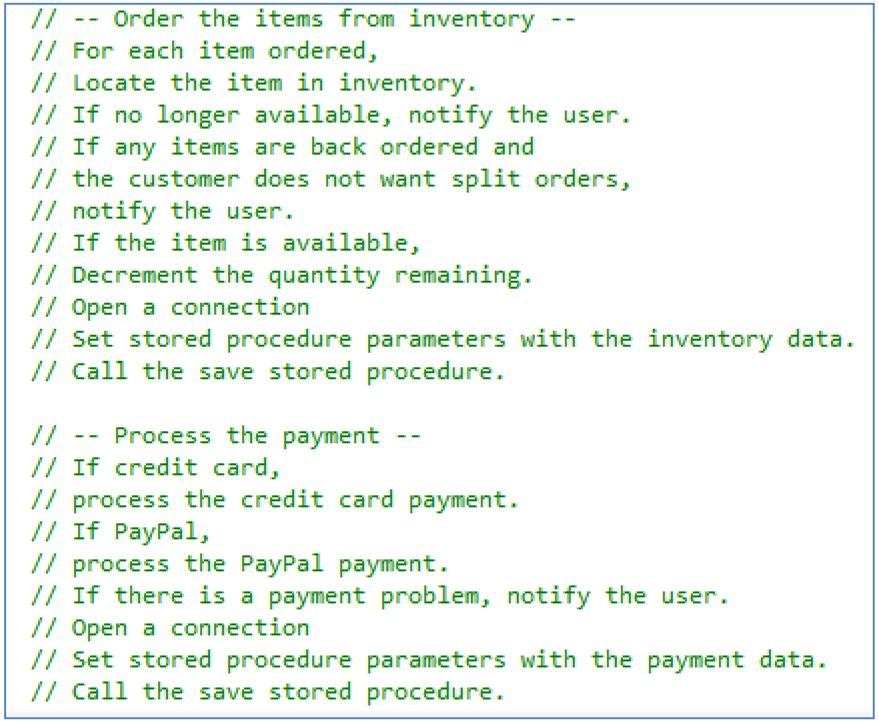
Example

Optionally,
PAUSE NOW



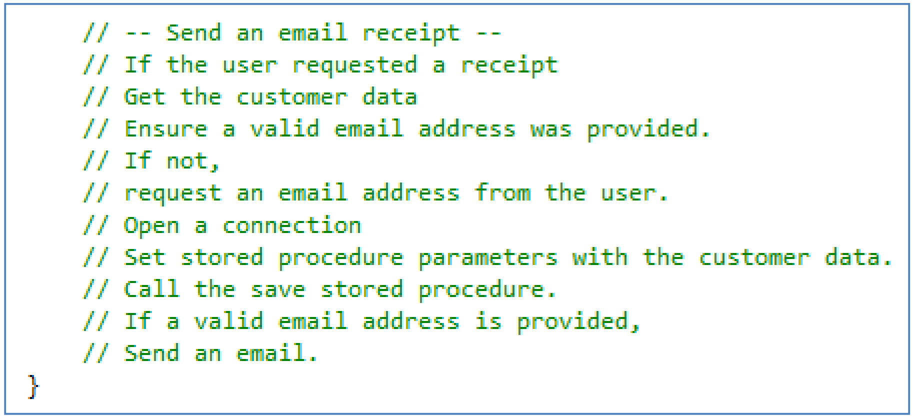
```
private void button1_Click(object sender, EventArgs e)
{
    // -- If this is a new customer, create the customer record --
    // Determine whether the customer is an existing customer.
    // If not, validate entered customer information
    // If not valid, notify the user.
    // If valid,
    // Open a connection
    // Set stored procedure parameters with the customer data.
    // Call the save stored procedure.

    // -- Create the order for the customer. --
    // For each item ordered,
    // Validate the entered information.
    // If not valid, notify the user.
    // If valid,
    // Open a connection
    // Set stored procedure parameters with the order data.
    // Call the save stored procedure.
```



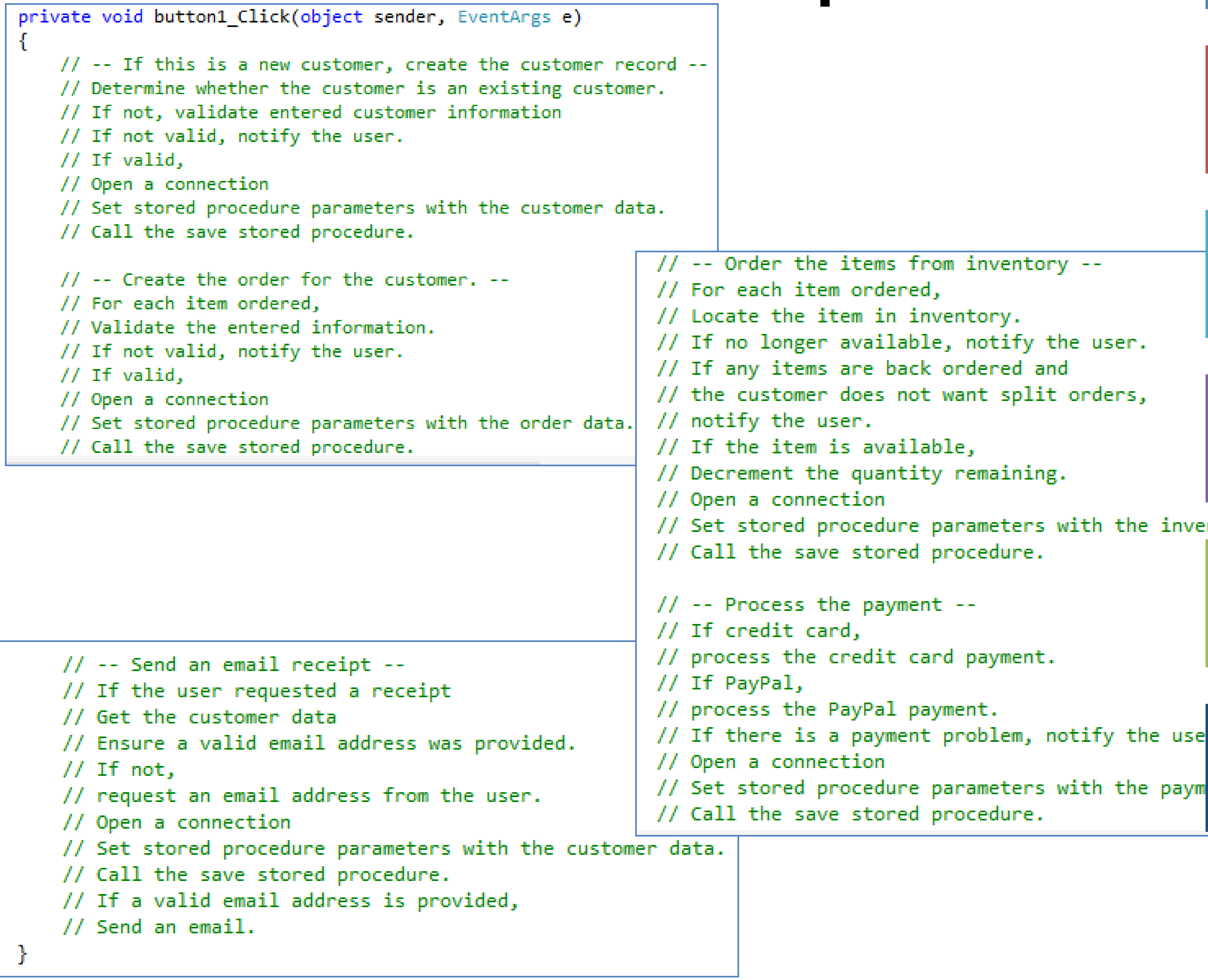
```
// -- Order the items from inventory --
// For each item ordered,
// Locate the item in inventory.
// If no longer available, notify the user.
// If any items are back ordered and
// the customer does not want split orders,
// notify the user.
// If the item is available,
// Decrement the quantity remaining.
// Open a connection
// Set stored procedure parameters with the inventory data.
// Call the save stored procedure.

// -- Process the payment --
// If credit card,
// process the credit card payment.
// If PayPal,
// process the PayPal payment.
// If there is a payment problem, notify the user.
// Open a connection
// Set stored procedure parameters with the payment data.
// Call the save stored procedure.
```



```
    // -- Send an email receipt --
    // If the user requested a receipt
    // Get the customer data
    // Ensure a valid email address was provided.
    // If not,
    // request an email address from the user.
    // Open a connection
    // Set stored procedure parameters with the customer data.
    // Call the save stored procedure.
    // If a valid email address is provided,
    // Send an email.
}
```

Example



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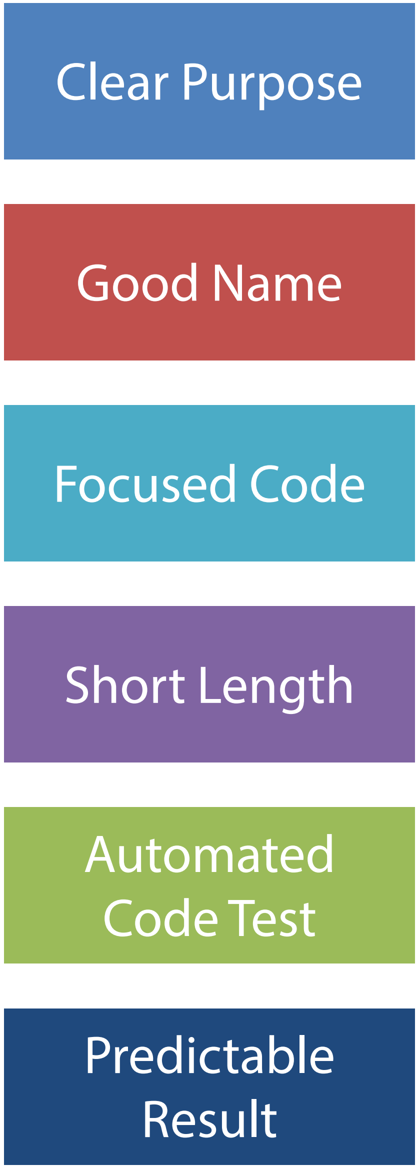
Clean, Testable, and Predictable Methods



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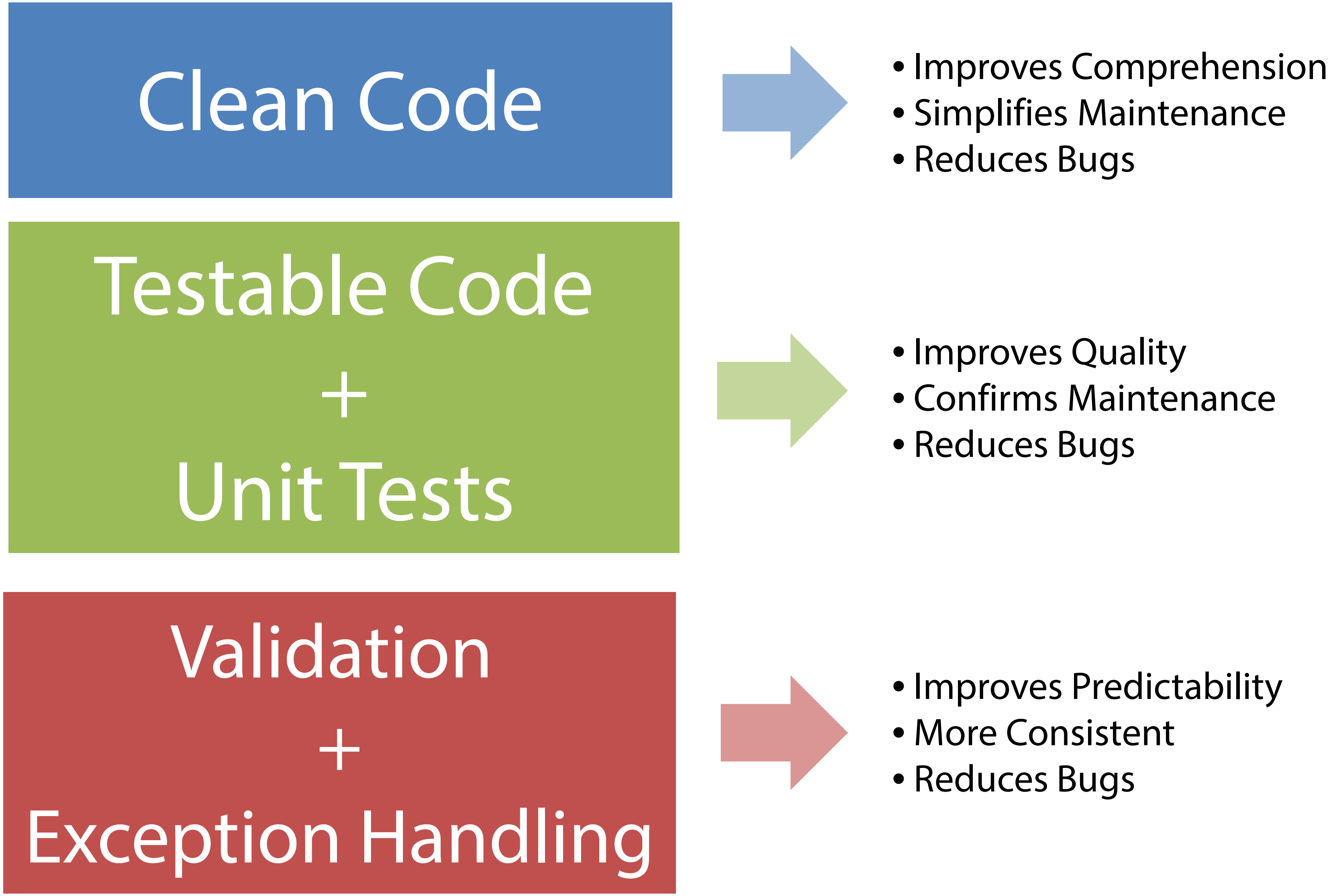

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