# Why Not Zoidberg?

## Code Inspection Report

Version 1.0 11/29/2012

Prepared for Ms. Lisa Matthews math1@umbc.edu

**Team Name: Planet Express** 

Team Facilitator - Chris Raborg
Requirements Leader - David Guldan
Design Leader - Kevin Yu
Implementation and Testing Leader - Zach Hisley
Delivery Leader - Matt Sperbeck

## Why Not Zoidberg? Code Inspection Report

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## **Document Versioning Control**

| Version Number | Date     | Changes from Previous<br>Version   |
|----------------|----------|--|
| 1.0            | 11/29/12 | Introduction, Code<br>Inspection Process,<br>Modules Inspected,<br>Defects, Appendices |

#### 1. Introduction

#### 1.1 Purpose of This Document

The purpose of this document is to show the results of the code inspection process from the web application "Why Not Zoidberg?" It will highlight all of the bugs that were found, and note the process taken to find them. There might be bugs such as logical errors, some commenting issues, or security flaws. There will also be details on how the code is commented and what measures were taken to make sure that it was properly commented to the standards of the customer.

#### 1.2 References

These are the references that we used:

- http://www.csee.umbc.edu/courses/undergraduate/341/fall12/projects/coding-standards.shtml

#### 1.3 Coding and Commenting Conventions

The commenting conventions that were used are based upon the conventions stated on the UMBC CMSC 341 course website. These standards for coding and commenting assure that all code is written and commented to the highest standards and can be easily read and followed. This allows for long-term maintenance of the product that is simple and could be done by someone who did not originally take part in writing the code.

We created the code using a to allow enough security and data hiding between the different levels of users, and between the different users itself. The code, which was written in PHP, allows for fast access to different web pages, and a quick search process for a user.

## 1.4 Defect Checklist

| #  | Error Type        | Description   | ls Fixed? |
|----|-------------------|---|-----------|
| 1  | Logical           | Session Header Location                                       | Yes       |
| 2  | Logical           | Incorporating Popular<br>Genre php script                     | Yes       |
| 3  | Logical           | Incorporating Shopping Cart php script                        | Yes       |
| 4  | CSS Layout        | Popular Genre font issue                                      | Yes       |
| 5  | CSS Layout        | Shopping cart font issue                                      | Yes       |
| 6  | Coding Convention | Incorrect variable names                                      | Yes       |
| 7  | Logical           | Displaying the shopping cart only to users logged in          | Yes       |
| 8  | Validation        | Checking if at least 1 book is added to shopping cart         | Yes       |
| 9  | Syntax            | Setting the admin variable correctly when creating an account | Yes       |
| 10 | Coding Convention | Incorrect redirection of pages                                | Yes       |
| 11 | Logical           | Incorrect randomization of books in popGenre.php              | Yes       |
| 12 | Logical           | Forgot to include "cart.php"                                  | Yes       |
| 13 | Logical           | Forgot to include "commonMethods.php"                         | Yes       |
| 14 | Coding Convention | Lack of comments in the admin source code                     | No        |
| 15 | Validation        | Quotes inside of summary text field                           | No        |

#### 2. Code Inspection Process

#### 2.1 Description

The group followed a relatively simple code inspection process. The programmers for the group discussed either in person or via Skype the code that they were working on. There were several meetings held where the group would run the code and find an error, and then would inspect through all of the files that were related to the error found. When we found the error, we would write a short description down so that we would be able to document it here later. Many of these errors were found while each programmer was working on the code individually. That way when the files were syntactically correct, some output would be given, and the code could be uploaded to the repository.

Once our code was in a relatively useable state (no noticeable errors), we sent the code to the Design Lead who had all of the updated code. We started to identify and lingering bugs, caused by either logic errors or validation errors. In many cases, we were more interested in getting different programmers' code integrated together, that we overlooked some simple validation. When we got all of the code integrated, we could then carefully inspect the code for bugs and fix them accordingly.

#### 2.2 Impressions of the Process

The code inspection process was mostly rough. A portion of the code was not yet completed therefore a full evaluation could not be fulfilled. But separate modules, such as the Popular Genre and Shopping cart module, could be tested without relying on other external components.

The popGenres.php, createAccount.php, and index-build.php were the best modules because they aren't reliant on other modules and produce no errors. The checkout.php, and addToCart.php are the modules that contain a few remaining bugs. checkout.php and addToCart.php are still missing validation for the quantity of books. The testing process could have been much more efficient if it was not mostly done by the programmers themselves.

#### 2.3 Inspection Meetings

#### Meeting 1:

Date: 11/27/12

Location: (Conversation was over facebook)

Start Time: 8:00pm End Time: 11:00pm Participants: Dave, Chris

Roles: Dave and Chris were both acting as inspectors of their own code. Code Units: item.php, cart.php, createAccount.php, viewAccount.php

#### Meeting 2:

Date: 11/28/12

Location: ITE Building Start Time: 5:30pm End Time: 9:30pm

Participants: Kevin, Dave, Chris

Roles: Dave was the Inspector, Kevin was the Moderator, and Chris was

the Author/Scribe

<u>Code Units:</u> cart.php, shoppingCart.php, browse.php, store-style.css, admin.php, login.php, updateAccount.php, createAccount.php, index-build.php

#### Meeting 3:

Date: 11/30/12 Location: RLC

Start Time: 1:00 pm End Time: 3:00 pm

Participants: Kevin, Dave, Chris, Matt, Zach

Roles: Kevin was the moderator, Matt and Zach were the inspectors, Chris

was the scribe, and Dave was the author

Code Units: addToCart.php, checkout.php

### 3. Modules Inspected

The modules that we have not inspected (or finished) at this point are addToCart.php, shoppingCart.php, checkout.php. Most of these files are missing some small validation components, but the checkout.php page is still a work in progress.

| Name of Module                          | Description  | Where it fits into SDD   |
|---|--|--------------------------|
| Admin.php                               | Displays the administrator page, and top sold items.   | Edit Inventory           |
| UpdateDelete.php,<br>AdminSubmit.php    | Takes care of adding, updating or removing an item from the database.                          | Update Item, Remove Item |
| CreateAccount.php,<br>UpdateAccount.php | Displays the create account form.  | Create Account           |
| GetLogin.html, Login.php                | Login form and validation.<br>Starts the PHP session.  | Login                    |
| item.php, cart.php                      | Classes that define items to be stored in a cart. Used to easily manipulate the shopping cart. | Shopping Cart            |
| AddToCart.php                           | Adds a particular quantity of items to the cart.   | Shopping Cart, Browse    |
| AddFunds.php, confirmFunds.php          | Adds/Confirms funds to a logged in user account.   | Add Funds                |
| popularGenres.php                       | Displays four books from genres that are popular.  | Popular Genres           |
| search.php                              | Searches the database for a book.  | Search                   |
| browse.php                              | Displays a book given a ISBN.  | Browse                   |
| viewAccount.php                         | Allows a logged in user to view their account.   | View Account             |

#### 4. Defects

| Description: | Session Header could not be sent because header has been already set. |
|--------------|---|
| Module:      | search.php, browse.php, viewAccount.php                               |
| Error Type:  | Logical   |

| Description: | include(popGenre.php) would not work    |
|--------------|---|
| Module:      | search.php, browse.php, viewAccount.php |
| Error Type:  | Logical                                 |

| Description: | include(shoppingCart.php) would not work |
|--------------|--|
| Module:      | search.php, browse.php, viewAccount.php  |
| Error Type:  | Logical                                  |

| Description: | Popular Genre font issue                |
|--------------|---|
| Module:      | search.php, browse.php, viewAccount.php |
| Error Type:  | CSS Layout                              |

| Description: | Shopping Cart font issue                |
|--------------|---|
| Module:      | search.php, browse.php, viewAccount.php |
| Error Type:  | CSS Layout                              |

| Description: | Incorrect variable names |
|--------------|--------------------------|
| Module:      | admin.php, login.php     |
| Error Type:  | Coding Convention        |

| Description: | Display the shopping cart to only users logged in |
|--------------|---|
| Module:      | search.php, browse.php, viewAccount.php           |
| Error Type:  | Logical   |

| Description: | Checking if at least 1 book is added to shopping cart |
|--------------|---|
| Module:      | browse.php  |
| Error Type:  | Validation  |

| Description: | Setting the admin variable correctly when creating an account |
|--------------|---|
| Module:      | createAccount.php   |
| Error Type:  | Syntax  |

| Description: | Incorrect redirection of pages |
|--------------|--------------------------------|
| Module:      | login.php, addFunds.php        |
| Error Type:  | Coding Convention              |

| Description: | Incorrect randomization of books in popGenre.php |
|--------------|--|
| Module:      | popGenre.php                                     |
| Error Type:  | Logical  |

| Description: | Forgot to include "cart.php"            |
|--------------|---|
| Module:      | search.php, browse.php, viewAccount.php |
| Error Type:  | Logical                                 |

| Description: |
|--------------|
|--------------|

| Module:     | popGenre.php, browse.php |
|-------------|--------------------------|
| Error Type: | Logical                  |

| Description: | Lack of comments in the admin source code |
|--------------|---|
| Module:      | admin.php                                 |
| Error Type:  | Coding Convention                         |

| Description: | Quotes inside of summary text field |
|--------------|-------------------------------------|
| Module:      | updateDelete.php                    |
| Error Type:  | Validation                          |

### Appendix B - Team Review Sign-off

We agree as a team that we have documented the code inspection to the fullest possible extent and that we have all read the entire document and agree with the contents. If there is an issue within the team about the document, the team shall resolve the issue at the next team meeting.

| Christopher Raborg, Team Facilitator  |
|---------------------------------------|
| David Guldan, Requirements Leader     |
| Kevin Yu, Design Leader               |
| Zachary Hisley, Implementation Leader |
| Matt Sperheck Delivery Leader         |