# Douglas Goss CMPS-294 Assignment 3

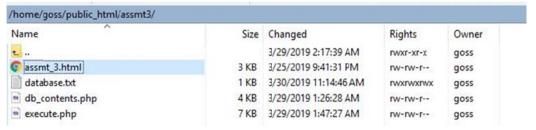
Book Database

## I. Purpose

The purpose of this database is to allow a user to enter information about a book for the purpose of finding it for later operations such as search and delete.

#### II. Implementation

i. Storage- the files are stored in the directory shown below



#### ii. File description-

Assmt\_3.html- the initial page a user opens to begin working with the database

Database.txt- the text file which contains data that describes the books

**Db\_contents.php-** shows the entire content of the database

**Execute.php-** contains html and php logic that allows a user to interact with the database in ways more complex than simply showing the entire contents of the database

## iii. Usage

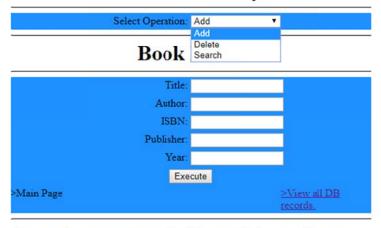
Select Operation- allows a user to select between Add, Delete and Search

Execute- button which carries out the selected operation

Main Page- a link which allows for easy return to the main page

View all DB records- a link which runs db\_contents.php which shows all contents of the database

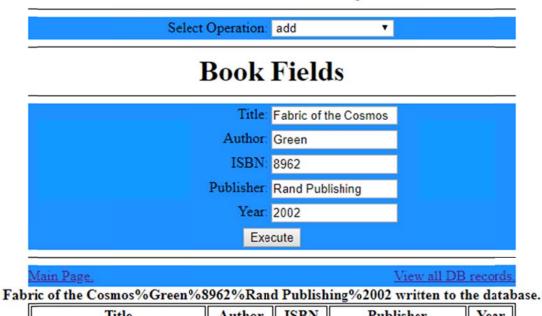
## **Book Inventory**



## Execute commands from this main page.

Add a new record with the appropriate information entered in the form and then press execute

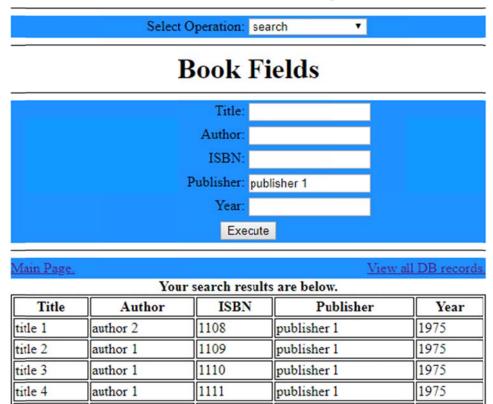
## **Book Inventory**

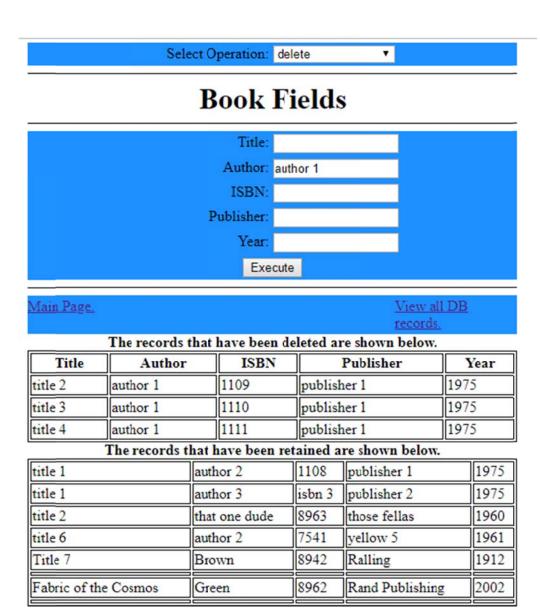


Title	Author	ISBN	Publisher	Year
Fabric of the Cosmos	Green	8962	Rand Publishing	2002

Find a book stored in the database by entering the proper text by which to filter. In this ii. case, I want to find all book published by Publisher 1

## **Book Inventory**





iv.

Book Inventory						
Select Operation: Add  Book Fields						
Author: ISBN:						
Publisher:						
Year:	cute					

## View all records in the DB from this page.

>View all DB records.

Author	ISBN	Publisher	Year
author 2	1108	publisher 1	1975
author 3	isbn 3	publisher 2	1975
that one dude	8963	those fellas	1960
author 2	7541	yellow 5	1961
Brown	8942	Ralling	1912
Green	8962	Rand Publishing	2002
	author 2 author 3 that one dude author 2 Brown	author 2     1108       author 3     isbn 3       that one dude     8963       author 2     7541       Brown     8942	author 2 1108 publisher 1 author 3 isbn 3 publisher 2 that one dude 8963 those fellas author 2 7541 yellow 5 Brown 8942 Ralling

8 records are currently in the database.

#### IV. Code

i. Assmt\_3.html

Main Page.

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
<title>assmt_3</title>
</head>
<style>

.flex-container {
    display: flex;
    background-color: DodgerBlue;
```

```
margin: auto;
width: 40%;
//border: 1px solid #73AD21;
padding-top: 3px;
padding-bottom: 3px;
justify-content: center;
div{
  //border: 1px solid #73AD21;
.flex col1{
  width:25%
.flex col2{
  width:25%;
  text-align: right
.flex_col3{
  width:25%
.flex col4{
  width:25%
h1{
  text-align: center;
  padding-top: 0px;
  padding-bottom: 0px;
  margin: 0px;
hr{
height:1px;
border:none;
color:#000;
background-color:#000;
width:40%;
text-align:center;
margin: 5 auto;}
table{
border: 1px solid black;
<form action="execute.php" method="GET">
```

```
<h1>Book Inventory</h1>
  <div class="flex-container">
    <div class="flex col1"></div>
    <div class="flex col2">Select Operation:&nbsp </div>
    <div class="flex col3"><select name="operation" style="width: 100%">
           <option value="add">Add</option>
           <option value="delete">Delete</option>
           <option value="search">Search</option>
    <div class="flex col4"></div>
  <h1>Book Fields</h1><hr>
    <div class="flex-container">
       <div class="flex col1"></div>
      <div class="flex col2">Title:&nbsp;</div><div class="flex col3"><input type="text" name="title"</pre>
style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Author:&nbsp;</div><div class="flex col3"><input type="text"</pre>
name="author" style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">ISBN:&nbsp;</div><div class="flex col3"><input type="text" name="isbn"</pre>
style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Publisher:&nbsp;</div><div class="flex col3"><input type="text"</pre>
name="publisher" style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
```

### ii. Db\_contents.php

```
<!DOCTYPE html>
 .flex-container {
 display: flex;
 background-color: DodgerBlue;
 margin: auto;
 width: 40%;
 //border: 1px solid #73AD21;
 padding-top: 3px;
 padding-bottom: 3px;
 justify-content: center;
 div{
   border: 0px solid #73AD21;
 .flex col1{
   width:25%
 .flex col2{
   width:25%;
```

```
text-align: right
.flex col3{
  width:25%
.flex col4{
  width:25%
h1{
  text-align: center;
  padding-top: 0px;
  padding-bottom: 0px;
  margin: 0px;
  background-color: white;
h4.message{
  text-align: center;
  padding-top: 0px;
  padding-bottom: 0px;
  margin: 0px;
  background-color: white;
hr{
height:1px;
border:none;
color:#000;
background-color:#000;
width:40%;
text-align:center;
margin: 5 auto;
table{
  text-align: center;
  margin:0 auto;
  border: 1px solid black;
  width:40%;
  text-align: left;
  margin:0 auto;
  border: 1px solid black;
th{
  border: 1px solid black;
```

```
<form action="execute.php" method="GET">
  <h1>Book Inventory</h1>
  <div class="flex-container">
    <div class="flex col1"></div>
    <div class="flex col2">Select Operation:&nbsp </div>
    <div class="flex col3"><select name="operation" style="width: 100%">
           <option value="add">Add</option>
           <option value="delete">Delete</option>
            <option value="search">Search</option>
    <div class="flex col4"></div>
  <h1>Book Fields</h1><hr>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Title:&nbsp;</div><div class="flex col3"><input type="text" name="title"</pre>
style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Author:&nbsp;</div><div class="flex col3"><input type="text"</pre>
name="author" style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">ISBN:&nbsp;</div><div class="flex col3"><input type="text" name="isbn"</pre>
style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Publisher:&nbsp;</div><div class="flex col3"><input type="text"</pre>
name="publisher" style="width: 100%"></div>
```

```
<div class="flex col4"></div>
    <div class="flex-container">
      <div class="flex col1"></div>
      <div class="flex col2">Year:&nbsp;</div><div class="flex col3"><input type="text" name="year"</pre>
style="width: 100%"></div>
      <div class="flex col4"></div>
    <div class="flex-container">
      <input type="submit" value="Execute">
  <div class="flex-container">
    <div class="flex col1"><a href="assmt 3.html">&nbsp;Main Page.</a></div>
   <div class="flex col2"></div>
    <div class="flex col3"></div>
    <div class="flex col2">>View all DB records.</div>
 <h1>View all records in the DB from this page.</h1><hr>
  TitleAuthorISBNPublisherYear
  $myfile = fopen("database.txt","r");
  $ttl records=-1;
  $lines = explode("\n", file get contents('database.txt'));
  fclose($myfile);
  foreach ($lines as $value) {
    $fields= explode("%",$value);
    print
 $fields[0]$fields[1]$fields[2]$fields[3]$fields[4]
    $ttl records++;
  print "";
  print "<h4 class=message>";
  print $ttl records;
  print " records are currently in the database.";
  print "</h4>":
```

```
?>

</body>
</html>
```

## iii. Execute.php

```
<!DOCTYPE html>
 .flex-container {
 display: flex;
 background-color: DodgerBlue;
 margin: auto;
 width: 40%;
 //border: 1px solid #73AD21;
 padding-top: 3px;
 padding-bottom: 3px;
 justify-content: center;
 div{
   border: 0px solid #73AD21;
 .flex_col1{
   width:25%
 .flex col2{
   width:25%;
   text-align: right
 .flex_col3{
   width:25%
 .flex_col4{
   width:25%
 h1{
   text-align: center;
   padding-top: 0px;
   padding-bottom: 0px;
   margin: 0px;
   background-color: white;
```

```
h4.message{
    text-align: center;
    padding-top: 0px;
    padding-bottom: 0px;
    margin: 0px;
    background-color: white;
  hr{
  height:1px;
  border:none;
  color:#000;
  background-color:#000;
  width:40%;
  text-align:center;
  margin: 5 auto;
  table{
    text-align: center;
    margin:0 auto;
    border: 1px solid black;
    width:40%;
  td{
    text-align: left;
    margin:0 auto;
    border: 1px solid black;
  th{
    border: 1px solid black;
//begin pulling in html tags
$operation=$_GET["operation"];
$title=$_GET["title"];
$author=$ GET["author"];
$isbn=$_GET["isbn"];
$publisher=$ GET["publisher"];
$year=$_GET["year"];
```

```
<form action="execute.php" method="GET">
  <h1>Book Inventory</h1>
  <div class="flex-container">
    <div class="flex col1"></div>
    <div class="flex col2">Select Operation:&nbsp </div>
    <div class="flex col3"><select name="operation" style="width: 100%">
           <option value='<?php echo $operation?>' selected='selected'><?php echo $operation?></option>
           <option value="add">Add</option>
           <option value="delete">Delete</option>
           <option value="search">Search</option>
    <div class="flex col4"></div>
  <h1>Book Fields</h1><hr>
    <div class="flex-container">
       <div class="flex col1"></div>
      <div class="flex col2">Title:&nbsp;</div><div class="flex col3"><input type="text" name="title"</pre>
value="<?php print $title; ?>" style="width: 100%"></div>
      <div class="flex col4"></div>
                                      <div class="flex col1"></div>
    <div class="flex-container">
       <div class="flex col2">Author:&nbsp;</div><div class="flex col3"><input type="text"</pre>
name="author" value="<?php print $author; ?>" style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">ISBN:&nbsp;</div><div class="flex col3"><input type="text" name="isbn"</pre>
value="<?php print $isbn; ?>" style="width: 100%"></div>
      <div class="flex col4"></div>
    <div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Publisher:&nbsp;</div><div class="flex col3"><input type="text"</pre>
name="publisher" value="<?php print $publisher; ?>" style="width: 100%"></div>
       <div class="flex col4"></div>
```

```
<div class="flex-container">
       <div class="flex col1"></div>
       <div class="flex col2">Year:&nbsp;</div><div class="flex col3"><input type="text" name="year"</pre>
value="<?php print $year; ?>" style="width: 100%"></div>
       <div class="flex col4"></div>
    <div class="flex-container">
       <input type="submit" value="Execute">
  <div class="flex-container">
       <div class="flex col1"><a href="http://localhost/cmps294/Assmt%203/assmt 3.html">Main
Page.</a></div>
      <div class="flex col2"></div>
      <div class="flex col3"></div>
      <a href="db"><div class="flex col4"><a href="db"><a href="db">div><a href="db">View all DB records.<a href="db">/a></div></a>
  TitleAuthorISBNPublisherYear
/begin add record
if ($_GET["operation"] == "add" ) {
  $myfile = fopen("database.txt", "a") or die("Unable to open file!");
  $txt = "$title%$author%$isbn%$publisher%$year\r\n";//each field bounded by %
  fwrite($myfile, $txt);
  fclose($myfile);
  print "<h4 class=message> $txt written to the database. </h4>";
  $fields= explode("%","$txt");
  print
 $fields[0]$fields[1]$fields[2]$fields[3]$fields[4]
/end add record
if ($ GET["operation"] == "search") {
  $myfile = fopen("database.txt","r");
```

```
$lines = explode("\n", file get contents('database.txt'));
  fclose($myfile);
  print "<h4 class=message> Your search results are below. </h4>";
  foreach ($lines as $value) {
    $fields= explode('%',$value);
    if(\$fields[0]=\$title|\|\$fields[1]==\$author|\|\$fields[2]==\$isbn|\|\$fields[3]==\$publisher|\|\$fields[4]==\$year)\{
 $fields[0]$fields[1]$fields[2]$fields[3]$fields[4]
 end search records
if ($ GET["operation"] == "delete") {
  if($title!=NULL){
    $title to delete=$title;
  }else{$title to delete=".*";
  if($author!=NULL){
    $author to delete=$author;
  }else{$author to delete=".*";
  if($isbn!=NULL){
    $isbn to delete=$isbn;
  }else{$isbn to delete=".*";
  if($publisher!=NULL){
    $publisher to delete=$publisher;
  }else{$publisher to delete=".*";
  if($year!=NULL){
    $year to delete=$year;
  }else{$year to delete=".*";
```

```
$myfile = fopen("database.txt","r");
  $lines = explode("\n", file get contents('database.txt'));
  fclose($myfile);
  foreach ($lines as $value){
(preg match("/$title to delete%$author to delete%$isbn to delete%$publisher to delete%$year to delete/
, $value)){
      $delete[]=$value;
    }else{
      $keep[]=$value;
print "<h4 class=message>The records that have been deleted are shown below. </h4>";
  foreach ($delete as $value) {
   $fields= explode('%',"$value");
"$fields[0]$fields[1]$fields[2]$fields[3]$fields[4]
print "";
print "<h4 class=message>The records that have been retained are shown below. </h4>";
print "";
  $myfile = fopen("database.txt", "w") or die("Unable to open file!");
  foreach ($keep as $value) {
  txt = "value r n";
  fwrite($myfile, $txt);
 $fields= explode("%","$value");
 fclose($myfile);
print "";
```



## V. File/Aid links

 $\frac{http://147.174.59.103/\sim goss/assmt3/assmt\_3.html}{http://147.174.59.103/\sim goss/assmt3/db\_contents.php} \\ \frac{http://147.174.59.103/\sim goss/assmt3/execute.php}{https://regex101.com/}$