Your project part 5 will be written as a web application, which should render HTML code in the browser. You are also encouraged to use Style Sheets (CSS) to make your web app design look pleasant.

If you're note familiar with HTML and CSS, you are encouraged to take a couple hours to learn it through the following crash course: <https://scrimba.com/learn/htmlcss>. (Links to an external site.)

Populating HTML <select> with PHP

Drop-down select statements can be generated by PHP by writing <option> tags for every option.

Custom Input Validation with HTML5

Modern HTML can be used to reject form submissions in the client's browser.

<https://www.the-art-of-web.com/html/html5-form-validation/>. (Links to an external site.) has good information on how to do this.

Javascript can also be used. https://scrimba.com/learn/learnjavascript (Links to an external site.) is a very good introductory course on Javascript.

Example PHP file

<!doctype html>

<html>

<head>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>

<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>

</head>

<body>

<h1>Insert Song</h1>

<?php

//create mysql connection

require("connection.php");

if($\_POST['composer']){

//code to insert song

echo 'Message that song was inserted successfully.<br><br><br>';

}

?>

<span style="display: inline-block; width:50%">

<form class="form-horizontal" action="songInsert.php" method="post">

<div>

Song Name:<input class="form-control" type="text" name="name" pattern="..+" required> <!-- pattern regex to force to be at least two characters. 'required' to require entry. -->

<br>

Musician:

<select name="composer" class="form-control form-control-sm">

<!-- First option is a prompt. "selected ensures it will be selected by default"-->

<option selected>Select Composer</option>

<?php //PHP will populate the contents of the select menu

try{

$musicianListStmt = $connection->prepare("SELECT id, f\_name, l\_name FROM musician;");

$musicianListStmt->execute(null); //execute the statement with no arguments (prepare statement has no ? or :param attributes)

//get all results into an array

//only gets associative keys

$musicianResults = $musicianListStmt->fetchAll(PDO::FETCH\_ASSOC);

foreach($musicianResults as $row){

print("<option value=\"".$row['id']."\">".$row['f\_name']." ".$row['l\_name']." (id ".$row['id'].")</option>\n");

}

} catch(PDOException $error) {

//if connection failed, close the select tag, print error, and end HTML page gracefully;

echo "</select>";

echo "Error: " . $error->getMessage() . "<BR>";

echo "</div></form></span></body></html>";

}

?>

</select>

<br>

Lyrics:<textarea class="form-control" name="lyrics" pattern="..+" required></textarea><br>

Duration:<input class="form-control" type="text" name="duration" pattern="[0-9]+" required><br>

Style:<input class="form-control" type="text" name="Style" pattern="..+" required><br>

<input class="btn btn-primary" type="submit">

</div>

</form>

</span>

</body>

</html>

This file implements <select> populated by PHP and HTML5 input validation. This is on another database, but you can get the idea and adjust to the project database.

songInsert.php

Use and abuse of the PHP documentation!

<https://www.php.net/manual/en/>

extra help:

<https://www.taniarascia.com/create-a-simple-database-app-connecting-to-mysql-with-php/>.