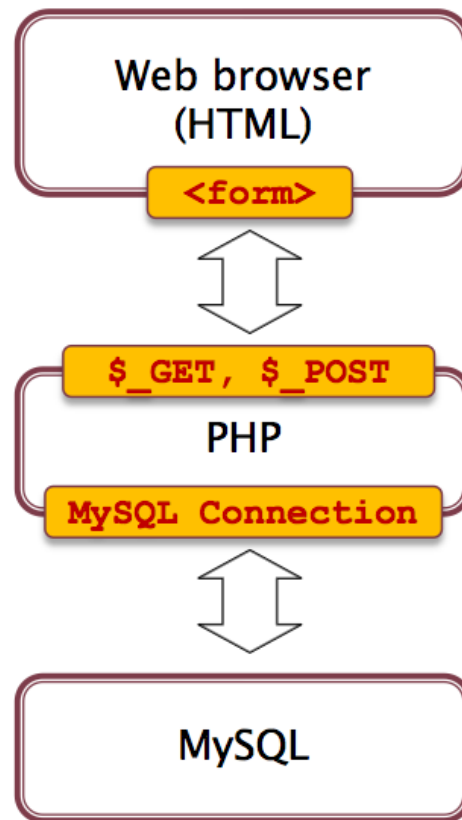


The background of the slide features a series of overlapping, wavy blue lines that create a sense of depth and movement, transitioning from a lighter blue at the top to a darker blue at the bottom.

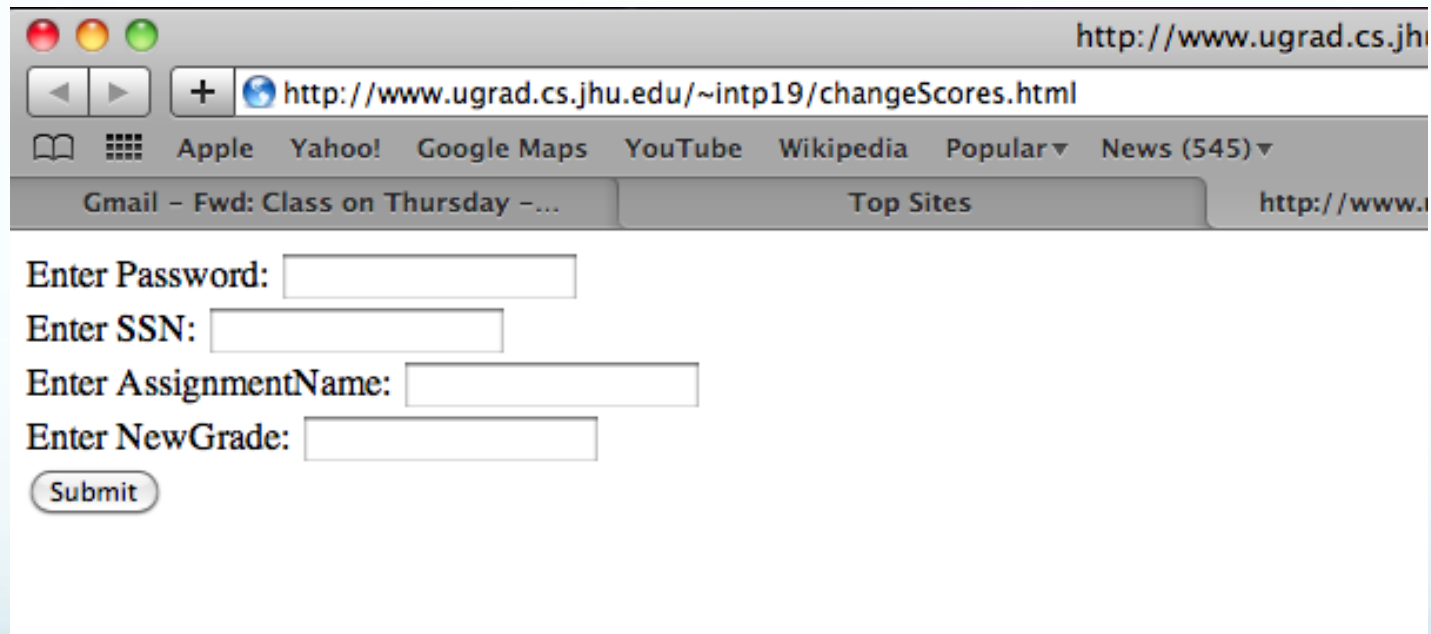
PHP + MySQL + Web

PHP + MySQL + Web



The Goal

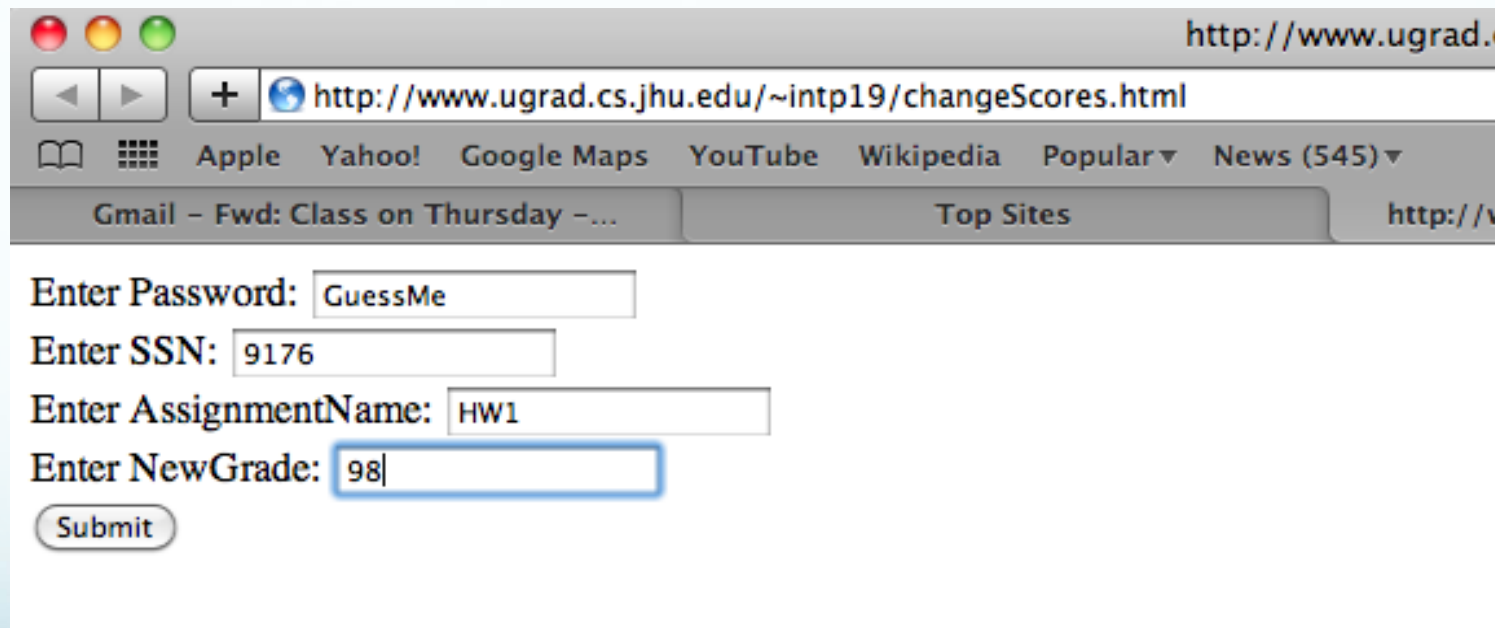
- Web Interface that can access the database



A screenshot of a web browser window. The address bar shows the URL `http://www.ugrad.cs.jhu.edu/~intp19/changeScores.html`. The browser's menu bar includes "Apple", "Yahoo!", "Google Maps", "YouTube", "Wikipedia", "Popular", and "News (545)". Below the menu bar, there are tabs for "Gmail - Fwd: Class on Thursday -..." and "Top Sites". The main content area displays a form with four input fields and a submit button:

Enter Password:
Enter SSN:
Enter AssignmentName:
Enter NewGrade:

- To update the database from the Web Interface.



A screenshot of a web browser window. The address bar shows the URL `http://www.ugrad.cs.jhu.edu/~intp19/changeScores.html`. The browser's toolbar includes buttons for back, forward, and a search icon, along with a list of bookmarks: Apple, Yahoo!, Google Maps, YouTube, Wikipedia, Popular, and News (545). Below the toolbar, there are tabs for "Gmail - Fwd: Class on Thursday - ..." and "Top Sites". The main content area displays a form with four input fields and a submit button. The fields are labeled "Enter Password:", "Enter SSN:", "Enter AssignmentName:", and "Enter NewGrade:". The values entered are "GuessMe", "9176", "HW1", and "98" respectively. The "Submit" button is located below the "Enter NewGrade:" field.

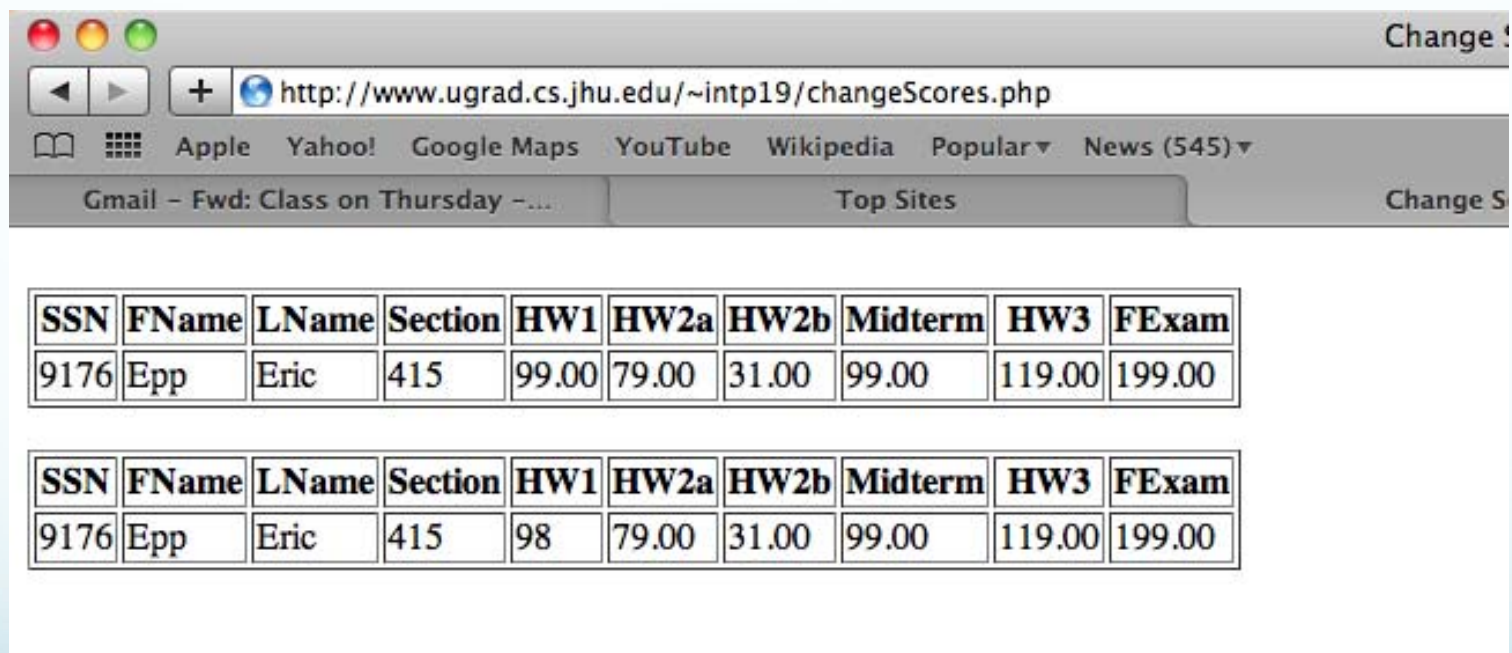
Enter Password:

Enter SSN:

Enter AssignmentName:

Enter NewGrade:

- Output Screen



The screenshot shows a web browser window with the address bar displaying `http://www.ugrad.cs.jhu.edu/~intp19/changeScores.php`. The browser's toolbar includes navigation buttons and a search bar. Below the toolbar, there are tabs for "Gmail - Fwd: Class on Thursday ..." and "Top Sites". The main content area displays a table with student scores.

SSN	FName	LName	Section	HW1	HW2a	HW2b	Midterm	HW3	FExam
9176	Epp	Eric	415	99.00	79.00	31.00	99.00	119.00	199.00

SSN	FName	LName	Section	HW1	HW2a	HW2b	Midterm	HW3	FExam
9176	Epp	Eric	415	98	79.00	31.00	99.00	119.00	199.00

PHP + MySQL

- How to Connect DBASE MySQL server from UGRAD machine

```
$dbhost = 'dbase.cs.jhu.edu:3306';  
$dbuser = 'your_mysql_id';  
$dbpass = 'your_mysql_password';  
$conn = mysql_connect($dbhost, $dbuser, $dbpass);  
if (!$conn) {  
    die ('Error connecting to mysql');  
}
```

HTML Sample code

```
<html>
```

```
<body>
```

```
<form action="update.php" method="post">
```

```
Enter Password: <input type="text" name="password"><br>
```

```
Enter SSN: <input type="text" name="ssn"><br>
```

```
Enter New Grade: <input type="text" name="newgrade"><br>
```

```
<input type="submit">
```

```
</html>
```

```
</body>
```

PHP Sample code

- Reading data from the text box.

```
<?php
```

```
include 'conf.php';
```

```
include 'open.php';
```

```
$password = $_POST["password"];
```

```
$ssn = $_POST["ssn"];
```

```
$newgrade = $_POST["newgrade"];
```


- To use stored procedure in MySQL with PHP

```
if ($mysqli->multi_query("CALL UpdateMidterm  
    (\".$password.\" ,\".$ssn.\" ,\".$newgrade.\" );")) {  
    do {  
        if ($result = $mysqli->store_result()) {
```

```
        .
```

```
        .
```

- Check list

All your source codes should be located in the `~/public_html` folder

- If there isn't create one as follows.

>mkdir public_html

>chmod 705 public_html

- You have to change the permission of a file if you want to access it via web-browser. (IMPORTANT STEP) ☐ **>chmod 704 demo1.php**

SQL Stored Procedures

What are Stored Procedures?

- A Stored Procedure is a pre-written SQL statement that is saved in the database.
- The Stored Procedure can then be executed many times without having to rewriting the SQL statement.
- Stored Procedures can take external variables and return results either in scalar variables or in selected rows.

Stored Procedure Example

- CREATE a stored procedure:

```
delimiter //
```

```
DROP PROCEDURE IF EXISTS strLen //
```

```
CREATE PROCEDURE strLen(IN myStr VARCHAR(20), OUT charCount INT)
```

```
BEGIN
```

```
    SET charCount = LENGTH(myStr);
```

```
END;
```

```
//
```

Stored Procedure Example

- Stored procedures are created by specifying a function name i.e. `strLen()`
- Variables can be passed to it using the `IN` keyword and returned using the `OUT` keyword. The type must be specified.
- `BEGIN` and `END` keywords are used to specify the body of the procedure.

Stored Procedure Example

- Using a stored procedure:

```
delimiter ;
```

```
call strLen(`testString`);
```

```
+-----+  
| charCount |  
+-----+  
|      10      |  
+-----+
```

Stored Procedure Example

- Returning error messages in a stored procedure:

```
delimiter //
```

```
DROP PROCEDURE IF EXISTS findFromSSN //
```

```
CREATE PROCEDURE findFromSSN(IN ssnin INT)  
BEGIN
```

```
    IF EXISTS ( SELECT SSN FROM People WHERE SSN=ssnin) THEN  
        SELECT * FROM People WHERE SSN = ssnin;  
    ELSE  
        SELECT `Sorry; This SSN was not found` AS `Error Message`;  
    END IF;
```

```
END;  
//
```


SQL Views

What are SQL Views?

- A SQL View can be thought of as a virtual table or a stored query.
- It does not physically exist in the database but it can be accessed like a table.
- Unlike a real table, Views can't store data.
- Views can be used to reduce repeated queries.

SQL View Example

- CREATE a SQL View:

```
delimiter //
```

```
CREATE OR REPLACE VIEW myScores AS
```

```
Select HW1,HW2a, HW2b,Midterm,HW3,FExam
```

```
FROM rawscores
```

```
WHERE FName = `Tian`;
```

```
//
```

SQL View Example

- Using a SQL View:

delimiter ;

Select * from myScores;

HW1	HW2a	HW2b	Midterm	HW3	Fexam
88	75	80	85	91	89

Questions????