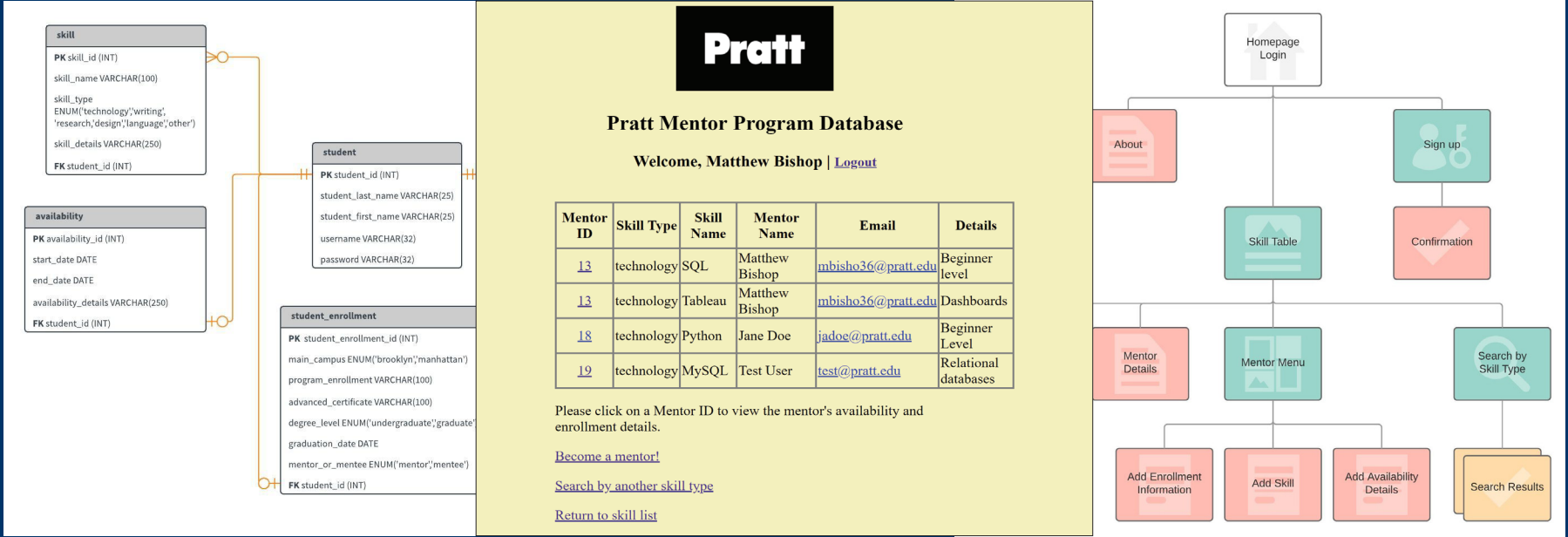# Student Mentor Web Application

Final Project for LIS-638 Web Development

Matt Bishop

Scope

Develop a website for volunteer student mentors at Pratt Institute driven by a SQL database that houses self-reported skill, enrollment, availability, and contact information of mentors.
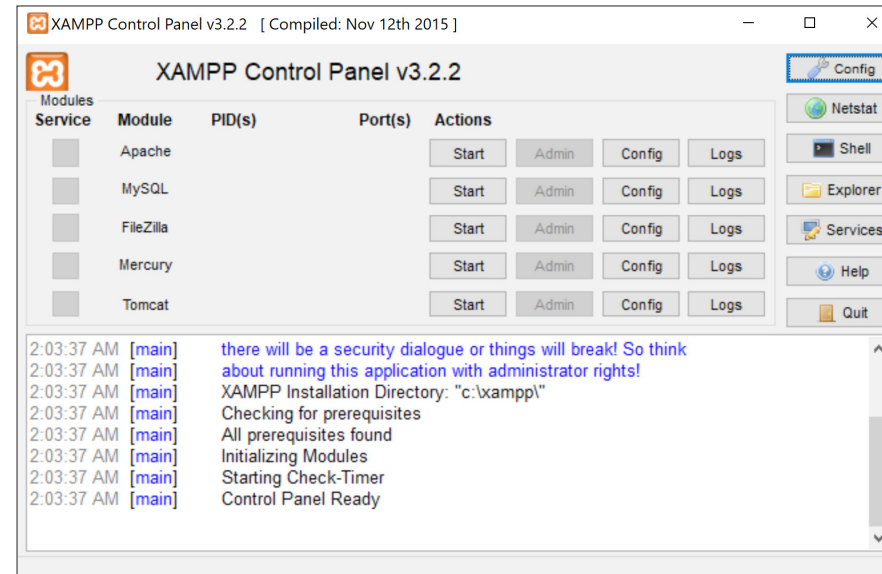
Tools:

Lucidchart

XAMPP
phpMyAdmin
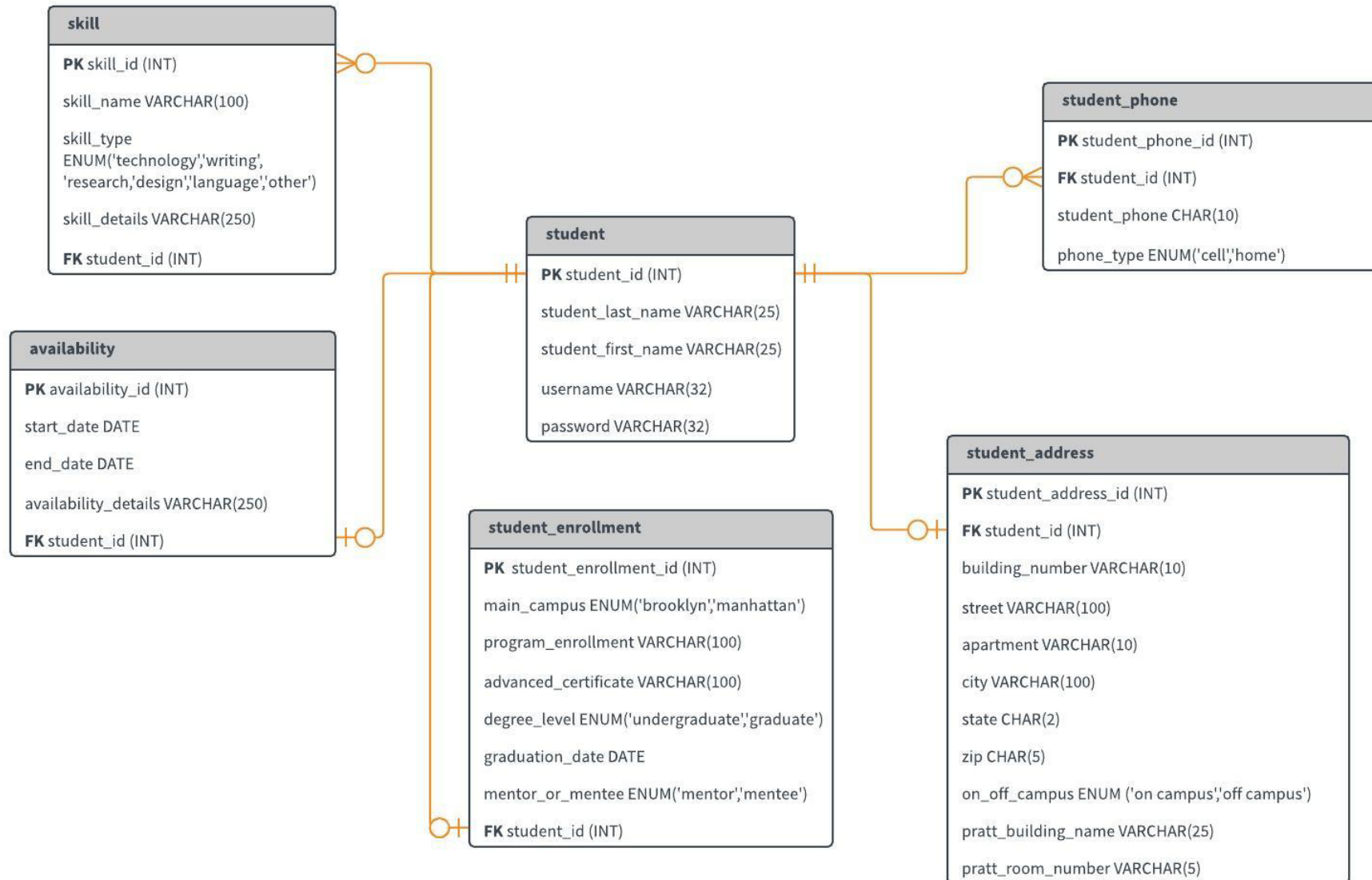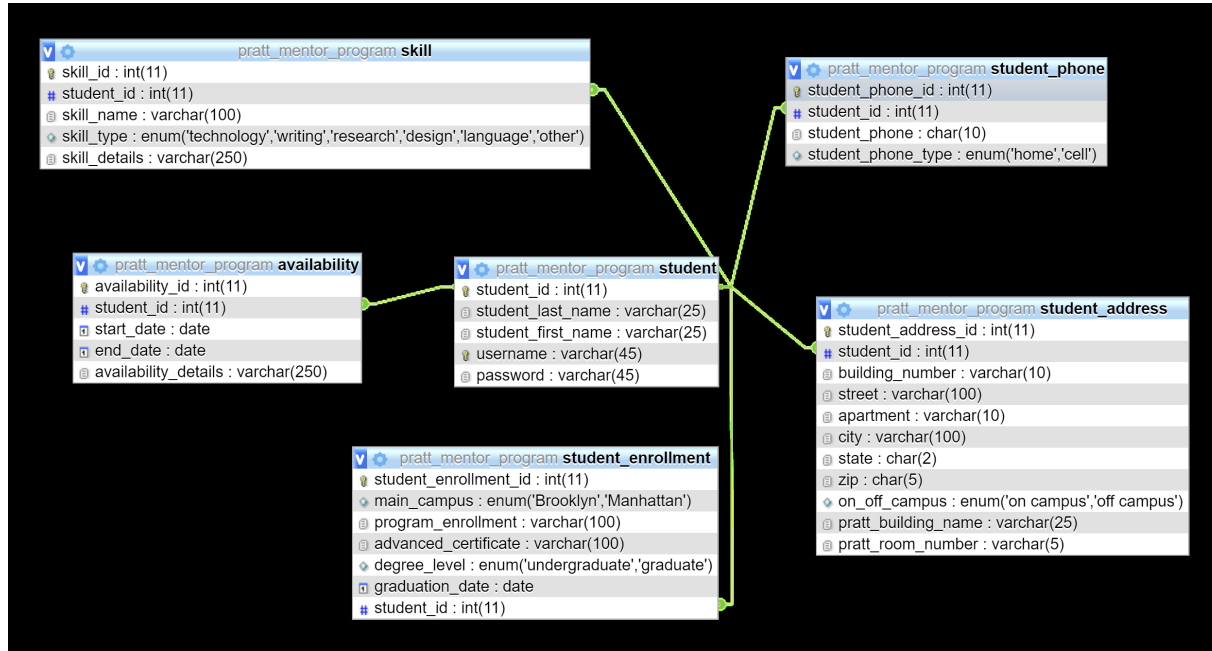Notepad++
GitHub

Languages:
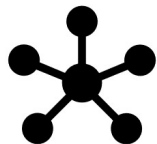
SQL

PHP
HTML
CSS

Database ERD

Define data types

Normalization

Foreign Key Constraints

```sql
1  CREATE TABLE student (
2    student_id INT NOT NULL AUTO_INCREMENT UNIQUE,
3    student_last_name VARCHAR(25) NOT NULL,
4    student_first_name VARCHAR(25) NOT NULL,
5    username VARCHAR(45) NOT NULL UNIQUE,
6    password VARCHAR(45) NOT NULL,
7    PRIMARY KEY (student_id)
8  );
9
10 CREATE TABLE skill (
11   skill_id INT NOT NULL AUTO_INCREMENT UNIQUE,
12   student_id INT NOT NULL,
13   skill_name VARCHAR(100),
14   skill_type ENUM('technology','writing','research','design','language','other'),
15   skill_details VARCHAR(250),
16   PRIMARY KEY (skill_id),
17   FOREIGN KEY (student_id)
18   REFERENCES student (student_id)
19   ON DELETE CASCADE
20   ON UPDATE CASCADE
21 );
22
23 CREATE TABLE student_phone (
24   student_phone_id INT NOT NULL AUTO_INCREMENT UNIQUE,
25   student_id INT NOT NULL,
26   student_phone CHAR(10),
27   student_phone_type ENUM('home','cell'),
28   PRIMARY KEY (student_phone_id),
29   FOREIGN KEY (student_id)
30   REFERENCES student (student_id)
31   ON DELETE CASCADE
32   ON UPDATE CASCADE
33 );
34
35 CREATE TABLE student_address (
36   student_address_id INT NOT NULL AUTO_INCREMENT UNIQUE,
37   student_id INT NOT NULL,
38   building_number VARCHAR(10),
39   street VARCHAR(100),
40   apartment VARCHAR(10),
41   city VARCHAR(100),
42   state CHAR(2),
43   zip CHAR(5),
44   on_off_campus ENUM('on campus','off campus'),
45   pratt_building_name VARCHAR(25),
46   pratt_room_number VARCHAR(5),
47   PRIMARY KEY (student_address_id),
48   FOREIGN KEY (student_id)
49   REFERENCES student (student_id)
50   ON DELETE CASCADE
51   ON UPDATE CASCADE
52 );
53
54 CREATE TABLE availability (
55   availability_id INT NOT NULL AUTO_INCREMENT UNIQUE,
```

Site Map

Web Page Development

Pratt Mentor Program Database

Welcome, Matthew Bishop | Logout

Become a Mentor!
You must fill out all * fields.

*Skill Type: [Technology ▾]

*Skill Name: [   ]

Skill Details: [   ]

[Submit] Go back

Thank you for visiting the Pratt Mentor Program site!

Please remember to be respectful when contacting mentors.

[About]

* Created by: Matt Bishop *

---

pmp_addskill.php

```php
1  <?php
2  session_start();
3
4  require_once 'includes/auth.php';
5  require_once 'includes/login.php';
6  require_once 'includes/functions.php';
7
8  $student_id = $_SESSION['student_id'];
9
10 if (isset($_POST['submit'])) {
11     if ((empty($_POST['skill_name'])) || (empty($_POST['skill_type'])) ) {
12         $message = '<p class="error">Please fill out all of the required (*) form
13     } else {
14         $conn = new mysqli($hn, $un, $pw, $db);
15         if ($conn->connect_error) die($conn->connect_error);
16         $skill_name = sanitizeMySQL($conn, $_POST['skill_name']);
17         $skill_type = sanitizeMySQL($conn, $_POST['skill_type']);
18         $skill_details = sanitizeMySQL($conn, $_POST['skill_details']);
19         $query = "INSERT INTO skill
20             (student_id, skill_name, skill_type, skill_details)
21             VALUES ($student_id, \"$skill_name\", \"$skill_type\", \"$skill_detai
22         $result = $conn->query($query);
23         if (!$result) {
24             die ("Database access failed: " . $conn->error);
25         } else {
26             $message = "<p class=\"message\">You volunteered to mentor in $skill_
27         }
28     }
29 }
30 ?>
31
32 <?php
33 include_once 'includes/header.php';
34 if (isset($message)) echo $message;
35 ?>
36 <form method="post" action="">
37     <fieldset>
38         <legend>Become a Mentor!<br>You must fill out all * fields.</legend><br>
39         <label for="skill_type">*Skill Type:</label>
40         <select name="skill_type"><br><br>
41           <option value="technology">Technology</option>
42           <option value="writing">Writing</option>
43           <option value="research">Research</option>
44           <option value="design">Design</option>
45           <option value="language">Language</option>
46           <option value="other">Other</option>
47         </select><br><br>
48         <label for="skill_name">*Skill Name:</label>
```

Data Security

Pratt email check

User authentication

Password salting and hashing

Less is more

Site Walkthrough

https://webdevdbcourses.prattsi.org/~mbisho36/pratt_mentor_program/pmp_signin.php