

Mock Technical Interview Written Section

You have 30 minutes. Please time yourself.

Technical Questions:

1. You have a users table, how do you select all the rows from the users table? **Note: the id is a primary key (autoincrements & is an integer, other fields are strings)**

```
SELECT * FROM Users;
```

Users Table

id	username	email	password_hash
1	Sphen	sphen@sphen.sphen	GHTY75X1425
2	Betty	betty@betty.betty	YSTTOLA892J3
3	George	George@george.george	FGK235JKG125
4	Janet	Janet@janet.janet	GKWERGK124L

2. How would I select the second user from the table?

```
SELECT * FROM Users  
WHERE id = 1;
```

3. You have a users table. And a meal belongs to user. What would the meals table look like? (hint: Create a table that will track meals with the user who owns it)

Meals table

id	user_id	meal
1	1	Pizza
2	1	Roast Beef
3	2	Pasta

4. Write the syntax to create a meals table that you described above:

```
CREATE TABLE Meals
(
  id int NOT NULL AUTO_INCREMENT,
  user_id int NOT NULL,
  meal varchar(50) NOT NULL,
  PRIMARY KEY (id)
);
```

5. Insert a meal into the meals table for the user with an id of 1.

```
INSERT INTO Meals (user_id, meal)
VALUES (1, 'Steak');
```

6. In the users table, update the user with an id of 3 to a username of “myfavbandisglassanimals”.

```
UPDATE Users
SET username = 'myfavbandisglassanimals'
WHERE id = 3;
```

7. What is the SQL query to delete a user with an id of 4?

```
DELETE FROM Users
WHERE id = 4;
```

8. How would you show all the columns of all the meals and all the columns for the user that owns each meal in one query?

```
SELECT *
FROM Users
INNER JOIN Meals
ON Users.id = Meals.user_id;
```

9. CSS: Draw the box model and label the key components.

10. Given the following code, please draw out what you think the layout would look like:

```
<!DOCTYPE html>
<html>
<head>
  <title>1.2.9 Exercise</title>

  <!-- This critical line points your HTML to the CSS file. Notice the "relative" pathway -->
  <link rel="stylesheet" type="text/css" href="assets/style.css">
</head>
<body>
  <header>
    <h1>Student Bio</h1>
  </header>

  <div class="container">

    <section id="main-bio">

      <h2>Your Name</h2>

      

      <p>Write a short paragraph or two about yourself, or use placeholder text from <a href="#">
    </section>

    <section id="contact-info">
      <h2>Contact Info</h2>
      <ul>
        <li><strong>Email:</strong> <a href="#">someplace@gmail.com</a></li>
        <li><strong>Github:</strong> <a href="#">sampleName</a></li>
        <li><strong>Portfolio:</strong> <a href="#">coming soon</a></li>
      </ul>
    </section>
  </div>

</body>
</html>
```

```

body {
    margin: 0;
    padding: 0;
    background: #efeee7;
    font-size: 18px;
    line-height: 150%;
    font-family: "Georgia",Times New Roman,Times,serif;
    color: #333333;
}
header {
    background: #d21034;
}
h1 {
    background: #333333;
    padding: 20px 0;
    color: #eee;
    margin: 0;
    font-size: 28px;
    text-align: center;
    margin-bottom: 20px;
}
h2 {
    font-size: 24px;
}
a {
    color: #d21034;
}
.container {
    width: 1024px;
    margin: 0 auto;
}
#main-bio,
#contact-info,
#bio-image {
    float: left;
}
#main-bio {
    width: 70%;
}
#contact-info {
    width: 30%;
}
#bio-image {
    width: 200px;
    height: 200px;
    margin-right: 20px;
}

```

10. Draw Resulting Layout here:

11.

```
var fullname = 'Genghis Khan';  
var obj = {  
  fullname: 'Chris Orange',  
  prop: {  
    fullname: 'Spheh Zhen',  
    getFullname: function() {  
      return this.fullname;  
    }  
  }  
};
```

```
var test = obj.prop.getFullname;
```

```
console.log(test());
```

Which fullname do you log in the console?

'Spheh Zhen'

12. With the skills you have right now – what kind of program would you write to defend yourself against a pride of lions?

I would write a program that would integrate the geo-locate feature of google maps api so that through street level view, I could quickly assess my surroundings and see if I could find a suitable hiding place or a nearby town to escape to. At the same time, the app would play a loud, piercing SOS sound that could not only scare the pride of lions and prevent them from attacking but also alert people who may be within earshot that I am in distress.