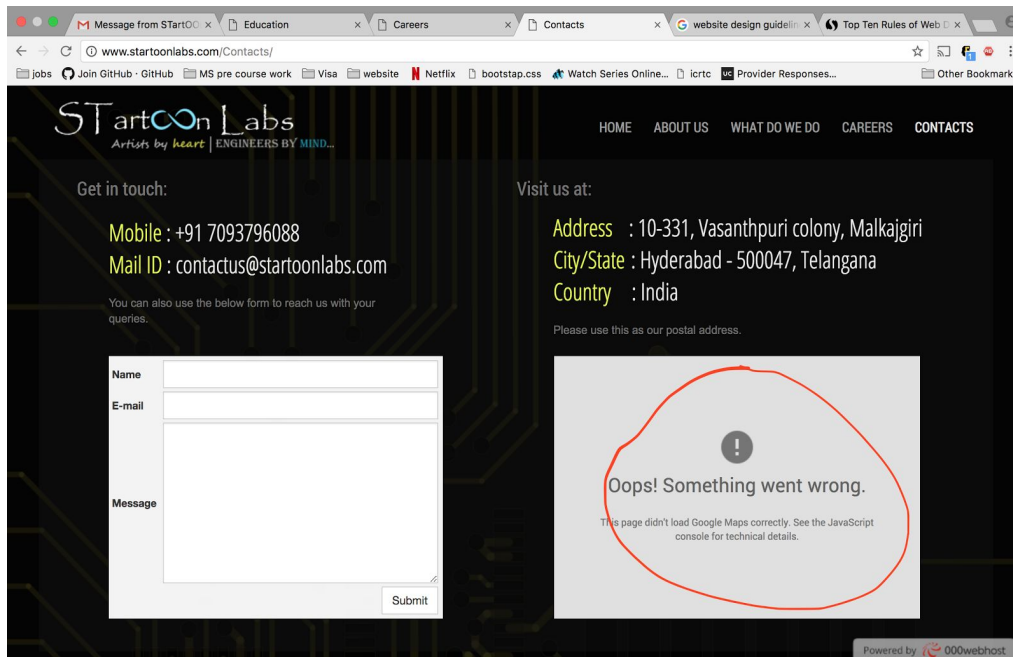
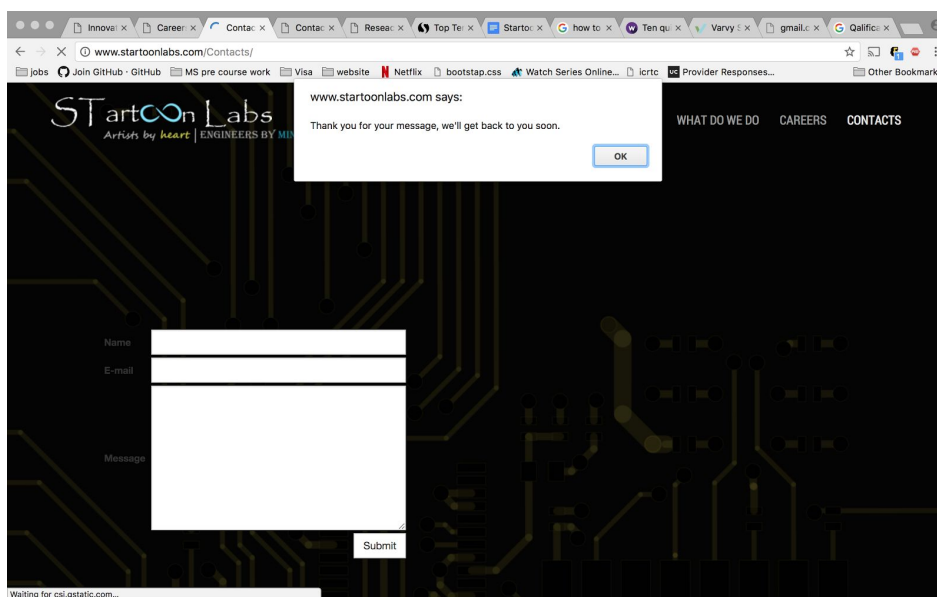


1) List down top 5 features of the website that do not follow web design guidelines.

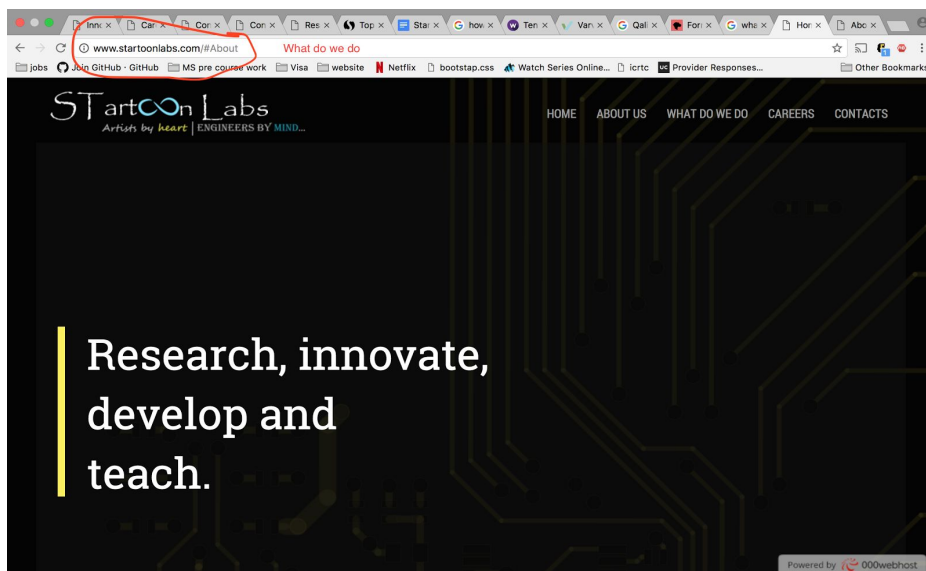
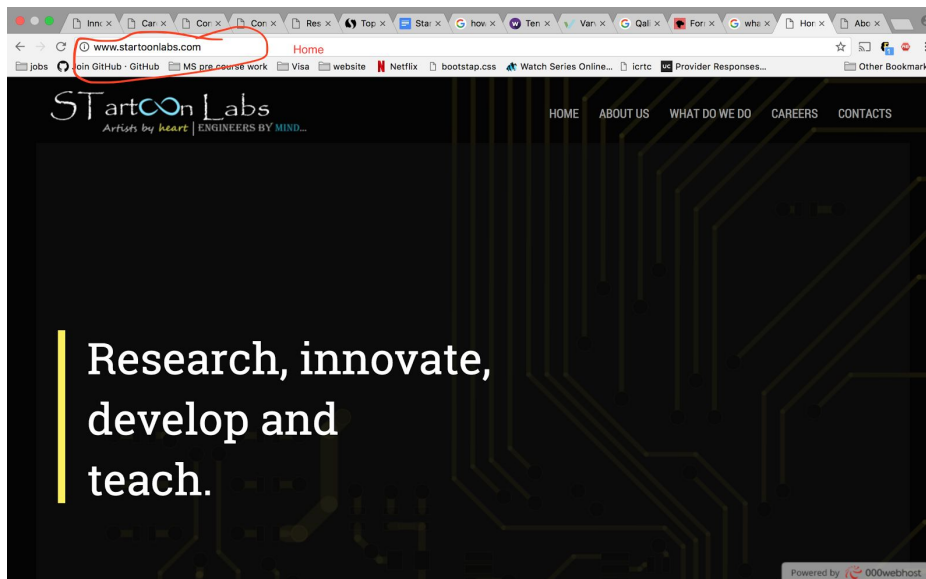
- ❑ A good website should not contain errors- In the contacts section, google maps is not loaded



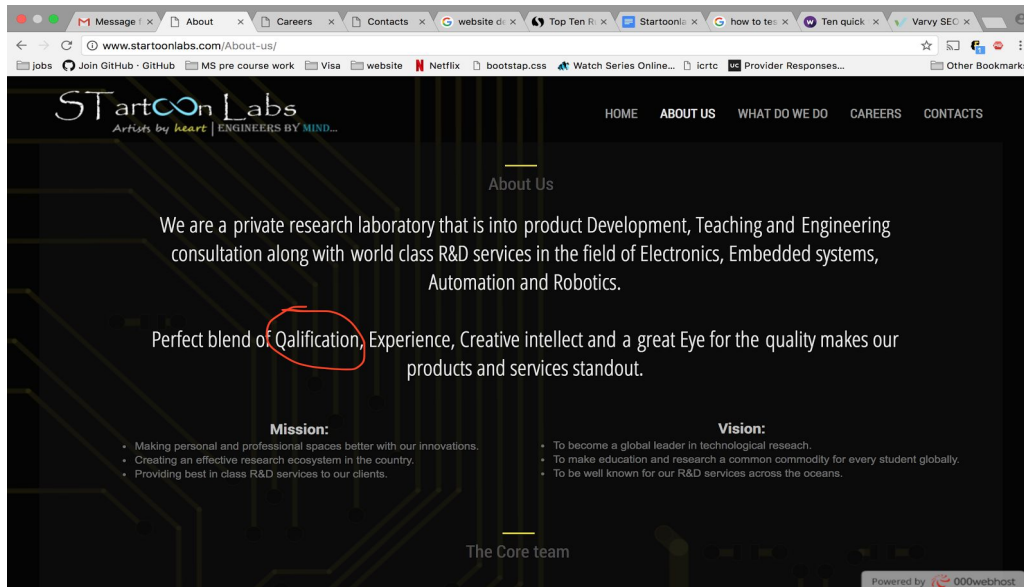
- ❑ Form is not validated in Contacts section. The form is accepting corrupted data. Example: accepted "hiee" as input for email.



- ❑ Unnecessary usage of a link- “Home” and “ What do we do” sections navigate to the same page.



- ❑ Website content should be correct and neat- There is a spelling mistake in About us section. Qualification is misspelled as Qalification.



- ❑ Since the Navigation header is fixed, we need not open the links in a new tab .Link for “Careers” opens in a new tab.
- ❑ Apart from this when the website is checked with Varvy SEO tool, it failed in the following fields -
  - ➔ Security : page is not secure, does not default to HTTPS for all traffic
  - ➔ Accessibility : Not screen reader friendly. Link for skip to main content is not found
  - ➔ Page speed : Browser caching issues, Images not optimized, CSS not minimized, Javascript not minified
  - ➔ If modified since indicators are not found
  - ➔ No sitemaps for users

2) List down methods to make website SEO/SEM compatible.

We can make a website SEO compatible by following below guidelines-

- Keywords should be kept at beginning
- Url must be short and concise with important keywords and must be understandable
- Page title should be in reference to the content and also should be kept as short as possible
- Proper file name should be given for pictures as they can be used in promotions
- Have great content that others want to link. Inbound links improves ranking in the search results

Website can be SEM compatible by following below guidelines-

- Use SEM optimized CMS (Content management system) software and plugins to create your websites
- Have good Pay per click and landing page strategies

SEM is over and above SEO. There are other marketing strategies also like social media marketing.

After grading [www.startoonlabs.com](http://www.startoonlabs.com) on website grader it suggested the following fixes

- Implement caching to speed up the loading of frequently used content.
- Remove or defer JavaScript and CSS that interferes with loading above-the-fold content
- Reduce meta descriptions to 155 characters in length and include keywords once
- Add an H1 tag to each page and include a keyword that's relevant to that page
- Purchase an SSL certificate for your Website. SSL certificates protect websites from attacks and give visitors confidence that your site is authentic and trustworthy.

3) If given a task to add a login page to the website, what is the procedure to do it (considering UX/UI, front end and back end areas)

New Users - Sign up page

Returning Users - Login page

- I would use Bootstrap framework to make my login page responsive
  - It would have a navbar with navbar-right class to make my Signup and Login buttons right aligned
  - Would use glyphsicons to make it more attractive
    - Glyphicon-user class for Signup
    - Glyphicon-log-in class for Log in

```
<nav class="navbar navbar-inverse">
  <ul class="nav navbar-nav navbar-right">
    <li>
      <a href="signup.html"><span class="glyphicon
glyphicon-user"></span>
      Sign Up</a>
    </li>
    <li>
      <a href="login.html"><span class="glyphicon
glyphicon-log-in"></span>
      Login</a>
    </li>
  </ul>
```

- Signup.html
  - Sign up form would ask for Name, email, password, Signup button

- On clicking SignUp button it navigates to Signup.php where the input is saved to database.

```
➤ <form action="Signup.php" method="post">  
    Name: <input type="text" name="name"><br>  
    E-mail: <input type="email" name="email"><br>  
    Password: <input type="password" name="password"><br>  
    <input type="submit" name="Signup">  
</form>
```

- Signup.php

- First Database is connected to the server
- Table with 3 fields Name, Email, Password is created
- User entered details are inserted into database
- On successful insertion of data, Welcome message is displayed and the user is logged in.

```
➤ <?php  
$servername = "localhost";  
$username = "username";  
$password = "password";  
$dbname = "myDB";  
  
// Create connection  
$conn = new mysqli($servername, $username, $password, $dbname);  
  
// Check connection  
if ($conn->connect_error) {  
    die("Connection failed: " . $conn->connect_error);  
}  
  
// sql to create table  
$sql = "CREATE TABLE Users(  
    Name VARCHAR(30) NOT NULL,  
    Email VARCHAR(50),  
    Password VARCHAR(30)";  
$conn->query($sql)  
  
//Collecting Signup form data  
if ($_SERVER["REQUEST_METHOD"] == "POST") {  
    $name = $_POST['name'];  
    $email = $_POST['email'];  
    $password=$_POST['password'];  
}
```

```
//Inserting collected data to database
$sql1 = "INSERT INTO Users (Name, Email, Password)
VALUES ('$name', '$email', '$password')";

if ($conn->query($sql) === TRUE) {
    echo "Welcome".$name ;
}
?>
```

- Login.html

- Has fields Email and Password and Checkbox for Remember me
- On clicking submit, goes to login.php
- ```
<form class="form-horizontal" action="login.php">
  <div class="form-group">
    <label class="control-label col-sm-2" for="email">Email:</label>
    <div class="col-sm-10">
      <input type="email" class="form-control" id="email" name="email">
    </div>
  </div>
  <div class="form-group">
    <label class="control-label col-sm-2" for="pwd">Password:</label>
    <div class="col-sm-10">
      <input type="password" class="form-control" id="pwd" name="pwd">
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
      <div class="checkbox">
        <label><input type="checkbox" name="remember"> Remember
me</label>
      </div>
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
      <button type="submit" class="btn btn-default">Submit</button>
    </div>
  </div>
</form>
```

- Login.php

- Entered details is checked if it exists in database
- If the user details are present in database then the user will be logged in
- `session_start();`

```
if(isset($_POST["name"], $_POST["password"]))  
{
```

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

```
    $result1 = mysql_query("SELECT Email, Password FROM Users WHERE  
Email= ' ".$email." ' AND Password = ' ".$pwd." '");
```

```
    if(mysql_num_rows($result1) > 0 )  
    {  
        $_SESSION["logged_in"] = true;  
    }
```

```
    else
```

```
    {  
        echo 'The email or password are incorrect!';  
    }
```

```
}
```