**Assignment 3**

**Question 1**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

</head>

<div class="table">

<div class="table-row">

<div class="table-head">Apple IOS</div>

<div class="table-head">iPad</div>

<div class="table-head">iPhone</div>

<div class="table-head">iPod Touch</div>

<div class="table-head"></div>

</div>

<div class="table-row">

<div class="table-cell">Google Android</div>

<div class="table-cell">Nexus 7</div>

<div class="table-cell">Samsung Galaxy Note 8</div>

<div class="table-cell">Samsung Galaxy Note 4</div>

<div class="table-cell">HP Slate 7</div>

</div>

<div class="table-row">

<div class="table-cell">Blackberry OS</div>

<div class="table-cell">Blackberry Z10</div>

<div class="table-cell">Blackberry Q10</div>

<div class="table-cell"></div>

<div class="table-cell"></div>

</div>

<div class="table-row">

<div class="table-cell">Microsoft Windows Phone OS/RT</div>

<div class="table-cell">Nokia</div>

<div class="table-cell">Samsung ATIV</div>

<div class="table-cell">Surface</div>

<div class="table-cell"></div>

</div>

</div>

<style type="text/css">

.table{

display: table;

width:40%;

border-collapse:collapse;

border: 8px solid #000000;

background-color: #FFFF00;

}

.table-row{

display: table-row;

}

.table-cell, .table-head{

display: table-cell;

padding:1em;

border:2px solid #000000;

}

.table-head{

font-weight:none;

}

</style>

</body>

</html>

**Question 2**

<iDOCTYPE html>

<!DOCTYPE html>

<html lang="en">

<head>

<title> </title>

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

</head>

<body>

<div class="tab">

<button class="active" href="#info">Information</button>

<button> href="Interface">Interface</button>

<div class="tabcontent" id="Information">

<h3>Fliud unit</br> conversion</h3>

<p>There are two primary units for measuring</br> volume of liquid</p>

<p><lu><li>Imperial system units suchas </br>gallon</li></lu></br>

<lu><li>Metric system uses units such as </br>liters.</li></lu></p>

<p>This app allows you to convert from </br>gallon to litres using the formula:</br>

litre = gallon/3.789.</p>

<style>

.tab{

overflow: hidden;

border: 1px solid #D3D3D3;

background-color: #D3D3D3;

}

.tab button{

background-color: inherit;

float: none;

border: none;

outline: none;

cursor: pointer;

padding: 14px 16px;

color: black;

}

.tab button:hover{

background-color: #A9A9A9;

}

.tab button.active{

background-color: #00FFFF;

}

.tabcontent{

padding 6px 12px;

border: 3px solid #00FFFF;

border-top: none;

}

</style>

</body>

</html>

**Question 3**

2.1 F

2.2 E

2.3 C

2.4 D

2.5 B

2.6 A

**Question 4**

4.1 DELETE FROM books WHERE publisher = “John Grishman”;

4.2 DELETE FROM books WHERE publisher != “John Grishman”;

**Question 5**

app.post('/saveNewUser', function(request, response){

console.log('New user being created');

var user = request.body.saveNewUser;

console.log(request.body)

if (!user.email|| !user.newPassword|| !user.firstName|| !user.lastName|| !user.healthCareNumber|| !user.dateOfBirth

|| !user.cancerType|| !user.tshRange){

return response.json(400, 'Missing a parameter');

}

var salt = bcrypt.genSaltSync(8);

var passwordString = '' + user.newPassword;

var.password = bcrypt.hashSync(passwordString, salt);

user.agreedToLegal = false;

usersCollection.find({

email: user.email

}, function(err, result){

if (err){

return response.send(400, 'Error ');

}

if (result.lenght){

return response.send(400, 'Already an existing user');

}

userCollection.insert (user, function(err, result){

if (err){

return response.send(400, 'An error has occured');

}

return response.json(200, 'User created successfully')

});

});

});

**Question 6**

|  |  |
| --- | --- |
| Android | |
| **Interface and user experience** | * Home screen allows the use of widgets, which display auto-updating information such as weather and emails. * Status bar runs across the top, offering information such as time, Wi-Fi, cell signal and battery life. * Offers the greatest amount of customization. * Users can drag-and-drop widgets anywhere on the screen. * Android hides many of complex settings from inexperienced users. |
| **Applications** | * Gets applications from google play. * Some Android devices, such as Kindle fire, uses separate app stores that have a smaller selection of apps available. * Android offers access to Google-based apps, such as YouTube and Google Docs. * Google play is completely open-sourced. * The quality of apps is not as high. * Some apps are not transferable to a new phone. |
| **Security** | * For unlocking they use biometrics technology, pattern-swiping, face-recognition. * It is easier to get viruses from downloadable apps, as you can side-load an unapproved app. * Google is more relaxed about which apps it allows to appear in its Play Store. |

|  |  |
| --- | --- |
| **Apple IOS** | |
| **Interface and user experience** | * Boost a simple design that is easy to navigate. * Home screen contains rows of apps and icons * Features a dock where users can pin their most frequently used applications. * Status bar runs across the top, offering information such as time, Wi-Fi, cell signal and battery life. * Apple IOS is compatible with many devices including iPad and OS X products. * Another strength is seamless integration with iTunes. |
| **Applications** | * Apple store charges slightly more for its application downloads. * Apple Store has the most cutting-edge apps available. * Most apps are easily transferable to a new IOS device. |
| **Security** | * For unlocking they use biometrics technology, pattern-swiping, face-recognition. * Every downloadable app available on the Apple Store is subject to strict security protocols. * Sign in with Apple to limit data passed to third parties. * Two-factor authentication to ensure unauthorized person cannot gain access to the account. * When a passcode is utilized on an Apple IOS device, the contents are encrypted. |

|  |  |
| --- | --- |
| **Windows 8** | |
| **Interface and user experience** | * Windows 8 has adopted the same look and feel as its desktop interface. * Home page has live tile features. * Live tile features give you little nuggets of information without forcing you to open an application * Thanks to cloud computing, most mobile users have options of accessing important files on the go. * Integration with outlook and Microsoft solutions is seamless. |
| **Applications** | * Windows has not attracted as great of a developer community as exist for Apple IOS and Android devices. * Apps rarely receive updates. * Most Apps lack fundamental features. * Most Apps are port from Android and Apple store. * Windows phone store has a much smaller selection of Apps. |
| **Security** | * For unlocking they use biometrics technology, pattern-swiping, face-recognition. * Every downloadable app available on the Windows phone store is subject to strict security protocols. * All Apps are reviewed and approved by Microsoft. |

**Question 7**

mSpy Mobile Monitoring

It is an application to monitor what children are doing on their smartphones and iPads. As times go on, technology is changing rapidly, and parents cannot keep up with their children’s activities on their gadgets. More and more children are having access to the web, social media and addictive games.

There are pedophiles that are always on the web looking for their next target by pretending to children. It helps to follow and check your kid’s activities and report back to you. It also lets you as a parent to manage incoming/outgoing calls, read multimedia file, text messages, social media and track their location.

In the real world as opposed to the virtual world, an exceptionally large proportion of a child’s now exist online. It is irrefutable and irreversible, so to become alien to such a proportion of their lives is inexplicable. We teach our children to look both ways before crossing the street, do not talk to strangers, no one think twice about teaching their children about the do’s and don’ts of the web. Always keep the lines of communication open, ask questions instead of probing to make a safe environment.

Every parent will be at ease whether they are on holidays or at work knowing that their children are safe. It will also build a trust between a child and a parent.

**References**

[1] <http://www.pfeifferreport.com/v2/wp-content/uploads/2013/09/iOS7-User-Experience-Shootout.pdf>

[2] <https://techhelpboston.com/2015/09/16/whats-the-difference-between-windows-vs-android-vs-ios/>

[3] <https://blog.udemy.com/ios-vs-android-vs-windows/>

[4] <https://books.google.co.za/books?id=_bcaCgAAQBAJ&pg=PA233&lpg=PA233&dq=var+user+%3D+request.body.newuser&source=bl&ots=VgpVQ-TbSZ&sig=ACfU3U1mNLx22CvZc_jnMO_xlK37_c4v3w&hl=en&sa=X&ved=2ahUKEwjroJW2rpLpAhXfURUIHZnFBR4Q6AEwAHoECAkQAQ#v=onepage&q=var%20user%20%3D%20request.body.newuser&f=false>