

University of Buea

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Faculty of Engineering and Technology

Department of Computer Engineering.

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TITLE : WIRELESS HOTSPOT WEB APPLICATION

## Introduction:

The project was aimed at designing a wireless hotspot web application composed of a front-end web interface, a back-end database and a logic. The purpose of this project is to understand the modelling of data in a real time scenario and implementing a fully functional database system which interacts with a front end interface.

## ALGORITHM

A high level description of the project is given below:

- It incorporates a form to register new users or members. So they will need to provide some information such as: a username, phone, password (which is the user ID), email amongst others.
- Even non-members can use the system by just getting a valid login time code.
- The administrator of course is the only person who has access to the database of the system.
- The header and footers of the system were static ones thus separated from the rest of the code and included in every other pages.
- The above specifications led to the production of a database, hotlink including a table, users\_info for users, visitors\_table.
- Another table products\_table was created to make the system dynamic. This table was then used to generate web pages.
- The registration forms are validated using a server side scripting language and outputs an error in case the form is wrongly entered, an error is fired and the user redirected to the form.
- The user's password entered during the registration is encrypted using the sha1 encryption scheme before being posted to the database.
- Anybody can have a view of the other pages such as advertisements, products and others. But only users can go to the status page.

So for the above mentioned to be correctly implemented, a knowledge of at least four web programming languages was required. These include:

- HTML (HyperText Markup Language) is used for the
- CSS (Cascading StyleSheet) was added for the styling of the web pages together with the formatting that give a nice look and feel. Also it was used for the structuring of the different elements.
- PHP (Hypertext Preprocessor) was used together with SQL commands for the backend database and logic of the application. Wamp version 3.2.1 was used as the local server. PHP was also used for getting information from users and validating them before posting to the database. Also to make the application dynamic.
- JavaScript was included to bring interactivity to the application

Briefly the project's specifications were implemented as such:

- The home page was first designed on paper, to have a precise look of the web application together with some links.
- HTML was used to make concrete the paper design of the page CSS added for styling of the different sections of the page.
- The database was then created using wamp.
- The home page was then transformed into a PHP file and the PHP commands and functions put to make pages dynamic.
- The user password is encrypted each time we want to authenticate the user, be it during login or sign up.

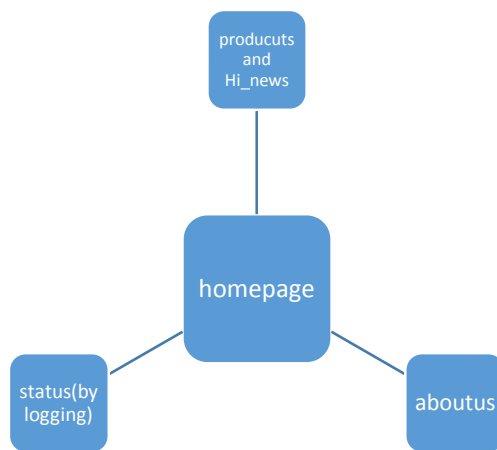


Fig: web application logic

## ER MODEL

Below is the database schema:

Database: Hotlink

Users\_info

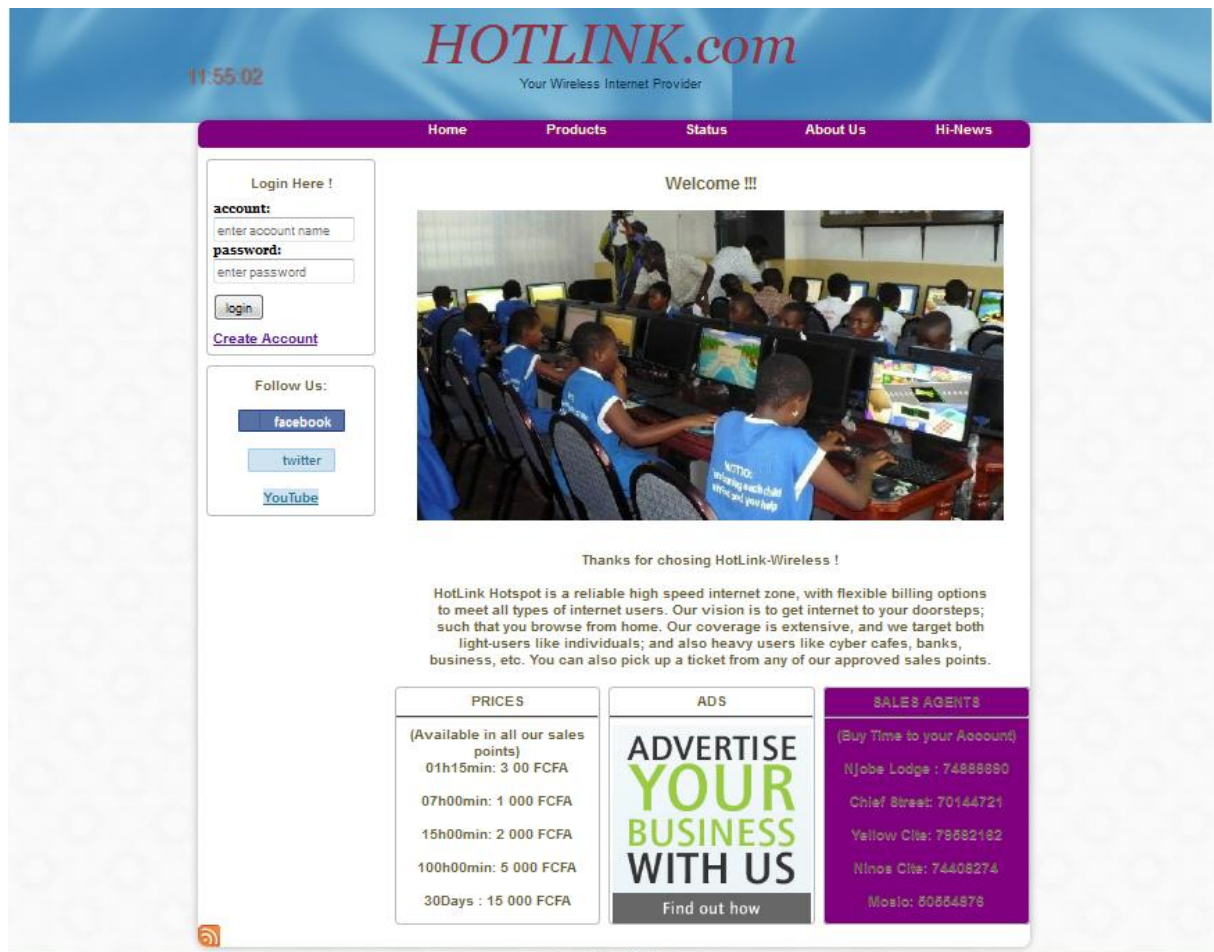
User_name	User_id	Mobile	Email	Confirm	User_time
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Products\_table

Product_id	Product_name	product_description	Product_image
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## LOOK AND FEEL

This is a view of the home page of the application.



Below is the products-machines page

**HOTLINK.com**  
Your Wireless Internet Provider

11:58:31

Home Products Status About Us Hi-News

**Login Here !**  
**account:**  
  
**password:**  
  
  
[Create Account](#)

**Follow Us:**  
[facebook](#)  
[twitter](#)  
[YouTube](#)

**Machines**

**HP 2000 AMD i5**

HP 2000-2100X - 2500RHS  
 AMD F50  
 15.4" screen  
 3GB Memory  
 32GB HD

**DELL INSPIRON i5**

DELL - 25100HS  
 2.5 GHz Intel Core i5  
 4GB RAM  
 500GB HDD  
 14" Screen Size  
 1.3 MP Web Cam

**SAMSUNG 300E i3**

SAMSUNG - 1000HS  
 Intel Core i3-2370M (2.4 GHz)  
 4GB of RAM  
 300GB of HD  
 15.4" screen

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(Available in all our sales points) 01h15min: 3 00 FCFA 07h00min: 1 000 FCFA 15h00min: 2 000 FCFA 100h00min: 5 000 FCFA 30Days : 15 000 FCFA	<b>ADVERTISE YOUR BUSINESS WITH US</b> <a href="#">Find out how</a>	<b>(Buy Time to your Account)</b> Njoke Lodge : 74888690 Chief Street: 70144721 Yellow Cite: 79682162 Nines Cite: 74408274 Moso: 80664878

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"Car en Lui il y a la vie, le mouvement et l'etre".  
 Act 17:28

This also is a view of the sign up page for creating users account.

## Registering Account

Language: English

\*username:

\*password:

\*mobile:

\*e-mail:

\* Fields are mandatory!

**ATTENTION:**  
 PLEASE READ THESE TERMS CAREFULLY BEFORE USING THIS WEBSITE. BY USING THIS SITE YOU AGREE TO BE BOUND BY THESE TERMS AND CONDITIONS. IF YOU DO NOT ACCEPT THESE TERMS ("TERMS"), DO NOT USE THIS WEBSITE.

☒ I accept the Terms & Conditions

[Français](#) | [English](#) | © HotLink 2013.

## CONCLUSION

Many difficulties were encountered, some of which include: very little knowledge of the different web programming languages, for getting some features to be implemented.

## REFERENCES

- Lynda.com HTML Essential Training 2012
- Lynda.com PHP with MySQL Essential Training videos
- Lynda.com PHP with MySQL beyond the basics videos
- Formation PHP MySQL
- JavaScript Essential Training (2007)
- Learning PHP & MySQL
- PHP & MySQL for Dummies (Wiley 2004)
- PHP Functions Essential Reference
- Web Design for Dummies (2009) – Malestrom
- HTML & JavaScript for visual learners
- [www.W3schools.com](http://www.W3schools.com) tutorials
- [www.tizag.com](http://www.tizag.com) tutorials

## APPENDIX

Here is the source code of the index page.

```
<?php include("includes/header.php"); ?>

<div id="left-navigation" align="left" style="">                                <!-- in charge of left section -->

    <div id="left-navigation-inner" align="left" style="padding:10px;">

        <div id="login-form" style="width: 170px;">                                <!--take care of the form-->

            <div id="login-form-inner" style="width: 170px">

                <form action="status.php" method="post" >

                    <p align="center" class="logging"><b> Login Here !</b></p>

                    <label for="login" style="font-family:Georgia;font-size:14px;color:black;">
account: <input type="text" name="account" placeholder="enter account name" /> </label><br>

                    <label for="password" style="font-family:Georgia;font-
size:14px;color:black;"> password: <input type="password" name="pwd" placeholder="enter password" /> </label>

                    <p><input type="submit" value="login"/> </p>

                    <p><a href="form.php"><u> Create Account </u></a></p>
```

```

        </form>

    </div><div class="cleared"></div>

</div>

<div id="nav-down" align="left">                                <!-- div below form -->

    <div id="nav-down-inner" >

        <p> <!--href="#" class="follow"-->

            Follow Us:<br/><br/>

<a href="https://www.facebook.com/HotLink" target="_blank" class="btn-auth btn-facebook large"> facebook </a> <br/>
<br/>

<a href="https://www.twitter.com/HotLink" target="_blank" class="btn-auth btn-twitter large">twitter</a> <br/><br/>

<a href="https://www.youtube.com/HotLink" target="_blank" class="bnt-auth btn-youtube large">YouTube</a>

        </p>

    </div><div class="cleared"></div>

</div>

</div>

<div id="article" align="right" style="width: 690px; margin-left: 210px; margin-top: 0; border: 1px solid transperent;">
    <!-- in charge of right section -->

    <div id="article-content-block" align="right">

        <div id="article-content-block-inner" align="right">                                <!--revoire le width-->

            <div id="article-content-row-1" align="right" style="">

                <!--<div id="article-block-1" style="width: 400px; ">

<!-- shutterstock_9220px543doit contenir des images circulantes 

                </div>-->

            </div>

            <div id="aricle-block-1">

<div id="article-block-inner" align="center" style=" padding-top: 20px; margin-top: 5px;">                                <!-- doit travailler ca-->

                <h3> Welcome !!! </h3>

                <br />

                <p>  </p>

                <br />

                <blockquote><p>

                    Thanks for chosing HotLink-Wireless !<br /><br/>HotLink Hotspot

is a reliable high speed internet zone, with flexible billing options to meet all types of internet users. Our vision is to get
internet to your doorsteps; such that you browse from home. Our coverage is extensive, and we target both light-users like
individuals; and also heavy users like cyber cafes, banks, business, etc. You can also pick up a ticket from any of our
approved sales points.</p></blockquote>

```

```
        </div>
    </div>    <div class="cleared"></div>
<?php include("includes/footer.php"); ?>
```