

**“MODULARITY OF MOBILE SHOPPING ASSISTANCE  
SHOPPING SYSTEM”**

**BY**

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**UNDER THE GUIDANCE OF  
Prof. Prasad Halgaonkar**

**IN FULFILLMENT OF BACHELOR IN  
ENGINEERING (COMPUTER)**

**DEGREE OF SAVITRIBAI PHULE PUNE UNIVERSITY  
MAY/JUNE 2014-15**



**DEPARTMENT OF COMPUTER ENGINEERING  
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## **ASSIGNMENT NO 1**

### **Project workstation selection, installations along with setup and installation report preparations**

#### **PROJECT WORKSTATION SELECTION**

All modules are implemented in Netbeans and records are stored in MySQL.

##### **Platform**

1. JDK 7+
  - i. ADT 22.0v or plus.
  - ii. Widely used and open source. Here we are use Oracle JDK only.
2. MySql 5+
  - i. Supports MyISAM engine
  - ii. Faster database access and storage in case of million tuples
3. Operating System
  - i. Android (3.0 +).
  - ii. For development, any OS is supported.

##### **Technology**

1. Java: Java is a platform independent, object oriented language. It supports inheritance, polymorphism, abstraction, and encapsulation.
2. Sentiment Analyser- SentiWord.: It is an open source parser available. It includes all the words and supports emoticons
3. Twitter API: Allows communicating with the user and calculates their number of followers. It gives us the number of tweets.
4. OAuth 2.0: Authorization of user for Twitter data.
5. MySQL

## **INSTALLATION SETUP**

- **ADT installation steps:**

### Starting the Download

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1. Go to <https://developer.android.com/sdk/index.html>
2. Find Download Android Studio.
3. Click the Download button for the download option that you want to install.
4. Save the installer file to your system.

### Installing the Software

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Follow the instructions in this section to install the IDE on your system. These installation instructions apply to all supported platforms. For the list of supported platforms and system requirements, see the [release notes](#).

### **To set up Android Studio on Windows:**

1. Launch the .exe file you just downloaded.
2. Follow the setup wizard to install Android Studio and any necessary SDK tools.

On some Windows systems, the launcher script does not find where Java is installed. If you encounter this problem, you need to set an environment variable indicating the correct location.

Select **Start menu > Computer > System Properties > Advanced System Properties**. Then open **Advanced tab > Environment Variables** and add a new system variable `JAVA_HOME` that points to your JDK folder, for example `C:\Program Files\Java\jdk1.7.0_21`.

The individual tools and other SDK packages are saved outside the Android Studio application directory. If you need to access the tools directly, use a terminal to navigate to the location where they are installed. For example:

```
\Users\<user>\sdk\
```

### **To set up Android Studio on Mac OSX:**

1. Launch the .dmg file you just downloaded.
2. Drag and drop Android Studio into the Applications folder.
3. Open Android Studio and follow the setup wizard to install any necessary SDK tools.

Depending on your security settings, when you attempt to open Android Studio, you might see a warning that says the package is damaged and should be moved to the trash. If this happens, go to **System Preferences > Security & Privacy** and under **Allow applications downloaded from**, select **Anywhere**. Then open Android Studio again.

If you need use the Android SDK tools from a command line, you can access them at:

```
/Users/<user>/Library/Android/sdk/
```

## To set up Android Studio on Linux:

1. Unpack the downloaded ZIP file into an appropriate location for your applications.
2. To launch Android Studio, navigate to the `android-studio/bin/` directory in a terminal and execute `studio.sh`.

You may want to add `android-studio/bin/` to your PATH environmental variable so that you can start Android Studio from any directory.

3. If the SDK is not already installed, follow the setup wizard to install the SDK and any necessary SDK tools.

**Note:** You may also need to install the `ia32-libs`, `lib32ncurses5-dev`, and `lib32stdc++6` packages. These packages are required to support 32-bit apps on a 64-bit machine.

## XAMPP installation steps:

1. Download the software from : <http://www.apachefriends.org/en/xampp-windows.html#641>

Select the Installer option under the Basic Package. You may be taken to a page that presents you with a bunch of different download locations. Just click one of the download buttons, and then save the file to your desktop. Once downloaded, the installer works like most Windows installers.

In Internet Explorer, you may get a warning about downloading the file. Click the yellow information bar that appears above the Web page in IE, and choose Download File...

2. Double-click the .exe file you downloaded.  
A window opens, asking you to select the language you'd like to use.

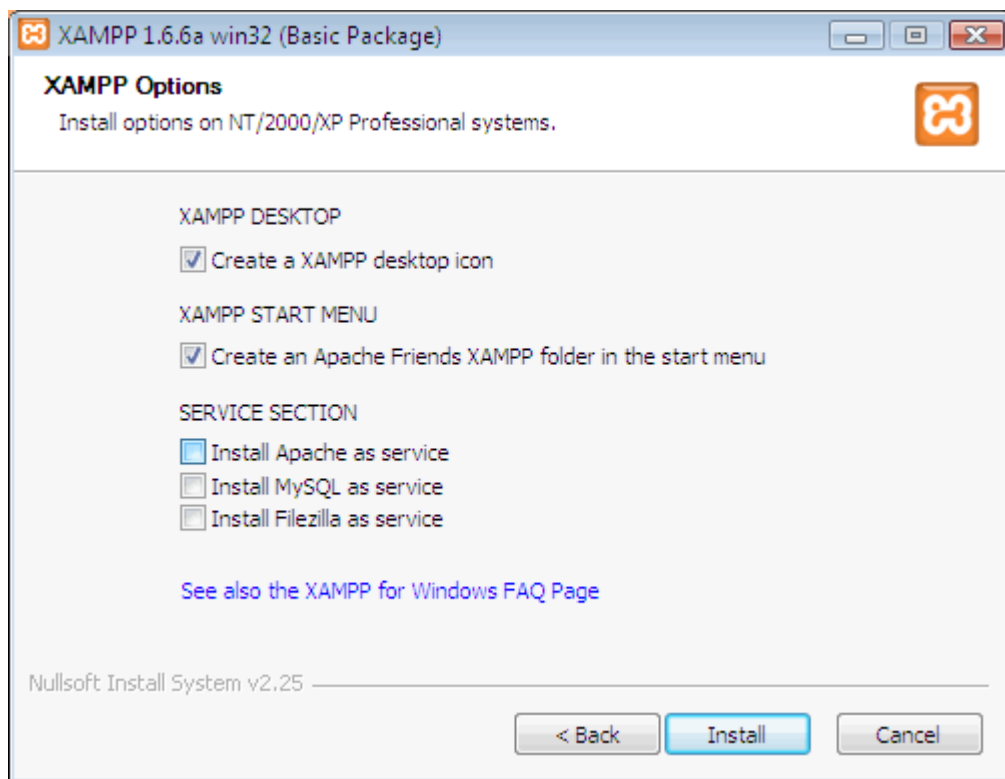
If a warning dialog appears click the "Allow" option to install XAMPP.

3. Choose a language from the menu, and then click OK.  
A Setup Wizard window appears, ready to step you through the setup process.

In Vista you may see a message warning you that XAMPP may not work when installed in the C:\Program Files directory. The default installation is in C:\XAMPP so you don't have to worry about this problem.

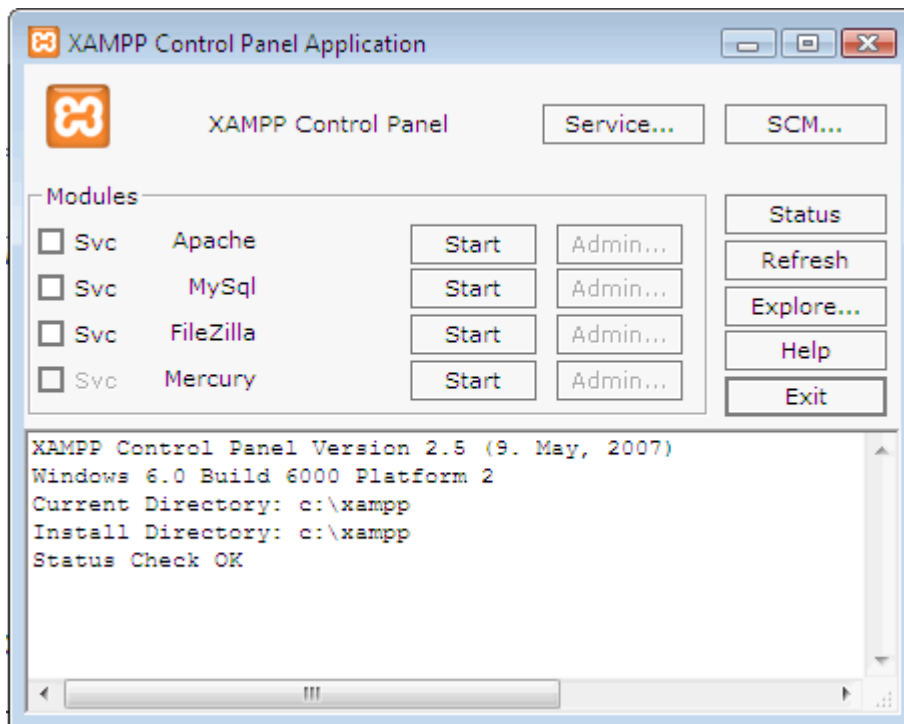
4. Click the Next button.  
The installer suggests putting the application on your main drive at C:\XAMPP. You can pretty much install it anywhere, but with the Vista operating system you may encounter problems if you install it in C:\Program Files.

5. Click the Next button once again. The XAMPP Options window appears (see below). In most cases, it's fine to leave all the window's checkboxes just as you see; see the note below for details.



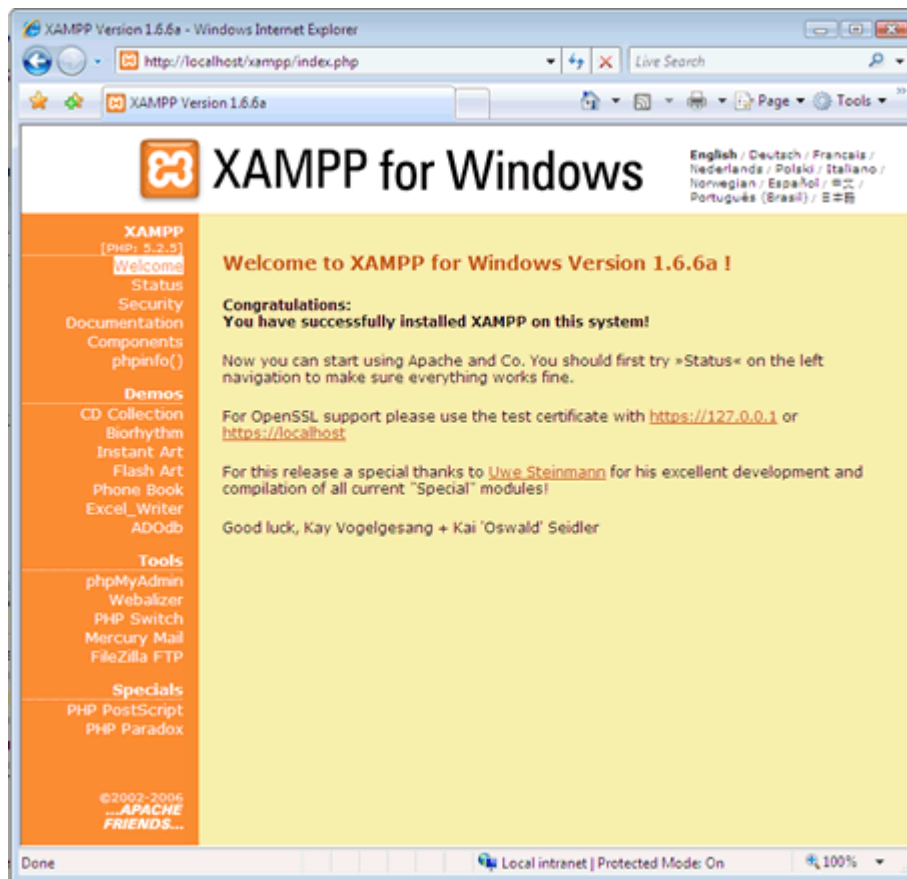
If you plan on doing a lot of development, day in and day out, you might want to turn on the -Install Apache as service and -Install MySQL as service checkboxes. A service starts up every time you turn on your computer, so Apache, PHP, and MySQL are always running. However, if you won't be building database sites frequently, or you don't have a lot of RAM in your computer, don't turn on these boxes (you'll just have to manually start the servers when you wish to build dynamic pages, using the XAMPP control panel described on the next page).

6. Click the Install button. The installer places all the files onto your system. This process takes a while, since a lot of programs and files are being installed.
7. Finally, click the Finish button. A window appears -congratulating you (way to double-click the installer program!), and asking whether you wish to start the XAMPP Control panel.
8. Click Yes, to open the XAMPP Control Panel (see screenshot below). The XAMPP Control Panel lets you start and stop the Apache Web server and MySQL database server.



In this figure, both Apache and MySQL are currently NOT running, as indicated by the word Start to the right of their names. Click the Start buttons to turn the servers on. You can open the Control Panel by clicking the XAMPP Control Panel shortcut on your desktop.

9. If the buttons to the right of Apache and MySQL say Start, click them to start the Web server and the MySQL database server. You probably get a Windows security alert about both MySQL and Apache: Click the Unblock button in both cases. This action allows the two servers to run, and tells the Windows firewall protection service that everything is OK. If Apache and MySQL are already running, these buttons say Stop. (Clicking them turns off the Web server and MySQL.) Whenever you start Apache, PHP automatically starts as well. At this point, you should have a complete testing server running on your machine. You just need to make sure it's working.
10. To do so, launch a Web browser, and, in the Location bar, type `http://localhost/`. You encounter a page that lists a bunch of languages; click the language you prefer, and you're taken to a kind of Web-based control panel for XAMPP (see screenshot below).



Once installed, you can view your XAMPP home page from <http://localhost/xampp/>. From the left-hand list of links, you can access helpful programs and information, such as phpMyAdmin (for working with the MySQL database) and phpinfo() for finding out more about the server setup.

Once you've installed XAMPP, you'll see a shortcut called XAMPP Control Panel on your desktop. Double-click this icon to control the servers you've just installed—you can turn the servers off and on, as well as turn them into services (which launch each time you start up your computer).

## **USER INTERFACE DESIGN**

- Login/Register Page.
- Home Page of Offers and featured items.
- Shopping list management page
- Orientation /map page
- Information Retrieval Page
- List View Page
- Coupon Redemption Page
- Payment Page



## **ASSIGNMENT NO 2**

### **Programming of project functions, interfaces and GUI**

<b>No</b>	<b>NAME OF MODULE</b>	<b>MODULE Description in brief</b>	<b>Responsible Student Name for module</b>	<b>Duration of completion</b>
<b>1</b>	<b>Shopping List Management</b>	Design of workflow and behavior of framework In shopping list amangement.	Shubham Jakheta	<b>16-Dec-2014 to 15-Feb-2015</b>
<b>2</b>	<b>Orientation</b>	Find shortest Path in mall	Sourabh Shubham	<b>15-Jan-2015 to 31-Jan-2015</b>
<b>3</b>	<b>Server Flow Design</b>	Contains backend for whole shopping assistance	Shubham Jakheta	<b>01-Jan-2015 to 15-Jan-2015</b>
<b>4</b>	<b>Server Implementation</b>	Handles server task	Tej Pratap Singh	<b>15-Feb-2015 to 31-Feb-2015</b>
<b>5</b>	<b>Main GIU</b>	Designing All Activities And Fragments of Shopping Assistance System	Tej Pratap Singh	<b>16-Dec-2014 to 01-Mar-2015</b>

<b>6</b>	<b>Web App</b>	A Web Based Interface To Handle Common operation on serverside	Tej Pratap Singh	<b>01-Dec-2014 to 29-Dec-2014</b>
<b>7</b>	<b>Information Feeding</b>	Feed the server with information in the server	Sourabh Shubham	<b>01-Mar-2015 to 15-Mar-2015</b>
<b>8</b>	<b>Information Retrieval Module</b>	Fetch And Show Information About product using various mobile technologies	Sourabh Shubham	16-Dec-2014 to 15-Feb-2015
<b>9</b>	<b>Coupon Redemption</b>	Handles task of applying coupon on a list	Tej Pratap Singh	15-Feb-2015 to 31-Feb-2015
<b>10</b>	<b>Customer Loyalty reward</b>	Providing user with a discount to returning customers, the discount is calculated with a formula	Shubham Jakheta	15-Jan-2015 to 31-Jan-2015
<b>11</b>	<b>Payment</b>	Handles Encryption - decryption and methods to pay via different technologies available	Tej Pratap Singh	<b>15-Feb-2015 to 31-Feb-2015</b>

## **ASSIGNMENT NO 3**

**A) TEST TOOL SELECTION**

**B) TESTING OF VARIOUS TEST CASES FOR THE PROJECT PERFORMED**

**C) GENERATE VARIOUS TESTING RESULT CHARTS, GRAPHS ETC.  
INCLUDING RELIABILITY TESTING**

### **Validation of Software**

#### **1. Introduction**

Validation of software is an important part of any project. We have done rigorous validation so that the software produces accurate results as well as it meets the requirements specified. We have also done efficient testing so that the product possesses the qualities of availability, scalability, readability, durability.

#### **Selection of Project testing tool**

As we have used ADT to develop entire project we have used, testing tools within ADT itself. These testing tools have been used for

- Integration testing
- Unit testing
- Profiling
- Efficiency testing
- JUnit test
- Stress testing
- Load testing

#### **White Box Testing**

In White box testing we have done code coverage testing which includes

- Control flow testing
- Data flow testing
- Branch testing
- Past testing
- Decision coverage

#### ***Testing***

<b>TC ID</b>	<b>DESC.</b>	<b>STEPS</b>	<b>ORDER OF EXECUTION</b>	<b>RELATE D REQ.</b>	<b>AUTHOR</b>	<b>RES ULT</b>
<b>1</b>	<b>Unit Testing</b>	<b>1. Separate modules were checked individually</b> <b>2. Check the algorithm for proper input and output</b>	<b>1.Modules, interfaces, Local data structures, Boundary, Conditions, Independent paths</b>	<b>NA</b>	<b>Tej Pratap Singh</b>	<b>Pass</b>
<b>2</b>	<b>Integration Testing</b>	<b>1. Check the integrity of the system with other components</b>	<b>NA</b>	<b>Components</b>	<b>Shubham Jakhetia</b>	<b>Pass</b>
<b>3</b>	<b>Coverage testing</b>	<b>1.Each required part of the code is reached</b>	<b>1.NA</b>	<b>1. Each part of code is utilized</b>	<b>Tej Pratap Singh</b>	<b>Pass</b>
<b>4</b>	<b>Validation testing</b>	<b>1.Check whether sentiments Producing correct polarity or not</b> <b>2.The results predicted is close to actual business or not</b>	<b>1.Data will sent to and from Server</b> <b>2.Inputs are provided to Framework</b>	<b>1. Server</b> <b>2.Framework</b>	<b>Sourabh Shubham</b>	<b>Pass</b>

<b>5</b>	<b>Stress testing</b>	<b>1.Check the load bearing Capacity of system</b>	<b>1.Large no. of Users are provided to the system</b>	<b>NA</b>	<b>Shubham Jakheta</b>	<b>Pass</b>
<b>6.</b>	<b>Load testing</b>	<b>1.The breakpoints are obtained where system fails</b>	<b>1.Processing is done until system breaks</b>	<b>NA</b>	<b>Sourabh Shubham</b>	<b>Pass</b>
<b>7.</b>	<b>Usability testing</b>	<b>NA</b>	<b>1.User Friendlessness is Verified. User Can easily give input all fields are clearly mentioned</b>	<b>NA</b>	<b>Sourabh Shubham</b>	<b>Pass</b>
<b>8.</b>	<b>Recover testing</b>	<b>NA</b>	<b>1. Process recovery is Checked after point of failure. After Failure automatically the streaming starts.</b>	<b>NA</b>	<b>Shubham Jakheta</b>	<b>Pass</b>

Test id	Precondition	Input	Steps Followed	Result (Pass/Fail)	Expected Output	Actual Output
1	Database Connectivity, php installed	Table name= market, Statement Type=select, Attributes= itemName, itemId, itemPrice, Clauses=where	Enter itemName Click on search	Pass	Queries successfully created	Queries successfully created
2	Database Connectivity, php installed	Table name= coupons, market ,lists Type=select, Attributes= itemId, itemPrice,listId, Clauses=where	Enter Enter Coupon Id And Click On Apply	Pass	Queries successfully created	Queries successfully created
3	Database Connectivity, php installed	Table name= bank,customer Statement Type=select, Attributes=customerId,bankId Clauses=where	Get Amount And Click On Pay	Pass	Queries successfully created	Queries successfully created
4	Database Connectivity, php installed	Table name= lists Statement Type=select, Attributes=listId Clauses=where	Get ListId And Click On Show Map	Pass	Queries successfully created	Queries successfully created

## Tables:

Test Results on Redmi Note 4G in network Speed of 60 kb/s


Sr No.	Module	Time	Result (%)
1	Getting User Lists	921 ms	Success (100 %)
2	Getting Specific List	505 ms	Success (100 %)
3	Getting Map For List	1044 ms	Success (100 %)
4	Applying Coupon To List	370ms	Success (100 %)
5	Payment	425 ms	Success (100 %)

## 7.1 Screenshots

10:55AM26.0K/s56%


Featured

Use Coupon Code 'dd20' At The Time Of Purchase



Huawei Honor Holly (Black/White) (6999)

Add To List Quick View



Moto X (16 GB) (Black, Without Adapter) (17999)

Add To List Quick View

10:52AM0.05K/s56%

One Store

152346988

name	price	qty
Huawei Honor Holly (Black/White)	6999	3
Lenovo C260 All-in-One (CDC/ 2GB/ 500GB/ Free DOS)	21990	1
Moto X (16 GB) (Black, Without Adapter)	17999	3

152346985

name	price	qty
Huawei Honor Holly (Black/White)	6999	1
Moto X (16 GB) (Black, Without Adapter)	17999	1
Moto E(White)	6299	1

152346977

name	price	qty
Huawei Honor Holly	6999	1

10:52AM0.00K/s56%

One Store

List Id : 152346988

name	price	qty
Huawei Honor Holly (Black/White)	6999	3
Lenovo C260 All-in-One (CDC/ 2GB/ 500GB/ Free DOS)	21990	1
Moto X (16 GB) (Black, Without Adapter)	17999	3
total :	96984	

10:53AM4.48K/s56%

One Store

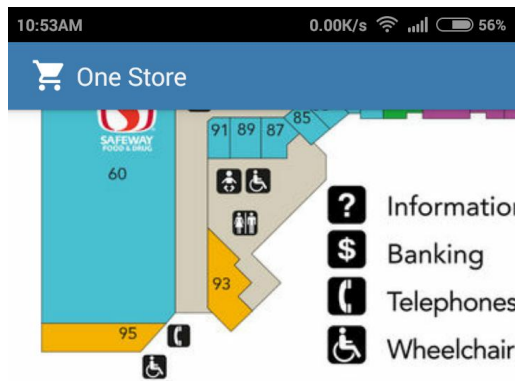
List Id : 152346988

Your List Is Ok

All item's in the list are available in market.

CloseApply CouponPayment

Moto X (16 GB) (Black, Without Adapter)	17999	3
total :	96984	



Pull Up For Shortest Route

Shortest Route

# Start From Shop No. 1

# Then Go To Shop No. 5

# Then Go To Shop No. 3

# Now Proceed For Paym...



Do You Have Any coupon code ?

name	price	qty
Huawei Honor Holly (Black/White)	6299	3
Lenovo C260 All-in-One (CDC/ 2GB/ 500GB/ Free DOS)	19791	1
Moto X (16 GB) (Black, Without Adapter)	16199	3
total :	87285	

dd10

Apply

Skip

