

# Web Portal For Smartphone Price Comparison

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**Abstract-** In this paper we are going to present a Smart phone Comparing App which will allow users to check for various smart phones available and can check the price from different sellers as well as compare them. E-commerce websites nowadays have become one of the most important sources for buying all kinds of products. Many strategies have been developed by analyzing customers behavior to attract more business and participation of people. As there are many e-commerce websites available it becomes difficult for users to choose best deal for desired product amongst these websites. The users look for the solutions that not only get them products at low price but at the same time they match all their quality expectations. The mobile apps are covering every industrial niche and this time they are just ready to cover the concept of price comparison mobile apps. These mobile apps enlist all the products, for which users are searching along with their price that are running on different Ecommerce sites. For instance, if you are searching for a pair of shoes, then the shoes that you select will be displayed if exists on the other sites as well with their price. Therefore, you can easily compare the rates of shoes on the Amazon with that of Flip kart, Snap deal and Shopclues.com just at a single location.

**Keywords-** Application, Comparison, E-commerce, Mobile, Smart, Websites.

## I. INTRODUCTION

Nowadays we use number of shopping websites for buying each and every thing which we need in our daily life. Most of time we use only that websites, which are famous and used by number of persons. We are not considering all the websites while buying any product. In addition, we are not even aware about few of the websites. So, we just tend to buy a product from some particular website at a given price. Checking all the websites while buying some product is time consuming. As people are now very conscious about their time, they mostly go with only one website and tend to buy the products. To deal with this kind of scenarios, we are designing an Android Application. To make it more specific we are just focusing on Smartphones. Using this application, we can check and compare price of any smartphone from number of shopping websites. Moreover, this all is possible just on single click, which makes this application stand out in the market. This makes a task easy for the user to find the price of smartphone and he can select the website where he can get a

best possible deal. Once the user decided the site from which he want to buy the product, he can easily redirect to the particular website just by clicking on the product. This makes it easier for user to navigate to different websites from one portal.

## II. METHODOLOGY

### Methodology implemented for problem solving

We are using JSOUP for web scripting in our project. We gather data from Amazon, Flip kart, EBay, Snap deal and Shop clues. For collecting data form this number of sites we used JSOUP.

### JSOUP Directory

Today, enterprise Java web application developers use HTML in every aspect of a project. This work is made difficult at times because parsing HTML content is a tedious task. Doing so without a parser framework is a most undesirable chore. Fortunately, there are a handful of Java-based HTML parsers publicly available. jsoup, which was first released as open source in January 2010. It has been under active development since then by Jonathan Hedley, and the code uses the liberal MIT license.

jsoup can parse HTML files, input streams, URLs, or even strings. It eases data extraction from HTML by offering Document Object Model (DOM) traversal methods and CSS and jQuery-like selectors.

jsoup can manipulate the content: the HTML element itself, its attributes, or its text. It updates older content based on HTML 4.x to HTML5 or XHTML by converting deprecated tags to new versions. It can also do cleanup based on whitelists, tidy HTML output, and complete unbalanced tags automagically.

JSOUP provides a very convenient API for extracting and manipulating data, using DOM, CSS, and jquery-like methods. JSOUP allows you to scrape and parse HTML from a URL, file, or string and many more. We create 1 button on the main view and button will perform task such as showing the website title, description and a price and image.

Jsoup is to HTML, what XML parsers are to XML. It parses HTML; real world HTML. Its jquery like selector syntax is very easy to use and very flexible to get the desired result.. jsoup is an open source Java HTML parser that we can use to parse HTML and extract useful information. jsoup as web page scraping tool in java programming language.

jsoup API can be used to fetch HTML from URL or parse it from HTML string or from HTML file.

Some of the cool features of jsoup API are

- scrape HTML from URL or read it from String or from a file.
- Extract data from html through DOM based traversal or using CSS like selectors.
- jsoup API can be used to edit HTML too.
- jsoup API is self contained, we don't need any other jars to use it.

For implementing our android application we need some permissions from mobile. For that we used system alert window.

**SYSTEM\_ALERT\_WINDOW**

String SYSTEM\_ALERT\_WINDOW

Allows an app to create windows using the type TYPE\_APPLICATION\_OVERLAY, shown on top of all other apps. Very few apps should use this permission; these windows are intended for system-level interaction with the user.

If the app targets API level 23 or higher, the app user must explicitly grant this permission to the app through a permission management screen. The app requests the user's approval by sending an intent with action ACTION\_MANAGE\_OVERLAY\_PERMISSION. The app can check whether it has this authorization by calling Settings.canDrawOverlays().Protection level: signature

Constant Value:

"android.permission.SYSTEM\_ALERT\_WINDOW"

For using services of our android mobile we used window manager in our application.

**Window Manager**

The interface that apps use to talk to the window manager.

Each window manager instance is bound to a particular Display. To obtain a Window Manager for a different display, use create Display Context(Display) to obtain a Context for that display, then use Context.get System Service(Context.WINDOW\_SERVICE) to get the Window Manager.

The simplest way to show a window on another display is to create a Presentation. The presentation will automatically obtain a Window Manager and Context for that display.

Instances of this class must be obtained using Context.getSystemService(Class) with the argument WindowManager.class or Context.getSystemService(String) with the argument Context.WINDOW\_SERVICE.



Figure 1. Block diagram.

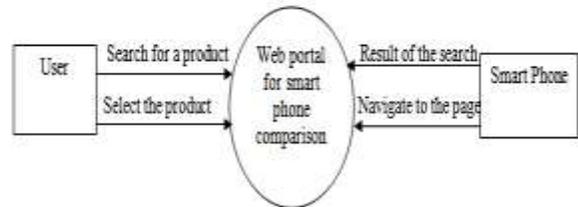


Figure 2. DFD level 0

**III. IMPLEMENTATION**

At user side:

Module 1: Search for product:

User will type the product in the search box.

Module 2: Display of products:

All the products from various websites with low prices will be displayed on the screen.



Figure 3. Home page



Figure 4. Search page



Figure 5. Product display page

#### IV. CONCLUSION

We implement an android application for comparing price of particular product on different website. This will help to find price of particular product on number of website. Searching price of one product on multiple website is somewhat time consuming. Using our android application, it reduces the time. User can easily find prices on multiple shopping websites on one click.

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**REFERENCES**

- [1] Riya Shah, Karishma Pathan, Anand Masurkar, Shweta Rewatkar, Prof. (Ms.) P.N.Vengurlekar, "Comparison of E-commerce Products using web mining", International Journal of Scientific and Research Publications, Volume 6, Issue 5, May 2016 640 ISSN 2250-3153
- [2] David Ronayne., "Price Comparison Websites" ISSN 2059-4283.
- [3] Rahul Kumar Behera , Gaurav Kumar<sup>3</sup> Vemula Satyanarayana<sup>1</sup>," Online Price Comparator and Reselling Website" International Journal of Engineering & Technology, 7 (2.7) (2018) 512-514R. W. Lucky, "Automatic equalization for digital communication," *Bell Syst. Tech. J.*, vol. 44, no. 4, pp. 547–588, Apr. 1965.
- [4] Kate Downer, Aino Pietikäinen and Charlotte Crichton, Sania Haq, Rhiannon Jones and Fiona Pannell," Price comparison websites: consumer perceptions and experiences " ISO 20252, the international standard for market and social research