iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** VI **Month of publication:** June 2022

DOI: https://doi.org/10.22214/ijraset.2022.43552

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue VI June 2022- Available at www.ijraset.com

Quick Reacher: An Application for Home Services

Anakha K Aji[1], Anila Thankachan[2], Dona V Varkey[3], Hema V Nair[4], Krupa Alan Thomas[5], Rekha V R[6]
[1, 2, 3, 4, 5]*Department of Computer Science and Engineering College of Engineering Kidangoor, Kottayam, India*
[6]*Assistant Professor Computer Science and Engineering College of Engineering Kidangoor, Kottayam, India*

Abstract: ***In the present scenario, people are involved in heavy work culture, as everyone is busy with their own work schedules which makes them deviate from family life. If any problem arises unexpectedly, it will force them to keep away their prior work and to solve the issue. In such situations, every one of us have dreamt about a house where there are no maintenance issues. So, here comes the idea of getting a home maintenance technician easily, by linking the user to the provider required smoothly by hiring them and make them reserved. Besides, those people who are in need of items required for their services may not be able to get it at that particular moment. Therefore we present a feature that will enable the user to purchase that product immediately.***
Index Terms: GPS, MySQL, WAMP.

I. INTRODUCTION

Our application aims to help in providing best solutions to all the household problems efficiently and effectively. It describes all sorts of capabilities at the user's fingertips. By fetching the latitude and longitude of the client, the nearest ser- vice provider is allotted to serve the client's needs. In addition to the location preference, rating based on feedback can also be considered while hiring a provider. The system is versatile as the service can be booked from everywhere to anywhere as the user desires. It provides significant convenience, considerable flexibility and reliability.parskip

Based on the location and rating preference, user can select the best shops from which the products can be purchased. User can express their viewpoints by filling out the feedback form provided by the application. User's experience about the application can be evaluated through rating it. User can raise complaints against shop and service provider in case they did not meet their expectations. It consist of mainly four modules - Admin, Shop, Service Provider and User which is followed by three sections - Home Maintenance, Cleaning Services and Home Appliance Repairs. Each sections include sub fields like electrical works, plumbing services, carpentry works, car washing, dry cleaning, sanitization, computer re- pairs, refrigerator repairing etc. to provide happy and friendly home atmosphere in order to please customers.

II. OBJECTIVES AND SCOPES

The main objective of the Online Application for Home Services is about rendering the household services at the user's fingertips just by one click. This paper describes about the idea of the online household services, several services supplied and how the purchasing and distributing of services are done. In a world where things are changing rapidly, an application for home services provide direct services with customer and provider. Thereby providing ease and effectiveness between the customer and the provider. Due to flexible and transparent charges, online services can be thought of as being more reli- able. It always ensures that talented and professional workers are delivering the services.

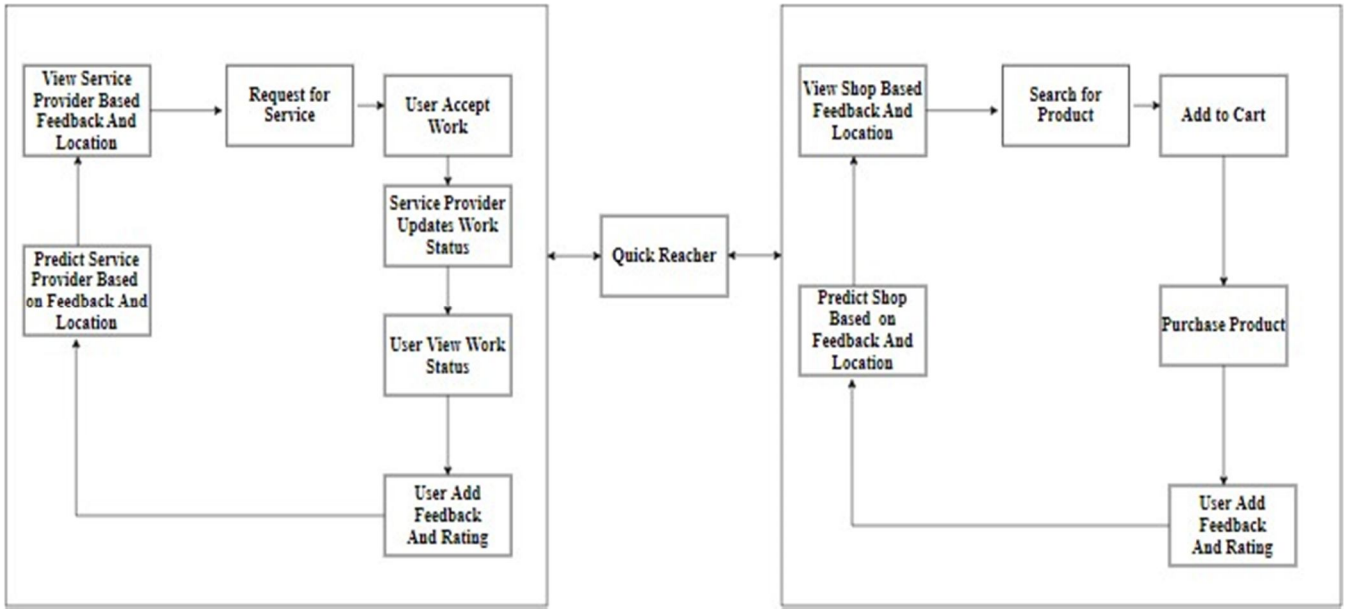
While offline purchasing requires more time, but in online purchases it requires much less time. So the customers do not have to be in long queues to pay for the products purchased. As there is a wide range of products online, the customer can select from a pool of products available according to their desire. Shopping is made easier and convenient for the customer. It is also easy to revoke the transaction from the cart if the customer is not satisfied. Generally, while purchasing products offline the sales representatives may influence the buyers to buy a particular product. But in online mode the user is free to do as he will. The time will not be a barrier as the products will be available and customers can purchase them in 24 X 7.

III. PROPOSED METHOD

The task of the proposed system is to get home mainte- nance workers easily. Based on the location and the customer feedback the user will be able to view the list of available workers in the user's interface. Our application consist of mainly three sections - Home Maintenance, Cleaning Services and Home Appliance Repairs. Customers will also be able to purchase products associated with each service from nearby recommended shops.

IV. SYSTEM DESCRIPTION

A. *Architecture*



The system begins with hiring of service provider based on user feedback and location. Then the user can make a proposal according to his need and requirements. He can either accept or reject the proposal after they get to know about the estimated amount sent by the service provider. The user is also allowed to buy products from shops that is listed based on their feedback and location. The quality of the work rendered by a service provider or a product bought from a shop can be expressed by means of rating, feedback and complaints.

B. *Modules*

The System mainly consists of following modules

1) *Admin:* Admin is the one who can view,manage and coordinate all other modules. Admin can add new service types and areas which will then be reflected on the user module. It is from these areas and service types that the user will be able to hire a service provider or the service provider can get registered for a particular service. He can view the complaints raised by the user against a particular service provider and shops. Based on it warning message will be generated and if the count exceeds two, will result in the immediate removal of that entity.

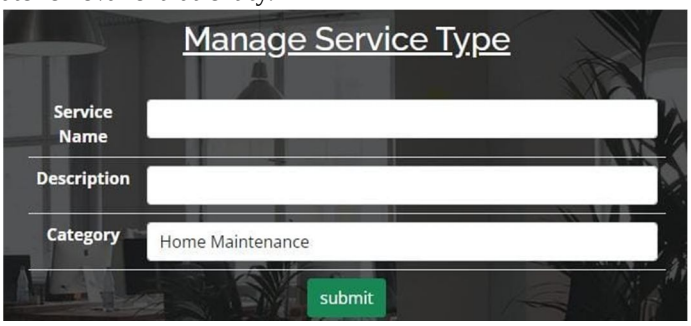


Fig. 1. Admin - Manage service type

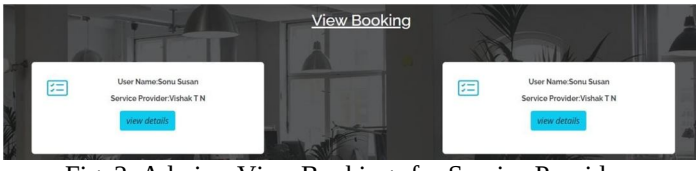


Fig. 2. Admin - View Bookings for Service Provider

2) *Shop:* The registered shops can manage products by adding details such as their rate and quantity. Each of them can view the respective bookings and payments done by the customer. Ratings, feedbacks and complaints given by the user will be visible to the shop.

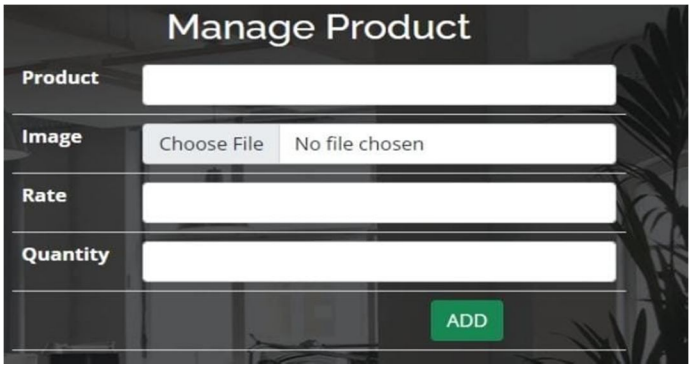


Fig. 3. Shop - Manage Products

3) *Service Provider:* Once the provider is registered he can then add the services based on his skills and talents. He replies to the proposal sent by the user by sharing the estimated amount required for that particular work. The feedbacks and ratings will help the provider to evaluate himself and further improve his work. There is a communication way between customer and provider so that they can exchange their updates.
4) *User:* The user will provide their details and login to the system. GPS will fetch the user's current location and returns the list of active providers within a specified radius. Similarly there is a preference for rating over the location, which will display the highly rated service providers. After that user send a proposal which consist of description, date and work images to the corresponding provider he wants. As per the provider's response towards the user's proposal, user can accept or reject it. Upon completion of the work, the customer can make the payment, rating, feedback and complaint for that provider. The items that might be needed in between the work can be purchased from the near by shops. The user can do the payment, rating, complaint same as he had done in the case of service provider.

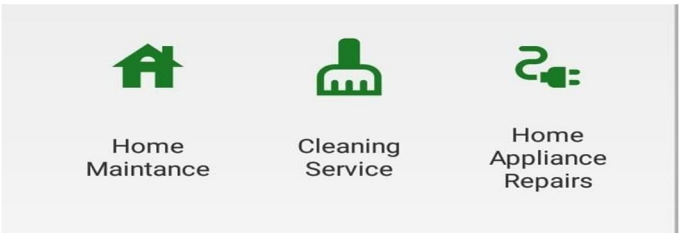


Fig. 4. User HomePage - 3 sections

Fig. 5. Searching Products

Fig. 6. User - Location and rating based listing of service provider

V. SYSTEM REQUIREMENTS

A. *Software Requirements*

1) *Operating System(Windows 8)*

Windows 8 is a version of Microsoft Windows that was released on 2012. Windows 8 introduces significant changes to the operating system's platform, primarily focused towards improving its user experience on mobile devices. It enables enterprise administrators to create USB drivers. It provides integrated system recovery through the new "Refresh" and "Reset" Functions. This iteration contains some of the biggest changes Microsoft has made to their operating system since Windows 95. It gives strong competition to mobile computing, especially the tablet market OS such as Apple OS and Android. It also has a more streamlined look and feel. It provides greater experience on larger screens.

2) *Front End-Python(Web Application)and Android (Mobile Application)*

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse.The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed. Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre- existing third-party libraries provide common functions. However, Flask holds extensions that will sum up the application characteristics as if they were implemented in Flask itself. Extensions exist for object-relational mappers, form validation, upload handling, various open authentication technologies and several common framework related tools.

Android is an open-source and Linux-based operating system. It was first introduced on 2007. Basically, Android is considered as a mobile operating system. But it is not limited to mobile-only. It is currently used in various devices such as mobiles, tablets, televisions, etc. Android provides a rich application framework that helps us to build interactive apps and games for mobile devices in a Java language environment. The Android open-source software stack consists of Java applications running on a Java-based, object-oriented application framework on top of Java core libraries running on a Dalvik virtual machine featuring JIT compilation.

The reasons to choose Android are manifold, and each of them holds some serious merit. The decision to choose a platform is best made through collaboration among various departments, individuals and interests. Android is often the right decision for startups and emerging companies, but it is fully capable of supporting major companies and their global app creation aims.

3) Back End - MySQL

MySQL is a free and open-source Software.The most comprehensive set of advanced features, management tools and technical support to achieve the highest levels of MySQL scalability, security, reliability, and uptime. MySQL Cluster enables users to meet the database challenges of next generation web, cloud, and communications services with uncompromising scalability, uptime and agility. MySQL can be built and placed man-made from source code, still it is commonly installed from a binary package unless special customizations are required. On most Linux distributions, the package management system can download and install MySQL with minimal effort, though further configuration is often required to adjust security and optimization settings.

4) Software - Sublime Text, WAMP, Android Studio

Sublime Text editor is a sophisticated text editor which is widely used among developers. It includes wide features such as Syntax Highlight, Auto Indentation, File Type Recognition, Sidebar, Macros, Plug-in and Packages that make it easy for working with code base.It offers ability to solve linker errors,tracking of all files,use of problem solving ability. It is compatible with various operating systems like windows, Linux and MacOS. Software packages are there for additional functions. These packages are created in JSON format.

WampServer is a Web development platform on Windows that allows you to create dynamic Web applications with Apache2, PHP, MySQL and MariaDB. WampServer automatically installs everything you need to intuitively develope Web applications. You will be able to tune your server without even touching its setting files.

Android Studio is the official Integrated Development Environment (IDE) for android application development. Android Studio provides more features that enhance our productivity while building Android apps.

Android Studio was announced on 2013 at the Google I/O conference as an official IDE for Android app development. It started its early access preview from version 0.1 in May 2013. The first stable built version was published in December 2014, starts from version 1.0.

5) Web Browser - Internet Explorer / Google Chrome/ FireFox

Internet Explorer is a free web browser, commonly called IE or MSIE, that allows users to view web pages on the internet. It is also used to access online banking, online marketing over the internet, listen to and watch streaming videos, and many more. It was introduced by Microsoft in 1995. It was produced in response to the first geographical browser, Netscape Navigator.

Google Chrome is a cross-platform web browser developed by Google. It was first released in 2008 for Microsoft Windows, built with free software components from Apple WebKit and Mozilla Firefox. It was later ported to Linux, macOS, iOS, and Android, where it is the default browser. The browser is also the main component of Chrome OS, where it serves as the platform for web applications.

A popular open source Web browser for Windows, Mac and Linux from the Mozilla project. Including a search box for Google and other major sites, the Firefox user interface is customizable by adding ”extensions”, such as a stock tracker, autofill and hundreds of others. Many viewed Firefox as a more secure alternative to Internet Explorer (IE), which has always been under attack. After Netscape evolved into a very large and somewhat bloated application, it was turned into the open source Mozilla project. In the early 2000s, the Gecko rendering engine was excised out of Mozilla and combined with the XUL user interface language to create a leaner, faster Mozilla browser. Renamed Phoenix, then Firebird, it finally gave birth as Firefox.

6) Apache HTTP Server

Apache HTTP Server is its official name. It is developed and maintained by the Apache Software Foundation. Apache permits the owners of the websites for serving content over the web. It is the reason why it is known as a ”web server”. Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation.The vast majority of Apache HTTP Server instances run on a Linux distribution, but current versions also run on Microsoft Windows, OpenVMS, and a wide variety of Unix-like systems. Past versions also ran on NetWare, OS/2 and other operating systems, including ports to mainframes.

VI. RELEVANCE

Customers get an opportunity to enjoy multiple services at the same platform. The system commits people to con- nect only with authorized and talented service providers. It enables us to pick the right one based on the feedback and location from available service providers. Based on the estimate amount send by the worker, user can accept or reject their proposal. It creates efficiency in helping new users to know about the experience of formerly consumers.

VII. FUTURE SCOPE

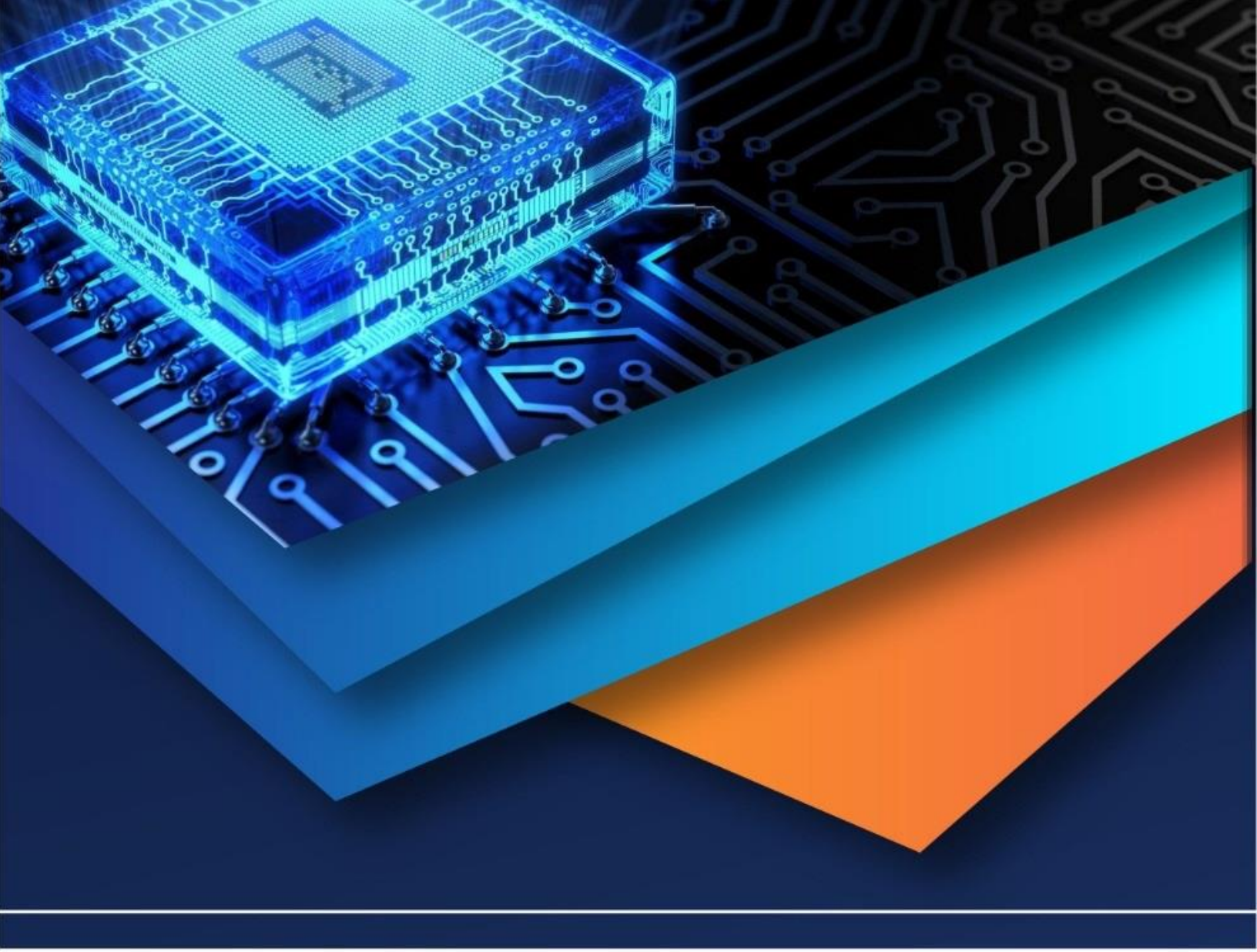
The On-demand services are very popular in today's gen- eration as they are largest consumers of internet services. As People are getting attracted towards ordering their essentials online very frequently, all related industries like online purchasing, on-demand services, and others are watching huge growth. Growing urbanization is paving the way to the growth of global online home services. In- stead of struggling with traffic to get services, consumers prefer to get these services at their doorstep.

VIII. CONCLUSION

In order to minimize the risk in finding home solutions for the services, the application provides several aspects by listing service providers with-in a single-click. Highly educated and efficient professionals make all your services to be fulfilled from any place to every place. The main objective of our project has been achieved successfully by designing and building of a web based application Quick Reacher for online home services.

REFERENCES

[1] Sheetal Bandekar,Avril D'Silva, "Domestic Android Application for Home Services" International Journal of Computer Applications, ISSN No.0975 – 8887, Volume 148 – No.6, August 2016
[2] L.RichardYe, Yue Jeff Zhang, Dat-DaoNguyen, James Chiu,"Fee-based online services: Exploring consumers'willingness to pay ". Journal of International Technologyand Information Management.
[3] N. M. Indravasan, Adarsh G, Shruthi C, Shanthi K, "An Online System for Household Services" International Journal of Engineering Research Technology (IJERT), ISSN: 2278-0181, May 2018



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY