SOFTPRO Vol. II, June-18 NEWSLETTER



Release of Softpro's First Newsletter (Volume I) by Vice Chancellor- AKTU, Prof. Vinay Kumar Pathak, Pro Vice Chancellor, AKTU, Prof. K N Upadhyay & Prof. N B Singh Vice Chancellor, HBTU



Softpro Group of Companies

The fastest growing IT Company Founded by Technocrats from IIT & IET Lucknow established since 2004.

Bridging The Technology Gap An ISO 9001:2015 Certified Company UPDESCO Empaneled Software Development Company

To **Prof. V K Pathak** on the Joining as the Vice Chancellor of AKTU in the second tenure By Director- Softpro Group.

ongratulations



Prof. Vinay Kumar Pathak Vice Chancellor Dr. APJ Abdul Kalam Technical University, Lucknow



An honorary evening spent by Ms. Yashi Asthana, CEO - Softpro Group at an event hosted by Softpro India in the gracious presence of **Prof. Anil D Sahasrabudhe, Chairman - All India Council of Technical Education (AICTE)** as a Guest of Honor.

SOFTPRO GROUP

Softpro India Computer Technologies (P) Limited

Softpro Innovations

(P) Limited

Estd. 2004

Softpro Learning Centre

Estd. 2008

Softpro Technologies, Malawi (Africa)

Estd. 2018

Estd. 2012



"An Introduction to Softpro Group"

Softpro India Computer Technologies (P) Limited, an **ISO 9001:2015 Certified** company which was endowed in 2004 by Technocrats from IIT Kanpur and IET Lucknow is acknowledged to be one of the aggrandizing IT companies in consulting and software development. It is one of the vigorous new generation software solution company providing software development, maintenance to companies in manufacturing and other domains and also is an acclaimed member of **UPDESCO** which facilitates software development in government sectors in UP.

The company has gained incredible establishment in the field of software development with more than 200 clients (Domestic & International).

"Softpro Learning Center", commenced in 2008 with a perception to bridge the Technology Gap prevalent between IT students and IT professionals. Softpro Learning Center has embarked itself as one of the most propitious center for learning across UP and nearby states.

Softpro Learning Center includes promulgating Summer &Vocational Training to B. Tech students, Industrial Training to MCA/BCA students and Apprenticeship Program to pass out students of B. Tech/BCA/MCA. In the year 2018, we had a crowd of 2500+ students who did their summer training from Softpro, making us the gargantuan learning centers of North India. Furthermore, 60% of the total trainees of Softpro got placed in popular brands like TCS, Infosys, Accenture and Wipro.

Softpro Innovations (P) Limited is India's premier electronic Product Development Company. In 2012, Softpro Innovations was established to help individuals design and manufacture quality electronic products. Softpro Innovations Pvt. Ltd. is a Design and manufacturing company based in fields of Robotics & Embedded Systems, Industrial Automation & Home Building, Telecommunication & Networking, Energy Consulting & Power Electronics. Softpro Innovations Pvt. Ltd. undertakes breakthrough internationally recognized research in partnership with industry, government and researchers to create value for India.

Softpro Technologies- Malawi, **Africa** is the latest milestone of Softpro Group. This unit of Softpro Group has been established in Malawi, Africa when the African embassy contacted the management to join hands with them to impart I.T. Education and Training in their country. Softpro has been working there to help the government raise the computer literacy rate of the country through our specialized training programs collaborated with the Colleges and Universities of the country.





The Upcoming Venture of Softpro Group



"Softpro Technologies, Malawi (Africa)"

"**Softpro Technologies- Malawi, Africa**", is the latest milestone of Softpro Group. This unit of Softpro Group has been established in Malawi, Africa after a dozen fruitful meetings with the African embassy with the management of Softpro to join hands with them in imparting I.T. Education and Training in their country.

Softpro will be working there to help the government raise the computer literacy rate of the country through our specialized training programs collaborated with the Colleges and Universities of the country.

Softpro will also be establishing its software development cell at Malawi to promote the automation and reduce the manual filing work.



Yashi Asthana, CEO -Softpro with Joseph Mwandidya, Secretary for Labour, Youth, Sports & Manpower Development



Rohit Kumar, Project Manager - Softpro with Alfred Vilili, Counsellor, Malawi Embassy



Yashi Asthana, CEO & Rohit Kumar, Project Manager - Softpro with Prof Charles L Chanthunya, Chancellor, Blantyre International University, Blantyre



Yashi Asthana, CEO & Rohit Kumar, Project Manager - Softpro with Prosper C Mopiwa, Deputy Director, Dept. of E-Government at Lilongwe, Malawi

Yashi Asthana, CEO & Rohit Kumar, Project Manager - Softpro with Wilson Makulumiza Nkhoma, ED, TEVETA, Malawi

DIRECTOR'S PROFILE

Er. Ajay Chaudhary

Chairman & MD Softpro Group of Companies

Member – Executive Council Dr. A P J Abdul Kalam Technical University, Lucknow

Founder Parivartan 'Ek Salah'



Er. Ajay Chaudhary, graduated in Electronics from Institute of Engineering & Technology (IET), Lucknow.

He is carrying an experience of 17 years as Technical person, Network Professional, Manager and Techno consultant.He held these positions of increasing responsibility in various Tier 1 organizations notably SGPGI Lucknow, Apollo Group, Petronas Group (Malaysia & Singapore).

Er. Chaudhary who was earlier working under Dr. Bhandari in SGPGI, Lucknow has high regards for him. Er. Chaudhary's professional journey started in 1997 under the expert guidance of Dr. Bhandari who later migrated to Hyderabad with him and joined Apollo Group.

Dr. Bhandari came up with the idea to start India's first online portal to impart education on medical science and proposed the same to Dr. P C Reddy – Chairman, Apollo Group. Er. Chaudhary was also a member in the same and the team came up with Medvarsity Online Limited (www.medvarsity.com). This incident sowed the seed of entrepreneurship in him which led him to come back to Lucknow after gaining hands on experience of working in IT sector in different geo-graphies and finally **Softpro India** came into existence in April 2004.

Softpro India (SPI) started as a small company with no money, credentials or history. He had nothing to rely on but a little technology and 10 trustworthy colleagues. Since then, for the development of SPI, everyone has exerted their maximum efforts and managers have devoted their lives to earning the trust of employees. He wanted Softpro to be an excellent company where all employees could believe in each other — abandon selfish motives — and be truly proud to work. This has been the base of SPI's management.

Professional Highlights

- Previously associated with Petronas(Malaysia), he laid the foundation of Softpro Group with its first company Softpro India in early 2004.
- More than 05 years' experience of working on onsite in Tanzania, Kenya, South Africa, Singapore and Sri Lanka on various Telecommunication projects.
- More than 05 years of experience of working in Malaysia and Singapore on different IT projects

Achievement

- He has been nominated by former Technical Minister Shree F M Kidwai and selected by Hon'ble Governor of Uttar Pradesh Shri Ram Naik to become Member – Executive Council, Dr. A P J Abdul Kalam Technical University.
- Worked extensively for implementation of India's one of the biggest HIS (Hospital Information System) project for SGPGI.
- The founder member of Asia's first e-Learning Medical University" Medvarsity Online Limited, Hyderabad" launched by Apollo Hospitals Group & NIIT Limited.
- He initialized the first pilot project on Tele Medicine in India at Aragonda, district Chittoor, Andhra Pradesh which was inaugurated by US President Bill Clinton in 2000 launched by Apollo Hospitals Group.





Er. Ajay Chaudhary

Attending the 15 th Convocation Ceremony of Dr. APJ Abdul Kalam Technical University as a Member - Executive Council, AKTU

A Memorable Evening spent with highly dignified Academic Gems & Dignitaries Hosted by Softpro Group @ Piccadily



Hon'ble Minister, Dept. of Technical & Medical Education Shri Ashutosh Tandon 'Gopal Ji' getting a warm welcome by Director, Softpro Group – Er. Ajay Chaudhary



Secretary, Department of Technical Education Shri Bhuvanesh Kumar (IAS) at the event with Director, Softpro Group – Er. Ajay Chaudhary



Hon'ble Minister, Dept. of Technical & Medical Education Shri Ashutosh Tandon 'Gopal Ji' with Director, Softpro Group Er. Ajay Chaudhary & CEO, Softpro Group Ms. Yashi Asthana



At Dinner **Prof. Anil D Sahasrabudhe, Shri Ashutosh Tandon 'Gopal Ji' & Er. Ajay Chaudhary.**



Director, Softpro Group – Er. Ajay Chaudhary greeting Director, IET Lucknow- Prof H K Paliwal



Director, Softpro Group – **Er. Ajay Chaudhary** welcoming and paying regards to Vice Chancellor- HBTU, Kanpur **Prof N B Singh.**



Director, Softpro Group Er. Ajay Chaudhary paying his regards to Director, REC Kannauj Mrs. Neelam Srivastava



Director, Softpro Group **Er. Ajay Chaudhary** paying his regards to Director, REC Banda – **Prof. S P Shukla**.

<u>A meeting held at BTE, Lucknow regarding the</u> prospects to enhance the employment ratio of Diploma Students.

The meeting was conducted in presence of people from academics of Board Of Technical Education and the Industrialist representing industry was Er. Ajay Chaudhary, Director – Softpro Group



Director Softpro Group with Shri Sanjeev Kumar, Secretary - Board of Technical Education Lucknow - UP



Director Softpro Group with Shri Manoj Kumar, Director, IRDT, Kanpur - UP

Director Softpro Group with Shri R C Rajput, Director, Board of Technical Education Lucknow - UP



Ms. Yashi Asthana

Chief Executive Officer Softpro Group of Companies Co-Founder – Parivartan 'Ek Salah' (An NGO Run Under The CSR of Softpro Group)

From the Desk of CEO

Softpro Group, is a flourishing cauldron of excellence in technical education, high quality research, executive development, and value-added consultancy in software development & industrial automation. Having established its recent footprint in Africa & Malaysia, Softpro's vision is to become one of the leading IT Company in the world. A vision where every achievement motivates us to set the bar even higher. A vision where SPI's offerings are continuously updated in keeping with the ever-changing global IT environment. A vision and a challenge which we at Softpro have pursued relentlessly over the years.

As Softpro's vision has taken shape and grown, quite naturally the people associated with Softpro have also grown in tandem. Our highly experienced consultants have increasingly worked on global research problems as well as research-oriented consulting. Many of our employees have been associated with us for a long time however some of our ex-colleagues have developed their minds and have embarked upon promising careers in the corporate world.

We are committed towards creating a community which is vibrant and which provides a lifelong learning experience and professional development. I would like to invite you for an enriching Softpro experience.

I thank you for choosing Softpro India without a doubt that we are the best on many aspects. Our team of professionals has high expertise and is well versed on the respective specialization. I lay more emphasis on customer satisfaction and providing right solution with great quality. And I'm proud that my associates understand our motto and co-operate to carry on efficiently. This makes it better for you to secure better engineering advice and assistance. All of which makes you better able to plan for your future and better able to reach your business goals.

Come and find out for yourself what you and Softpro can do together!

Advisory Board Members of Softpro Group

The Advisory Board of Softpro has proven to be the most precious asset of the company; the board is an amalgam of gems from the Academic as well as Corporate world. The high-caliber technological, engineering, management and philosophical expertise of the Committee members brings fresh perspectives to the all the complex issues and strategic planning of the curriculum of the company throughout the year.

The advisory board list includes all these jewels on honorary basis

Prof V K Pathak Vice Chancellor , AKTU

Prof D S Yadav Pro Vice Chancellor, AKTU & Ex Director, REC- Banda

Prof Neelam Srivastav Director, REC- Kannauj

Prof Manish Gaur Director, CAS – AKTU

Prof V K Singh Vice Chancellor, DDU

Prof Onkar Singh Yadav Ex. Vice Chancellor, MMMUT

Padmshree Dr. Mahendra Bhandari

CEO- Vattikutti Foundation, US Ex. Director - SGPGI, Lucknow Founder Vice Chancellor KGMU, Lucknow

> **Er. Virendra Gautam** SAP Project Manager Gurugram

Er. Manoj Verma Consultant - Hewlett Packard

> **Rohit Gupta** TSPL, Lucknow



Developer Tools



T is the world's fastest evolving industry, every day some or other new technology is introduced to mankind. Due to it's fast growing pace it is very important for the engineers to keep themselves updated and equipped with skills in accordance with the current market need. This makes sure that the softwares developed by them are on latest technologies and widely accepted.

At Softpro, we focus on using the latest tools and technologies for serving our clients for their long-term satisfaction. Softpro's Technical Team is having expertise of working on multiple platforms prevailing in IT Industry like Python, PHP, .Net with MVC, Android and the most conventional technology- Java. Our Strong team of engineers is specialized in developing customized application softwares, web based applications, ERPs, android and iOS based applications.

CORPORATE CLIENTS



Article on Spring, Data Science and Django Framework

Softpro India has grown and matured with every successful project delivered. The challenges and hurdles we have faced over the years have helped us to streamline and build strong processes. We are continuously upgrading ourselves on latest technologies prevalent in IT sector to match up with the changing world. As per the changes what we have faced and upgrades we have made, I am writing this article to help the young budding minds to know more about the new technologies at a glance.

What you call as a "Programming Language......"?

- v Programming language provides raw materials for application software development.
- Programming Language defines the syntaxes (rules), semantics (structure) by supplying compilers, interpreters.

v Programming Language provides base to create technologies, frameworks, DB s/w, Tools, Operating systems etc. What do you mean by "Software Technology......"?

- v It is software specification providing rules and guidelines to develop software by using one or another programming language.
- v Technology is not installable, but technology software is installable or arrangable.
 - eg: Jdbc technology gives rules and guidelines to develop jdbc driver s/ws using java language.

There are two types of software technologies.

a) Open Technologies

v Here rules and guidelines of technology are open to multiple software companies to create software.
 e.g.: All Java technologies like JDBC, Servlet, JSP and etc.

b) Propritierary Technologies

Here the vendor, who has created the Technology, is only allowed to create Technology based software.
 e.g.: All Microsoft Technologies like Asp.Net etc.

An Introduction to Frameworks

- v It is an installable software that is built on the top of one or more technologies having ability to generate the common logics of the application dynamically.
- v It is special installable software that provides abstraction layer on one or more technologies to simplify the application development process.
- ν While working with technologies we need to develop both common and uncommon logics.
- ν While working with frameworks we just need to develop application specific logics.
- Frameworks internally uses technologies but they never make programmer to worry about it(This is nothing but hiding technologies that are used, which also called providing abstraction layer)

E.g.: Struts, Spring, Hibernate, Cakephp, Codeignitor, D jango Etc.

An Introduction to Python.....

Python is a general purpose, interactive, object-oriented, high-level programming language. It was created in 1991 by Guido Van Rossum.

What is Data Science?

As the world entered the era of big data, the need for its storage also grew. It was the main challenge and concern for the enterprise industries until 2010. The main focus was on building framework and solutions to store data. Now when **Hadoop** and other frameworks have successfully solved the problem of storage, the focus has shifted to the processing of this data. Data Science is the secret sauce here. All the ideas which you see in Hollywood sci-fi movies can actually turn into reality by Data Science. Data Science is the future of Artificial Intelligence. Therefore, it is very important to understand what is Data Science and how can it add value to your business. "Data Science is a blend of various tools, algorithms, and machine learning principles with the goal to discover hidden patterns from the raw data.



Brijesh Mishra Sr. Manager-IT

"What is Machine Learning?

Machine Learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it learn from themselves.

| What we can do with Python? |
|-----------------------------|
|-----------------------------|

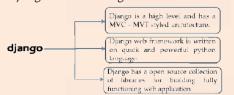
Web Development (Server-side) Development Game Development Big Data Machine Learning Data Science Mathematics System Scripting

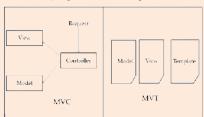
What is Django Framework?

Django is Python web framework. A framework provides a structure and common methods to make the life of web application developer muck easier for building flexible, scalable and maintainable web application. Python web framework is a code library that provide tools and libraries to simplify common web development framework.

Django MVC-MVT Pattern:-

MVC is slightly different from MVT as django itself take care of the controller part. It leaves the template which is a HTML file mixed with django template language (DTL). The developer provides the model, the view and the template then just map it to a url and django does the magic to serve it to the user.





What is Spring Framework?

Spring is one of the most popular frameworks for Java enterprise edition. Developers all over the world use spring for developing reliable and high-quality applications. Spring framework was designed by Rod Johnson. Since then spring has become alternative technology in java world for EJB model. You can create any application by using spring framework. **Spring Framework has DI, IOC, AOP:-**

Dependency Injection :- It is a composition of structural design patterns, in which for each function of the application there is one, a conditionally independent object (service) that can have the need to use other objects (dependencies) known to it by interfaces. Dependencies are transferred (implemented) to the service at the time of its creation. This is a situation where we introduce an element of one class into another. In practice, DI is implemented by passing parameters to the constructor or using setters. Libraries that implement this approach are also called IoC containers.

Inversion of Control: - This is the principle of object-oriented programming, in which objects of the program do not depend on concrete implementations of other objects, but may have knowledge about their abstractions (interfaces) for later interaction.

Aspect Oriented Programming: - A programming paradigm that allows you to distinguish cross-through (functional) functionality in application. These functions, which span multiple application nodes, are called cross-cutting concerns and these cross-cutting notes are separated from the immediate business logic of the application.

In OOP, the key unit is the class, while in AOP, the key element is the aspect. DI helps to separate application classes into separate modules, and AOP helps to separate cross-cutting concerns from the objects they affect.

I hope that the article was helpful for you all to know the latest technologies and their usage in current IT Industry. All The Best.....

"CREATIVITY IS NOTHING BUT THE WAY TO SOLVE NEW PROBLEMS."



Er. Rohit Kumar Project Manager

Web Technology was introduced during 1980's. In beginning web technologies are used only by few numbers of users to share information related to their academic work with their coworker. But Today social medias are become our part of daily life and billions of common peoples using web technologies overall the world. Now We can't image a world without Web. **Language**

In 1990, Tim Berners-Lee who introduced World Wide Web (www) wrote a software for browser and server using HTML (Hyper Text Markup Language).

Tags were used on the back-end of web pages which were processed by the browser and content displayed in the computer. Further development of new tags was closely related to introduction of browsers that could interpret and display picture and content in a better way with better visual effects during the late 1990.

Web Browsers

Tim Berners-Lee developed firs web browser In 1990. After that there were many other browsers was developed and it's a beginning of internet revolution. In 1993 there were a improved web browsers introduced that could show graphical content which for first time in web technology it is named Netscape. In following Microsoft introduced Internet Explorer and it took over the market and it continues to be a popular browser even today.

At the beginning of 2000s lot of advanced browsers link Mozilla Firefox, Google Chrome, Safari and Opera are introduced. With advancement in the website design and development search engines are introduced.

Servers

During the beginnings of internet era the speed at which requests for web pages were processed and retrieved and the hosting space offered for website content on the server were limited. With the growth of internet, website technology started to spread its roots into most of the business which created the need for higher processing speed web servers. The combined developments in server technology (software's & hardware), web browsers and website design and development have resulted in this huge growth of web technology

1. HTML5

Of course, HTML (HyperText Markup Language) has been the main markup language for pages on the Web since the beginning. Each subsequent version of the HTML specification has introduced a greater range of abilities to the language, but the recently introduced HTML5 specification is arguably the biggest leap forward that HTML has ever made.

The importance of HTML5 starts with its aim to end the nightmare of browser plugins. The inclusion of a whole range of new media tags like <audio> and <video> means that many of the abilities formerly provided via plugins such as Flash are now handled natively.

Under HTML5, for instance, embedding a video element can be as simple as this:

Although some facets of CSS3 are still experimental and carry vendor-specific prefixes, development is continuing rapidly.

Use of CSS3 also promises speedier page response due to the reduction of images needed for visual effects, and reduces our dependency on JavaScript for visual presentation tasks such as animation. This not only results in less code (so there are fewer potential bugs) but also even better web page performance.

3. Responsive Web Design (Bootstrap)

Responsive design is a hot topic in the web design universe. To see it in action, open a responsive web page such as http://www.trainingatsoftpro.com in a desktop browser, then slowly change the width and height of the browser window. See what happens? The layout adjusts itself automatically for the best fit to the new browser dimensions, as shown in Figure 2. Even if you're viewing it on a phone or other mobile device, the website is easy to view. Responsive website design moves us away from the fixed width pages we're used to, toward pages that intelligently alter their layouts and reflow content to suit the dimensions and resolution of the browser display.



Responsive Web Design is not a single piece of technology, but rather a set of techniques and ideas working together.

The first big idea is the fluid grid. Fixed width layouts have until recently been the more popular choice for web page layout. However, considering the broad range of screen resolutions in today's market, more liquid layouts start to make sense.

Instead of designing a layout based on fixed pixel counts or percentage values, a fluid grid works more carefully with proportions. This way, whether a layout is compressed to fit a mobile device or expanded across a large monitor, all of the page elements in the layout will be resized in relation to one another.

Great as fluid grids are, where the browser window is too narrow, the layout can start to fail. For example, a multi-column page may not work well on a mobile phone screen. Responsive design addresses this issue by using so-called media queries.

<video src="myMovie.mp4" poster="myMovie.jpg" controls>

This is some content to display if the browser does not support the video element. </video>

In addition, HTML5 adds new semantic markup tags (such as <article>, <figure> and <section>, among others), the <canvas> element, which gives HTML a surface on which to draw graphics, support for local data storage, and many other new or updated features.

HTML5 has gained the support of all the major browser vendors including Apple, Google, Firefox, Opera, and Microsoft. Because all major platforms are supported, including mobile devices, we can look forward to a uniform experience across most devices. Although individual features of HTML5 might vary from platform to platform, there should always be sufficient common features to build useful web apps with a consistent look and feel. As HTML5 continues to evolve, the differences among implementations are expected to lessen even more.

But perhaps the biggest draw of HTML5 is that it offers a chance to code something once and have it work across a wide range of browsers, without getting bogged down in device- and plugin-specific tools and APIs.

2. CSS3

CSS3 is the latest incarnation of Cascading Style Sheets and brings with it a lot of long-awaited abilities, including shadows, gradients, rounded corners, and transitions, plus new layout abilities like multi-column pages and flexible box and grid layouts. Previously, these would all have to be coded (usually in JavaScript) with all the associated problems of increased development times, potential bugs, and platform or browser incompatibilities.

Here's how simple it can be to add a drop-shadow effect using CSS3:

#shadowbox{
box-shadow: 10px 10px 5px #888888;
padding: 10px;
border: 1px solid;
width: 200px;
}
The result is shown in Figure 1.
bor

Box with drop shadow

4. Frameworks

A framework is designed to aid the development of scalable, robust and efficient dynamic websites and web applications. The framework aims to reduce the effort expended and promote code reuse on common activities such as database access, templating frameworks and session management, among others.

The MVC (model-view-controller) architecture is perhaps the most popular for web applications, as typified by the Google-supported AngularJS. HTML is great for declaring static documents, but not quite so able when we try to use it for declaring dynamic data in pages. MVC divides your application into three interconnected parts, separating internal representations of data from the way that information is presented to the user.

- The model contains application data, business logic and functions.
- The view can be any output representation of information, such as a web-based table or graphic.
- The controller acts as go-between for the model and view.

Some Popular frameworks are:

Spring Hibernate Struts Codelgnitor Laravel Cake PHP Django etc.

AngularJS lets you extend HTML vocabulary for your application. The resulting environment is very expressive and quick to develop, while still producing very readable code. It employs directives, which are all prefaced with ng-, to add new actions into the HTML attributes on a page. For example, making an HTML page into an AngularJS application is as simple as adding one extra term to the <html> tag: <html ng-app>

Then, through some very simple and elegant directives, AngularJS can handle much of your data binding and display tasks. Here's a simple loop to display the description property of items from a collection things as an HTML list:

ing-repeat="thing in things">

{{thing.description}}

5.SVG

Apple markets its much-vaunted "Retina" displays across its whole range of iOS products (iPhone, iPad, iPod Touch, etc.) and it seems almost certain that the other major manufacturers will seek ways to follow suit using their own display technologies.

For web developers, this can be a problem. We must cater not only for a plethora different screen sizes, but also for variations in pixel density.

One of the most interesting technologies that may help with this is SVG, or Scalable Vector Graphics. SVG essentially allows us to embed vector-based, rather than raster-based images right into web pages. Because the graphics are stored as patterns of vectors, they're infinitely scalable without any loss of quality, whatever the platform, screen size or resolution.

SVG is far from new - the first W3C draft was in 1999 - but following the inclusion by Microsoft of native support in Internet Explorer 9, we now see SVG as a feature of HTML5 with full native browser support from all the major manufacturers.

You can use SVG anywhere you use a raster graphic such as a GIF, JPG, or PNG. With SVG, though, what you're providing are drawing instructions rather than a bitmap:

Conclusion

Creating state-of-the-art web applications that work well regardless of the user's platform and browser has always been a challenge.

The current explosion in mobile devices for web consumption has led to new techniques for efficient and robust web development across the whole range of devices. In this article we've discussed five techniques that work well, alone or in combination, to produce capable, flexible and robust web applications while helping to minimize development time and code complexity.



"Simple things should be simple, complex things should be POSSIBLE."

Since you have to keep yourself up to date with new concepts & technologies evolving in IT-Industry hence proper information about latest trends is very much required. The latest frameworks and tools used in IT

sector are MVC, Angular JS and ORM tools.

Since years, software development has gone through many updates. The recent update is the use of MVC pattern for developing software or web application. The Model—View—Controller shortly known as MVC is a software architectural design for implementing user interfaces on computers. The MVC pattern is a great architecture no matter whatever the language you are using for the development. It is used to develop a project in 3-Tier and N-Tier architecture.

In MVC development, controller receives all requests for the application and then instructs the model to prepare any information required by the view. The view uses that data prepared by the controller to bring the final output. You can use MVC architecture with many technologies like Microsoft .NET, JAVA, PHP, Python. In .NET, you can use **ASP.NET MVC**, in Java you can use **SPRING MVC**, in PHP you can use **Cake PHP** and in Python you can use **Django** framework.

Advantages of using MVC Framework: -

- Lightweight Application
- Parallel & Faster Development
- Ability to provide Multiple Views
- Support for Asynchronous Technique
- Modification does not affect the Entire Model
- MVC model returns the data without formatting
- SEO Friendly Development Platform
- Test Driven Development (TDD) Support
- Bundling and Magnifications

ORM stands for Object Relational Mapping. It is a tool that helps a programmer to easily perform CRUD operations in database. **Entity Framework**, **Hibernate**, **N-Hibernate** are some popular ORM tools. In case of Web Application, you have to be more focused at client end which says that you should have strong command in JavaScript, jQuery and AngularJS.

Angular JS is a product of Google and it is a framework of JavaScript. AngularJS helps us to perform various operations at client side so that we can develop light weighted applications. It is a structural framework for dynamic web apps. Angular is an opinionated framework on how a CRUD application should be built. Along with services and dependency injection, MVC makes angular applications better structured, easier to maintain and more testable.

I suggest all the students to learn MVC pattern with ORM tool and AngularJS. It will help you grab a good job after completing your degree/diploma.

Best Wishes

Er. Akhilesh Kumar

Sr. Software Engineer



An Article on "Importance of Soft Skills for Young Engineers"

"Look, learn, live and strive to become a better version of your own self."

I believe that it is very important for the students of our region to be equipped with soft skills along with hard skills; hard skills take us to the door of our career, soft skills make us enter it. Our Personality and Soft skills not only help us to become an ideal person but also an ideal candidate who is able enough to stand out of a crowd.

Engineering graduates no matter how skilled they are, how technically sound they are, won't land in good industries until and unless they don't have the skills to express themselves. There is no use of one's academic/technical ability if nobody knows one has got such skills. This is where communication skills come into play. If, with time, a student works and enhances their communication skills, half of their work is done. Industries look for candidates with such skills as they will prove to be comparatively more dynamic.

Industries want their employees to be smart, ambitious, inventive, nifty and dynamic and for that it is important for the candidates to learn and master soft skills. Skills like Communication, Interpersonal, Leadership, Team Work etc. should be imparted in the students for channelizing their potential in the most productive direction possible.

Soft skills are not just important when facing external customers and clients. They are equally important when it comes to interacting with colleagues. Soft skills relate to how you work with others. Employers value soft skills because they enable people to function and thrive in teams and in organizations as a whole. A productive and healthy work environment depends on soft skills of the employees.

With the beginning of their college life, the majority of the engineering students get indulged in technical knowledge up to such an extent that they completely ignore the equally important soft skills; this is where the problem starts. One must focus on the development of their personality with the initiation of their engineering life. Grooming of their personality will help them to easily go through the different phases of the recruitment processes when the time comes. Candidates with an ideal personality are more likely preferred over others.

Personality development was not given much importance a few years ago but now has become very important from a career point of view. Most of the people still underestimate the role of one's personality and misinterpret it with just good looks and good dressing, which is just not true. For a good personality one must possess multiple characteristics like good communication, social skills, body language, etc. A great personality includes knowing how to dress well, social graces, grooming, speech and interpersonal skills. A lot of us have a misconception that these personality skills are inborn and cannot be developed, no matter how hard an individual may try to, which is totally baseless. With the help of good training a child or an adult can learn communication skills, different subjects, driving, improve vocabulary, pronunciation or computer operating, music etc. Similarly, a proper training in personality development enhances the general as well as unique traits or characteristics of a person. These days basic personality features like confidence, spoken skills as well as language skills are very important for making a mark professionally.

Having a good personality is important in professional life as it serves the following purposes-

- · Gives confidence
- · Improves Communication Skills
- · Develops a Positive Attitude
- Makes one Credible

These traits will help the student/candidate to achieve the jobs of their desire with much ease.

The essence of your technical ability is opportunity. This opportunity can materialize only with the command over soft skills. It sets you a step higher and makes you stand out of the crowd. Having the required interpersonal skills provides a must-have foundation for career growth. They give you the ability to take advantage of challenges and opportunities that will come your way. Your hard skills get you in the running and your soft skills get you noticed.

Good Luck, Aniruddh Raj Srivastava



How world is changing & adapting emerging technologies in the Engineering industry



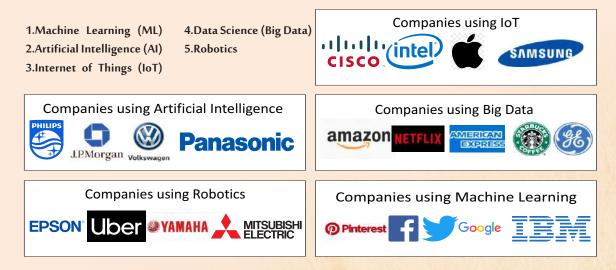
Trending Technologies attracting good Placements in the Industry:

Information Technology (IT) is widely understood to be the enabling technology of the 21st century. IT has transformed, and continues to transform all the aspects of our lives: commerce, finance, education, employment, energy, health care, manufacturing, government, national security, transportation, communications, entertainment, science and engineering.

The industry is changing as we become more reliant on the benefits of the digital age. With new inventions and start-ups occurring progressively, becoming an engineer has never been more exciting.

Why one should learn latest technologies?

With the introduction of latest and advanced technologies in the industry the demand for skilled manpower is still hard to find. Techies trained on below mentioned technologies would definitely attract high packages and numerous growth in their domain. And even every conglomerate has started adopting the market trends and join hands with changing era. Name a few of them:



Benefits of adopting these Technologies:

Let's have a look at wonderful salary packages companies are offering to fresher's skilled on these latest trending technologies. If fresher's can get this handsome amount then you can very well imagine, what an experienced would earn.

| TechnologiesSalary Packages | Per Annum (in 🛛) |
|-----------------------------|-----------------------|
| Machine Learning | 7,00, 000 – 11,00,000 |
| Artificial Intelligence | 8,00,000 — 12,00,000 |
| Big Data | 6,00,000 — 10,00,000 |
| ЮТ | 2,00,000 — 15,00,000 |
| Robotics | 4,00,000 — 6,00,000 |

Conclusion: The marvel of engineering and science cannot be captured in a single article. The evolution of the Internet, of computers, health technologies, nuclear engineering, automobile and civil engineering in the last 50 years have made gigantic contributions to the progress of mankind.

Let us hope and ensure that a scientific temper pervades the consciousness of human kind across the globe and that curiosity and passion will drive us to achieve ever greater marvels in the 21st century.

To conclude with, I would like to quote by J. Ullman "Computer Science is a science of abstraction-creating the right model for a

Faculty Development Program in Engineering Colleges

The incorporation of Information Technology in education has brought so many positive changes. With the change in time, we all can see the upgrades taking place in the Industry. To cope up with the changes in the Industry, Softpro has come up with an interactive Faculty Development Program to expose, enrich and equip the faculties of engineering colleges with technical skills.

Faculty Development Program is especially important in adapting faculty members to their changing roles in initiating and setting the directions for curricular changes. Overall, the aim of this program is to support faculty in adapting to the Technical Advancements taking place in the Industry and to enhance the practical skill set of the faculties in such a way that it becomes beneficial for them as well as their students.

The program aims at enhancing the practical environment in the Institutions by providing faculty members with enough opportunities to pursue research in the respective field. Participation in such programs would enable faculty members to update their research and pedagogical skills. Objective of FDP is to develop following skills in faculties:

Make them aware about upcoming latest technologies of IT Industry.

- To enrich the knowledge of faculties through interaction with highly skilled professionals.
- The knowledge gained by the faculty will be helpful for their students in future.
- Upgrading the skill set of the faculty in order to include technological advancements.
- Allowing the opportunity for the faculty to interact with others to find out what is happening in the Technical field.
- Fostering the learning of new skills and knowledge.





Softpro Experts conducting FDP at United Group of Institutions, Allahabad



Softpro Experts conducting FDP at IET, Lucknow

Faculty Development Program at IRDT, Kanpur





Softpro Team has recently conducted a "Faculty Development Program" for the faculties of Board of Technical Education all across UP. The program was organised by IRDT, Kanpur. A dream doesn't become reality through magic; it takes sweat, determination and hard work to make a dream come true....

Softpro is everyday coming up with new ideas, achievements and milestones in its success... Training the young budding minds of the nation has always been our passion which has now completed a figure which counts in lacs.

In the Journey a head, Softpro proudly announces the launch of its "First Learning Material" in form of a book on different topics of today like:

Learning Material 2018-19



Python By **Brijesh Mishra**

> PHP with MySQL By **Rohit Kumar**

Core Java & Advanced Java By **Brijesh Mishra**









Awards & Recognitions to SOFTPRO TEAM

















In-Campus Training Program

Softpro has now opened its wings into new dimensions and have come up with "**In House Program**". We understand the value of ongoing development for every individual and organization. Training the students and keeping their skills and knowledge up to date means that they remain competitive and current in a fast-paced and evolving world of technology. We deliver the ultimate solution to meet the customized objectives, cutting the training costs, and dramatically improving the organization's performance.

Why In-Campus/House Training?

- In-House training is often a more cost-effective solution when training a number of staff/students for the same training requirement.
- The training needs can be customized and aligned with the organization's culture, work procedures and strategic vision.
- Training can run where, when and how the college want it.

Knowledge Resources of Softpro have more than 10 years' experience and are the leaders in knowledge transfer. All our facilitators specialize in many various areas, of which we have selected our training titles from to cater the needs of colleges in order to give their students the exposure of latest technologies prevalent in IT sector these days.

Oriented Workshop

P? Soltaro India Pvt. Lud

Softpro Expert conducting In-Campus Training Program @ SMS, Varanasi

WORKSHOP GALLERY 2018

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TRAINING2018

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Training on IT Technologies for Computer Science Students @ Softpro House, Jankipuram

APPRENTICESHIP PROGRAM

(A program that makes you 100% employable)

The Apprenticeship Program of Softpro opens up whole new dimensions for the Students of B.Tech., MCA, BCA and Diploma by providing them a training that ensures to make them employable. Since the I.T. Industry is going through a revolution, having only a degree like million other students in not enough. Industries are looking for skilled and dynamic professionals to work for them and prove to be an asset for the company. Thus, Softpro has introduced this unique program which emphasizes on shaping the students to be job-enabled. This training program provides training on technical as well as non-technical grounds. The students are imparted high-level training on dual technologies accompanied with training on HR and Soft-skills after the completion of which the trainees are presented the opportunities on multiple interviews in reputed I.T. companies for technical job roles.

This program has already proven to be a boon to hundreds of job aspirants since last couple of years and has been designed keeping in mind the need of the changing I.T. Industry. What makes it unique-

- Training on dual technology.
- Placement opportunities in reputed I.T. Industries or with us too.
- Six to Eight months Internship.
- Work experience letter.
- Effective guidance from multiple Industrial Experts.
- HR Training- Soft Skills, Group Discussion and Interview skills.
- Focused assignments.
- Regular PAM, Feedback and test sessions.
- Globally accepted certificate.

Audience: B.Tech (CS & IT), Diploma (CS & IT), PGDCA, MCA, BCA, B.Sc (IT), M.Sc (IT) Duration: 06 to 08 Months Time: August onwards every year



SUMMER / VOCATIONAL TRAINING

Summer Training in Softpro is a huge festival wherein the budding engineers from all over the nation gather to celebrate with numerous computer technologies. The trainees are offered training on

- 1. Python Technology
- 2. Java Technology
- 3. Framework Programming
- 4. Machine Learning'
- 5. Data Science
- 6. PHP
- 7. Android
- 8. .Net with MVC

In June 2018 Softpro's new training office- **Softpro House** was inaugurated providing training to 2500+ students on latest technologies in this Summer Training program. This program also plays a major role for us to implement our motto of- "**Bridging the Technology Gap**". During these two months of Summer Training, the trainees are extensively trained on the technology of their choice bound with an Industrial Project. Not only the core technology but the training also covers web designing, programming fundamentals, database, frameworks and all the knowledge one requires for development of a complete project. The students are trained to be professionals and hence everything is started from the scratch; the trainees are not guided by teachers but a team of skilled and experienced software engineers which is headed by Project Managers. This helps the students to get an exposure to the standards and environment of the I.T. Industry.

- Training on latest I.T. Technologies.
- Training by experienced I.T. Professionals.
- Extensive training for the students to reach their full potential.
- Recognition to outstanding trainees and job opportunities.
- Trainees get experience of corporate culture.

Audience: B.Tech (CS&IT), Diploma (CS&IT), PGDCA, MCA, BCA, B.Sc (IT), M.Sc (IT)

Duration: 45 Days to 60 Days

Time: June & July every year



INDUSTRIAL TRAINING

Softpro has been known for the first-hand Industrial Exposure we provide to the Computer Science and Engineering students. Our Industrial Training program takes this exposure to a tremendously higher level. Industrial Training or Final Year Project Training is the most important part of the curriculum of M.C.A. and B.C.A. and hence Softpro provides them the opportunity of a six-month training course on various technologies like .Net with MVC, Java, Android, PHP, Hibernate, Struts, Wordpress, Joomla, Magento, etc. This program is a platinum opportunity for the students to learn the technologies for their final project and also to work on our real-time client side based projects. Students of final year are also provided with placement opportunities in genuine I.T. Companies.

- Trainees are trained rigorously on the technology of their choice.
- Keeping employability skills in mind, the trainees are assigned real-time projects.
- Trainees get a hands-on experience on corporate etiquette and work culture of I.T. Industry.
- Opportunities to appear in placement drives of reputed I.T. Companies.

Audience: MCA, BCA, B.Sc (IT), M.Sc (IT) Duration: 03 Months to 05 Months Time: January to May every year



OFF-SEASON TRAINING

Softpro has been working hard since years to provide the students what they need to become skilled and grow, for this we have been introducing new ideas and programs designed especially for focusing on the need of the students. With another such idea we now plan on providing a tremendous opportunity to the students who could not join the Summer Training Program in the form of- Off-Season Training.

This program is designed to impart a two-month technology training bound with a major live project for the trainees.

The trainees are offered training on

- 1. Python Technology
- 2. Java Technology
- 3. Framework Programming
- 4. Machine Learning'
- 5. Data Science
- 6. PHP
- 7. Android
- 8. .Net with MVC

Trainees can be a part of this program along with their college curriculums. The main focus is to provide focused learning to the students so that they can be in pace with the current I.T. Scenario.

Audience: B.Tech (CS&IT), Diploma (CS&IT), PGDCA, MCA, BCA, B.Sc (IT), M.Sc (IT) Duration: 02 Months

Time: Round the Year (Generally August onwards)



SUMMER/VOCATIONAL TRAINING (ELECTRONICS)

Robots are beginning to cross that line from absolutely primitive motion to motion that resembles animal or human behavior. With industries adopting Robotics, IOT & Automation to increase their efficiency, ECE and EEE Engineers are going to be in demand in the future. But industry needs practically skilled hands-on trained engineers who are capable of showing results.

The wings of Softpro are not only limited to computer science field but also Electronics. We have been working to shape the students of Electronics Engineering by providing them extensive training, keeping in mind the current scenario and future needs of the industry. This program focuses on imparting training on Automation by including Embedded Systems and Robotics in the syllabus.

The training program is under the expert guidance of the team of Softpro Innovations which is currently operating for the development and implementation of new devices and providing latest technical solutions to the market as well.

Our labs, equipped with all the required tools and gadgets aim at providing high level knowledge to the trainees and equipping them with a set of skills which will help them to be the innovators of tomorrow.

SOFTPRO INNOVATIONS have initiated hands-on training programs which include:

- Basic of Electronics
- PCB Designing
- Micro Controllers
- Embedded Systems
- Robotics

Audience: B.Tech (EC & EE), Diploma (EC & EE) Duration: 45 Days to 60 Days Time: June & July every year



TRAINING2018

Training on Embedded System for Electronics Students @ Softpro Tower, Aliganj

INNOVATIVE TASK

www.innovativetasks.com A Product by Softpro Innovation Pvt. Ltd.



Aishwary Dixit Chief Proiect Manager

Innovative Tasks is Online shop for students to buy their favourite Robotic components, we provide Online guidance & Troubleshooting for various projects and sophisticated technology in Electronics/ Electrical/IT sector.

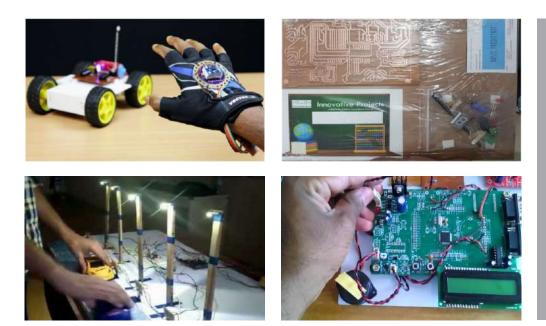
Innovative tasks.com is an E-commerce platform which aims to spread practical learning approach in all parts of India so that students of every domain or age can get the feel of a different learning approach.

Softpro Group is well known for providing In-house Internship successfully for the past 12 years, entertaining and promoting the students with knowledge and skills, to cope up with challenging IT and Engineering world. Innovations Softpro is equipped with the latest technology lab, consisting highly skilled professionals. The students are provided with tools and components to facilitate the students during the project and training sessions.

We have the India's largest variety of electronic project domains including IOT, Sensor based electronics, power electronics, mechatronics, GSM/GPS, Wireless communication and more. Browse through our list of latest electronics projects ideas for your final years We provide this free list of varied electronics project ideas. These are microcontroller as well as non-microcontroller-based projects for electronics engineering students.

SOME FEATURED PROJECTS:

GPS Vehicle Tracking & Theft Detection. Remote Controlled Robotic Arm Using RF. Home Security using GSM. Street light automatic intensity controller. GPS + GSM Based Advanced Vehicle Tracking System Project.



SOME PROJECTS

Global Certifications for Young Engineering Buds



Being an IT Professional you may have witnessed the growth in the industry over the years. To be a part of this growing industry, it has become essential to keep up with the technology changes.

IT Certifications help in keeping up with the rapidly evolving industry. An employee with the strong certifications is viewed as an asset by an organization and maybe awarded with challenging project assignments. Having advanced level certifications may help you create a high skillset for yourself, making you an expert for that technology.

To cater the growing needs of the IT Industry Softpro is now a PEARSON VUE Authorized Test Center to provide Global Certifications of:



Contact US

Leaves us your Details, We will get back to you as soon as possible...!

Vocational Training

(For Diploma / PGDCA) +91-7080102006 +91-7080102007

Summer Training

(For B.Tech / MCA / BCA) +91-7080812070 +91-7080102008

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Apprenticeship

(Employment Training Program) (For Diploma Passouts) +91-7080422022 +91-7080102007

Apprenticeship

(Employment Training Program) (For B.Tech / MCA / BCA Passouts) +91-7080812070 +91-7080102008

Summer Training (For B.Tech/Diploma - EC/EE) Call @ +91 7080462022

Summer Training at Noida Office Call @ +91 7080102011

Software Development, Call @ +91 8960768410 / +91 7080811340

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SOFTPRO GROUP OF COMPANIES

BRIDGING THE TECHNOLOGY GAP

SOFTPRO HOUSE