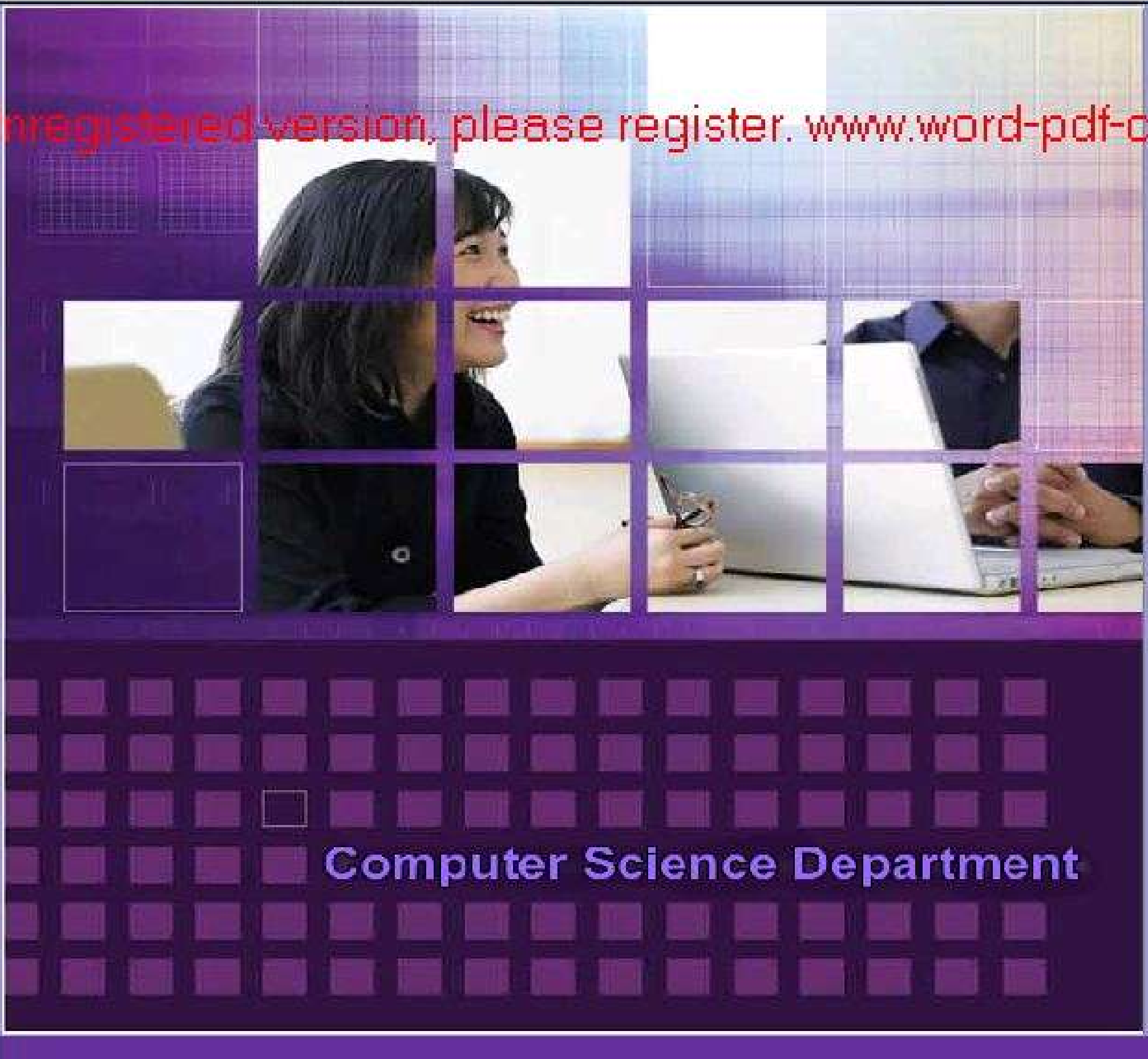

'News N Views'

Department Of Computer Science
COMSATS Institute of Information Technology
Lahore Campus

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'APRIL' n "MAY'
Issue

PUBLICATIONS

OWL ONTOLOGY FOR DLD
By Dr J S Mirza and Muhammad Sami ullah
Science International Vol 22. No. 1.

Abstract

An ontology is in the process of creation for the students of a course on Digital Logic Design (DLD). The authors feel that the solution to the students' problem lies in developing the web site with ontology[1], also called semantic web. Most of the students problems relate to the improper search words submitted to the search engine. The improper phrases or words submitted to the search engine mostly result in surfing sickness, because the intended or useful documents are not displayed. Equivalent classes for the improper search phrases or words are prepared and incorporated in the ontology document to help students find out quickly their intended documents This paper discusses the development of DLD ontology and a number of equivalences in the form of equivalent classes proposed by the authors. Protégé has been used to develop the ontology in "owl" vocabulary

Semantic web has numerous advantages in asynchronous teaching over and above the existing web. [2]. The use of semantic web is rapidly growing in modern e-learning techniques. Recent MIT Open Knowledge Initiative [3A,3B, 4,5,6,7], is a similar effort.

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SEMINARS

"Business Process Repository" by
Mr. Khurram Shahzad,
PhD candidate at DSV, Royal Institute of Technology (KTH), Sweden.
Date: April 8, 2010
Time: 11:30 AM
Location: Seminar room of Block-C, arranged by
Mr Abid Bhutta, Lecturer CS dept of CIIT on behalf of CIIT Lahore Chapter of ACM

Mr. Khurram Shahzad holds Masters in Engineering and Management of Information System from KTH and Masters in Computer Science from Punjab University College of IT, University of the Punjab. Currently he is pursuing his PhD at DSV, Royal Institute of Technology, Sweden. His research interests include Business Process Repository, Business Process Management and Business Process Improvement.

Abstract:
Business process repository is used for storing business processes and associated metadata. The BPEL Repository is an Eclipse plug-in originally built for BPEL business processes and other related XML data. It provides a framework for storing, finding and using these documents. Other research prototypes can reuse these features and build on top of it. The repository can easily be extended with new types of XML documents. The data can be queried as Java objects using an object-oriented query language, namely the Object Constraint Language (OCL). Moreover, the flexible design allows the OCL query engine to be replaced with another engine based on other query language.
Senior undergraduate, graduate students and interested faculty members are invited to attend the seminar.

* * *

"AI AT WORK" by
Dr Mian M Awais
Date: April 1, 2010
Time: 03:00 PM
Location: Seminar room of Block-C, arranged by
Mr Imran Raza, Lecturer CS dept of CIIT on behalf of CIIT Lahore Chapter of ACM
Organizer: Lahore students chapter of ACM

Dr Mian M. Awais received his MSc and PhD degrees in Neural Networks/Applied Artificial Intelligence from Imperial College, University of London, UK in 1996 and 2000 respectively. Currently, he is an Associate Professor at Department of Computer Science, Lahore University of Management Sciences (LUMS), Lahore, Pakistan. His research interests include applied artificial intelligence, soft computing, evolutionary and learning algorithms.
Artificial Intelligence (AI) is the area of computer science focusing on creating machines that can engage on behaviors that humans consider intelligent. The Robotics and Intelligent Computing (RICE) group at LUMS is dedicated to conduct research projects in the areas of Artificial Intelligence and robotics, speech and language processing, genetic algorithm based optimization, soft computing, learning through imitation in robot, and statistical learning. The talk will briefly describe some of the projects presently being pursued in the group.
Senior undergraduate, graduate students and interested faculty members are invited to attend the seminar.

* * *

Concept Mapping by
Mr. Nadeem Ghafoor Ch, Asstt Prof CIIT Lahore
Date: April 15, 2010

Time: [illegible] AM
Location: Seminar room of Block-A, organized by
CIIT Lahore Student Chapter of ACM

Abstract:
is the latest technique in teaching. A concept map is a diagram showing the relationships among concepts. It is a graphical tool for organizing and representing knowledge. A concept map is a way of representing relations between ideas, images or words, in the same way that a road map represents the locations of highways and towns, and a circuit diagram represents the workings of an electrical appliance. Concept maps were developed to enhance meaningful learning in the sciences, but are not limited to sciences only. A well-made concept map grows within a context frame defined by an explicit "focus question". Concept maps facilitate sense-making and meaningful learning on the part of individuals who make concept maps and those who use them.
Senior undergraduate, graduate students and interested faculty members are invited to attend the seminar.

* * *

European Commission Framework Program: by
Dr Saqib Rasool Ch
Date: April 23, 2010
Time: 10:00 – 11:00 AM
Location: Seminar room of Block-C, arranged by
Organizer: Lahore students chapter of ACM/ Raza lecturer CIIT

Abstract:
Investigator-driven ' frontier research', within the EU framework of activities commonly understood as 'basic research', is a key driver of wealth and social progress, as it opens new opportunities for scientific and technological advance. It is instrumental in producing new knowledge leading to future applications and markets especially in ICT (information and communication technology) sector. The objective of the specific presentation is to highlight the running program 'Ideas' is to reinforce excellence, dynamism and creativity in European research and improve the attractiveness of our research, as well as for industrial research investment. Communication and dissemination of research results is an important aspect of any progressive program. Knowledge lies at the heart of the European Union's strategy to become the "most dynamic competitive knowledge-based economy in the world". The ' knowledge triangle' - research, education and innovation - is a core factor in European efforts to meet the ambitious goals and can help us achieve same.

Bio:

Saqib Rasool Chaudhry has joined COMSATS Institute of Information Technology as assistant Professor in Computer Science department recently, and is affiliated with the WNCC and CTR at Brunel University and Kings College London respectively. He also held visiting appointments at the KCL, UK and UC San Diego, USA. He is a permanent member of the Institute of Electrical and Electronics Engineers and Institute of Engineering and Technology.
He researched during his PhD in electrical engineering from the Brunel University, UK, in 2009. As his doctoral thesis, he designed very high data-rate Heterogeneous indoor wired wireless personal communications. From 2005 to 2009, he served as Research Assistant and, Team leader at the Brunel University on FP6 and FP7 EU projects, where he was the chair of WNCC's global partner consortium. During this time, he also held a part time Junior Project Manager post in Apple R&D, UK. He developed handover techniques for multi-radio wireless communications converged with Optics as part of his doctoral research. From 2005-2009, he was a full time faculty at Brunel University involved in 5 * EU project named MAGNET, MAGNET Beyond, E2R and MONET, where his research addressed various areas in computational networks such as application controlled handover and power efficient PAN algorithms.
Mr. Chaudhry has published two chapters in edited books titled World Wireless Research Forum (UK: Wiley, 2009) and Handbook on Wired Wireless Convergence (USA: CRC Press, 2010). He was the Guest Editor of the IET Communications special issue on "Radio over Fiber for future wired wireless communications" (Dec. 2008). He is also permanent reviewer of the Springer Personal Communications journal. In addition, he has published in excess of 25 research papers in refereed journals and conferences and filed a patent on the discoveries of his novel research at WNCC/CTR UK (2009). He routinely serves on the organizing and technical program committees of various international conferences such as PIMRC, ICC, VTC, WPMC and WCNC. He received the Best Paper Award and Best Journal award in the IST 2007 & IET Communications 2009 respectively.
Senior undergraduate, graduate students and interested faculty members are invited to attend the seminar.

* * *

Economic System of Islam by
Mr. Nadeem Ghafoor Ch., Assistant Professor at CIIT Lahore
Date: Thursday, April 29, 2010
Time12:30-1:30 PM
Location: Seminar room of Block-C, arranged by
Organizer: Lahore students chapter of ACM

Abstract:
For any nation to progress she has to implement a system which is in harmony with their fundamental beliefs and concepts i.e. her Creed. Pakistan is implementing a system which is in conflict with the creed of the overwhelming majority of its citizens.
There are two possible ways to put Pakistan on the path of progress:
Option 1: People change their Aqeedah (Creed)
The people should become secular in their belief and implement the capitalist system in its entirety, without any reservation or holding back
Option 2: People should implement a different system
A system that exclusively emanates from their aqeedah, upon whose implementation they do not feel any emotional or religious resistance within themselves and whose protection they will consider a part of their aqeedah.
All students and faculty members are invited to attend the seminar.

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FAREWELL PARTY
(Bilal Hassan/ Nasir Rauf)

A Farewell Reception in honor of BCS-B8 was arranged on Wed, 28 April 2010, which was opened with remarks by the DCO CS Mr. Nasir Rauf (Representing HOD CS Prof. Dr. Syed Asad Hussain who was unable to come due to his busy office hours). In his speech, he expressed best wishes from HOD CS for students leaving the university and starting their professional career. Different kinds of events were also presented by the students. Faculty and students appreciated this reception. A High Tea session was also arranged for the Faculty and students at the end.

Nasir Rauf

* * *

JOINING
(Nasir Rauf)

Four students have joined the team who are running the newsletter of CS dept of CIIT
1-Sarmad Makhdoom
2-Bilal Hassan
3-Tahira Waseem
4-Rana Rameez Ur Rehman

Saqib Rasool Chaudhry

Bechelors in Computer Science (Punjab University)
MSc Electrical and Electronics (University of Hertfordshire)
PhD in Electrical and Communication Networks (Brunel University (Wireless Networks and Communications Centre)

Saqib Rasool Chaudhry has joined COMSATS Institute of Information Technology as Assistant Professor in Computer Science department recently, and is affiliated with the Wireless Networks and Communications Centre (WNCC) at Brunel University. He also held visiting appointments at UC San Diego. He is a permanent member of the Institute of Electrical and Electronics Engineers and Institute of Engineering and Technology.

He researched during his PhD in electrical engineering from the Brunel University, UK, in 2009. As his doctoral thesis, he designed very high data-rate Heterogeneous indoor wired wireless personal communications. From 2005 to 2009, he served as Research Assistant and, Team leader at the Brunel University on FP6 and FP7 EU projects, where he was also the chair of WNCC's global partner consortium. During this time, he also held a part time Junior Project Manager post at APPLE R&D, UK. He developed handover techniques for multi-radio wireless communications converged with Optics as part of his doctoral research. From 2005-2009, he was a full time faculty member at Brunel University involved in 5 * EU project named MAGNET, MAGNET Beyond and MONET, where his research addressed various areas in computational networks such as application controlled handover and end to end power efficient PAN algorithms.

Mr. Chaudhry has published two chapters in edited books titled World Wireless Research Forum (UK: Wiley, 2009) and Handbook on Wired Wireless Convergence (USA: CRC Press, 2010). He was also the Guest Editor of the IET Communications special issue on "Radio over Fibre for future wired wireless communications" (Dec. 2008). He is also permanent reviewer of the Springer Personal Communications journal. In addition, he has published in excess of 25 research papers in refereed journals and conferences and filed a patent on the discoveries of his novel research at WNCC/CTR UK (2009). He routinely serves on the organizing and technical program committees of various international conferences such as PIMRC, ICC, VTC, WPMC and WCNC. He received the Best Paper and Best Journal awards in the IST 2007 & IET Communications 2009.

Research Area
1. Wired Wireless Multiple Access Techniques;
2. Intelligent and efficient Wireless communication network design, performance analysis & optimization, QoS provisioning, and modeling;
3. Integrated heterogeneous multi-radio, multi-channel wired wireless networks (e.g., IEEE 802.11/802.16/802.15/802.21);
4. Cross-layer (e.g. Joint PHY/MAC/Application Layers) optimizations for application controlled wireless communication networks;
5. WPAN multi-radio/multi-channel/mutil-hop adaptation and open Spectrum;
6. Wireless standardization activities (See my contributions at IEEE 802.11n/802.11e, IEEE 802.16, IEEE 802.20 Working Groups);
7. Adaptive energy efficient communication protocols (e.g. Scalable end user driven data).
Book sections
8. S R Chaudhry and H S Al-raweshidy, "Telecommunication: Fixed Mobile Convergence", Chapter contribution: "Enhanced Application and Power based end to end network control for FMC platform", CRC Press US. (Submitted, to be published Sep 2010).
9. S R Chaudhry, T H Sulaiman and H S Al-Raweshidy, "Short range wireless communications," Technologies for the Wireless Future: Wireless World Research Forum (WWRF), vol. 2. Wiley, 2009.
Professional courses
S R Chaudhry, "Radio over Fibre propagation," 12th IET Course. London, May 2008.
Patents

S R Chaudhry, T H Sulaiman and H. S. Al-Raweshidy; "Link Selection in Heterogeneous Air Interfaces Networks", a patent has been submitted to Brunel University to file an application, 2009.

Journal special issues

S R Chaudhry and H S Al-Raweshidy " Net MAC-PHY for UWB-Ad Hoc vs. WPAN Networks," in IEEE Trans. Selected Area of Wireless Communications June 2007.

Journal papers

S R Chaudhry & H S Al-Raweshidy "Application Controlled Handover for Heterogeneous Multiple Radios over Fibre Networks", IET Communication Journal Jan 2009.
Conference papers
1. S R Chaudhry, H S Al-Raweshidy & S S A Obayya, " A comparative study of MB-OFDM and DS-CDMA in UWB WPAN", WWRF Nov 2004.
2. S R Chaudhry, H S Al-Raweshidy & S S A Obayya " Delay Analysis in Ad hoc On demand Distance Vector based Networks", Multitopic Conference, 2004. Proceedings of IEEE (INMIC 2004). 8th International.
3. A N Al-Khwildi, T. Sulaiman, S R Chaudhry, Y. K. Casey, H.S. Al-Raweshdiy," A Novel On-Demand Link State Routing Protocol for Ad Hoc Wireless Networks", Fourth Generation Mobile Forum, 4GMF ANNUAL CONFERENCE, July 2005, SAN DIEGO, USA.
4. Talha Shahid, S R Chaudhry, Hamed Al-Raweshidy, "Reachability & Stability for Master Device selection in Personal Networks" WWRF14 Working Group 3 San Diego, California, USA. July 2005. (best paper award)
5. S R Chaudhry, A N Al-Khwildi, Y K Casey , H Aldelou, H S Al-Raweshidy "A System Performance Criteria of On-Demand Routing in Mobile Ad Hoc Networks" , Wireless and Mobile Computing, Networking and Communications, IEEE WiMob2005,August 2005 Montreal, Canada. (Best paper award)
6. A N Al-Khwildi, Y K Casey, S R Chaudhry, H S Al-Raweshidy," Delay & Throughput Factors for On-Demand Routing Protocols in Large Wireless Ad Hoc Networks", 5th Electronic Circuits and Systems Conference, ECS05, Slovakia on September, 2005.
7. Y K Casey, A N Al-Khwildi, S R Chaudhry & H S Al-Raweshidy "Impact of Co-Interference on Bluetooth and WLAN Indoor Wireless Clusters", Wireless Personal Multimedia Communications IEEE (WPMC 05), Denmark on September, 2005.
8. S R Chaudhry, A N Al-Khwildi, Y K Casey, H Aldelou, H S Al-Raweshidy, "WiMob Proactive and Reactive Routing Protocol Simulation Comparison", 2nd IEEE International Conference on Information and Communication Technologies: from Theory to Applications, (ICTTA 06) Damascus, Syria, April 2006 (Invited paper)
9. A K Kiani, S R Chaudhry & W B Yao "An Analysis of Network Level Solutions for Mobile Multi-Homed Host", Wireless Mobile Communications IEEE WCNC, April 2006.
10. S R Chaudhry & H S Al-Raweshidy "Wireless-Optical Fibre Integration: application Service Layer Enhancement ", Wireless Personal Multimedia Communications IEEE (WPMC 06), San Diego, California, September 2006.
11. S R Chaudhry & H S Al-Raweshidy "An Application Controlled Handover for Heterogeneous Radio in Wired Wireless Integrated Networks", Wireless Personal Multimedia Communications IEEE (IST 07), Budapest, Hungary, July 2007.
12. S R Chaudhry & H S Al-Raweshidy, "Mathematical Modification in MB OFDM-UWB Transmitter for ISI Elimination" ICUWB 2007. (best paper award)
13. S R Chaudhry, Ayaz Usmani & H S Al-Raweshidy "HDR scheme for QAM MC-OFDM UWB ", The 11th International Symposium on Wireless Personal Multimedia Communications (WPMC 2008) Lapland, Finland, Sep 2008.
Theses and technical reports
1. S R Chaudhry "An improvement in high data rate optically converged WPAN protocols", in PhD thesis.
2. S R Chaudhry, "Picocellular wireless communications," in Master's thesis
3. S R Chaudhry, "A PN formation architecture and development suite for MAGNET applications," in technical report: MAGNET Beyond 2008.
Presentations and posters
1. S R Chaudhry, "Multidimensional Ad hoc communications," APPLE R&D UK, August 2009
2. S R Chaudhry, "Indoor Wired Wireless PAN characterisation and system design," National Physical Laboratories, London, UK, May 2009
3. S R Chaudhry, S Khan and H S AL-Raweshidy, "Wired Wireless Integrated Networks," WNCC Research Staff Society Poster Session, Brunel, UK, Nov. 2008.
4. S R Chaudhry and H S Al-Raweshidy, "Radio cellular concepts emerged Picocells ," KCL, UK, Oct. 2007.
5. S R Chaudhry, "HDR Physical layer considerations for IEEE 802.15.3," MAGNET Beyond, Helsinki, Finland May 2006.

* * *

WHY ARE STUDENTS GPA –CONSCIOUS?
DAWN ARTICLE (Bill Hassan)

MANY teachers ask students to pursue excellence rather than grades.
They say it is one's knowledge and skills that matter more in one's career growth than one's grades.
They are absolutely right but still many intelligent students do not follow this suggestion.
It is because our job market does not allow us to follow this philosophy.
Many companies these days have placed a limit of General Point Average (GPA) in order to appear in their aptitude test.
They give more importance to GPA in the hiring process: in fact, some companies make job recruitments solely on the basis of General Point Average.
There is not necessarily a negative relationship between the GPA of a student and his knowledge, but there are some students who are exceptionally talented students but they do not have a GPA of three.
In a job market where General Point Average is given more preference, students cannot be expected to be learning solely for the sake of learning.
Everyone in our society considers grades more important than any creativity, or developing problem-solving skills, emotional intelligence or communication skills of the person.
Owing to these reasons, such skills in students are not honed.
The recent Indian movie, '3 idiots', has conveyed a very good message that follows excellence rather than grades, because as it is the exposure of the student that is going to pay off in future rather than grades.
I think companies should abolish the practice of minimum limit of GPA 3 and change the hiring procedure that checks the knowledge and skills of the students rather than grades.
This will not only prove beneficial for those 'street smart' students who have been unable to apply in companies asking for high General Point Averages, but will also benefit companies hiring many talented students who are left behind due to low GPAs.

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DREAMS
Tahira Waseem BCS-SP09-095

Dreams, a nightly gift and a part of the natural process of being alive, are being re-discovered by our culture. The meaning and value of your dreams will vary according to what you and your society decide.
Our society is changing. We used to only value dreams in the context of psychotherapy. Now, after 30 years of self-help support groups and insightful professional research, we have learned that a dream need not be dismissed as "just a dream."
A dream is a succession of thoughts, images, sounds or emotions which the mind experiences during sleep. Mental activity associated with the rapid-eye-movement (REM) period of sleep. It is commonly made up of a number of visual images, scenes or thoughts expressed in terms of seeing rather than in those of the other senses or in words.
During the night there may be many external stimuli bombarding the senses, but the mind often interprets the stimulus and makes it a part of a dream in order to ensure continued sleep. Dream incorporation is a phenomenon whereby an actual sensation, such as environmental sounds are incorporated into dreams such as hearing a phone ringing in a dream while it is ringing in reality, or dreaming of urination while wetting the bed. The mind can, however, awaken an individual if they are in danger or if trained to respond to certain sounds, such as a baby crying
Dream -- likely a means of coping with a major life stress --helped Kern, explains researcher Rosalind Cartwright, PhD, professor emeritus of psychology at Rush University in Chicago. "It's almost like having an internal therapist, because you associate [through dreams] to previous similar feelings, and you work through the emotion related to it so that it is reduced by morning."
Although some researchers believe dreams are just a byproduct of sleep, others think dreams are important for memory consolidation or conflict resolution. Cartwright has found clues to suggest that dreams may help with mood regulation.
Sleep is without a doubt beneficial. According to the National Sleep Foundation, humans spend more than two hours dreaming each night (with the most vivid dreams occurring during REM sleep).
Fun and empowerment are also the main benefits of dreaming. Dreams are considered to be empowering in many ways like in self-development, problem-solving and training etc.

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HUNZA LAKE-- ALLAH BLESS US
A BIG WATER STORAGE BUT SEE HOW CAN WE UTILIZE IT ?