List of Appendix

Appendix 1; Glossary

Considering not all readers are familiar with the technology or terminology referred to in this research report. This section includes definitions of major terms and an explanation of acronyms.

Information System (IS): Information Systems exist in various forms but has the overall goal of supporting the business with valuable information through some type of interface connected to a database. Information system is a narrower term than IT, focusing on business systems that process, stores data, which transmit and retrieve data from other systems or applications.

Hospital Information System (HIS): are comprehensive, integrated information systems designed to manage the medical, administrative, financial and legal aspects of a hospital and its service processing. Traditional approaches encompass paper-based information processing as well as resident work position and mobile data acquisition and presentation

A **local area network (LAN):** is a computer network that connects computers and devices in a limited geographical area such as home, school, computer laboratory or office building

Computed Radiography (CR): uses very similar equipment to conventional radiography except that in place of a film to create the image, an imaging plate (IP) made of photostimulable phosphor is used. The imaging plate housed in a special cassette and placed under the body part or object to be examined and the x-ray exposure is made. Hence, instead of taking an exposed film into a darkroom for developing in chemical

tanks or an automatic film processor, the imaging plate is run through a special laser scanner, or CR reader, that reads and digitizes the image. The digital image can then be viewed and enhanced using software that has functions very similar to other conventional digital image-processing software, such as contrast, brightness, filtration and zoom.

Digital radiography is a form of x-ray imaging, where digital X-ray sensors are used instead of traditional photographic film. Advantages include time efficiency through bypassing chemical processing and the ability to digitally transfer and enhance images. Also less radiation can be used to produce an image of similar contrast to conventional radiography. Digital Radiography (DR) or (DX) is essentially filmless X-ray image capture. In place of X-ray film, a digital image capture device is used to record the X-ray image and make it available as a digital file that can be presented for interpretation and saved as part of the patient's medical record.

E**lectronic Health Record (EHR)** (also **electronic patient record** (EPR) or **computerized patient record**) is an evolving concept defined as a systematic collection of electronic health information about individual patients or populations. It is a record in digital format that is capable of being shared across different health care settings, by being embedded in network-connected enterprise-wide information systems. Such records may include a whole range of data in comprehensive or summary form, including demographics, medical history, medication and allergies, immunization status, laboratory test results, radiology images, vital signs, personal stats like age and weight, and billing information.

Radiology Information System (RIS) is a computerized database used by radiology departments to store, manipulate and distribute patient radiological data and imagery. The

system generally consists of patient tracking and scheduling, result reporting and image tracking capabilities. RIS complements HIS (Hospital Information Systems) and is critical to efficient workflow to radiology practices.

Picture Archiving & Communicating System (PACS): PACS Picture Archiving and Communication System. Computers or networks dedicated to the storage, retrieval, distribution and presentation of medical images.

DICOM: Digital Imaging and Communications in Medicine. The standard for medical image communication, defining data structures and services for exchange of medical images and related information

Integrating the Healthcare Enterprise (IHE): is an initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information. In 1997, a consortium of radiologists and information technology experts formed IHE, or "Integrating the Healthcare Enterprise." IHE created and operates a process through which interoperability of health care IT systems can be improved. The group gathers case requirements, identifies available standards, and develops technical guidelines that manufacturers can implement. IHE also stages "connectathons" and "interoperability showcases" in which vendors assemble to demonstrate the interoperability of their products. IHE is an international organization that focuses on the development of open and global IHE Integration Profiles and on the regional deployment of interoperable IT systems. Because of its limited resources, IHE concentrates on specific projects. It solicits proposals; and after surveying its members to better understand their priorities, it chooses areas to focus on

HL7: Health Level Seven. A non-profit organization that provides standards for both exchange, management, and integration of clinical data and management, delivery, and evaluation of healthcare services

E-learning: E-learning comprises all forms of electronically supported learning and teaching. The information and communication systems, whether networked learning or not, serve as specific media to implement the learning process

Website: Web 2.0 refers to dynamic websites which incorporate user interaction, unlike the websites in the past which were static, basic, and used only for informational purposes. Very popular versions of these dynamic websites are the on-line social networks, namely HI5, MySpace, Facebook, and many others.

Web-based: Information and application are available to use via the World Wide Web.

Critical Success Factors: Those are those things which must go right for the organization to achieve its mission.

Web Services (WS): WS are services (usually including some combination of programming and data, but possibly including human resources as well) that are made available from a business's Web server for Web users or other Web-connected programs.

Appendix 2 Flyers & Brochures

Flyer1

Flyer 2

www.UOSPACS.com
UOS PACS
Available ANY WHERE TIME
DICOM
TIFF
BMP
GIF
JPEG
JPG
PNG
Multi Image Format is Acceptable
✓ Designed for Students, Physicians, Medical Imaging Specialist (MIS)
✓ Satisfies knowledge needs
✓Covers Anatomy, Physiology, Pathology, Imaging Techniques

Flyer 3

www.uospacs.com

- Education
- Knowledge
- Basic Sciences

- Sharing Community
- Radiographic Images
- Cases

- Students
- Radiology Professionals
- Physicians
- Educators

Brochure

UOS PACS
UOS online PACS
Any time
Any Where
Join us
And become a member in our community
Why www.uospacs.com?
The education revolution from traditional to digital.
Ability to study, discuss and take quizzes.
The change from conventional films to digital images in diagnostic medical imaging.
Sharing skills and experiences between professionals and students
Utilization of diagnostic Imaging in study of basic sciences and radiography sciences .
What is new in www.uospacs.com?
The ability to use the DICOM images online
All cases are reviewed before published
Ability to upload the cases and the site administrator staff will complete the missing material such as anatomy, physiology, radiographic anatomy, pathology and quiz's
You can upload the images in any format and we will convert to the suitable format as well as labeling it.
Dynamic Image and video can be viewed
University of Sharjah
College of Health Sciences
Medical Diagnostic Imaging
UOS PACS
UOS online PACS
WWW.UOSPACS.COM
website developed and designed in the Medical Diagnostic Imaging Department, College of Health Sciences, University of Sharjah
Contain cases developed and reviewed by the faculty members to helps the student and other health professionals to study, share their knowledge and experiences

Appendix 3 – Online Questioner

End Users Evaluation of UOS Online PACS

Dear www.uospac.com users and guest, we are conducting a questionnaire evaluating the web site and its content and we appreciated your participation in the survey to evaluate and improve it. Thank you very much for your valuable time.

The survey is divided to 3 sections, Section 1was designed to collect general information the user, user account, internet browser, computability, basic information about the first impression about the site, pages labeled, errors. Section 2 was designed to evaluate the Digital Teaching File design, contents, value, rule in education and teaching and searching menu. Section 3 was designed to ask about the website accessibility, objectivity and visual appeal.

The survey questions were designed in different evaluation manner, 'Yes/No', 'Excellent, Good, Poor', and choices, some questions asked to give the reason of the users answer if it is available. At the end of the survey the users where asked to give there feedback and sign the guest book at the resources page.

Section 1

1. **What is your Profession?**
    a. Faculty member
    b. Health Care Professional
    c. Student
    d. Other
    e. Other (Please Specify)
2. **What type of Internet connection do you have?**
    a. Direct Connection
    b. Dial Up
3. **What Web browser/s are you using?**
    a. Internet Browser
    b. Netscape Navigator
    c. Mac
    d. Other
4. **IS the Website compatible with your internet browser?**
    a. Yes
    b. No
5. **Did you evaluate any website before?**
    a. Yes
    b. No

6. **Did you create your own account at www.uospacs.com?**
    a. Yes
    b. No
7. **If yes : it was**
        i. Easy
        ii. Difficult
        iii. Lengthy
        iv. Clear
        v. Not clear
8. **Has the website author clearly provided all contact information, e-mail address and phone number?**
    a. Yes
    b. No
9. **Is the purpose of the website indicated?**
    a. Yes
    b. No
10. **Is it clear who developed the website?**
    a. Yes
    b. No
11. **Are you satisfied with the accessibility of the Web pages?**
    a. Yes

b. No

12. Did you encounter any error messages?

a. Yes

b. No

c. If yes where and what? _____

13. Is it easy to navigate within the website?

a. Yes

b. No

14. Are the pages labeled in a descriptive way of their contents?

a. Yes

b. No

15. Is it easy to locate a topic/ category within the website?

a. Yes

b. No

Section2- Digital Teaching File Evaluation

1. **How do you rate the DTF Design?** (Excellent-Good-Poor)
2. **How do you rate "find/search" of the cases?** (Excellent-Good-Poor)
3. **How do you rate the case parts/sections?** (Excellent-Good-Poor)

4. **How do you rate the information provided with the case (Literature review**)? (Excellent-Good-Poor)

5. **How do you rate the patient information provided with the case (History/diagnosis/prognosis)?** (Excellent-Good-Poor)

6. **Do you think using of medical Imaging helps you to understand the file?**

    a. Yes

    b. No

7. **Do you find the images attached to each file informative?**

    a. Yes

    b. No

8. **Do you think the DTF design and information help in critical thinking?**

    a. Yes

    b. No

9. **Do you think using the DTF will help to understand similar patient situation?**

    a. Yes

    b. No

Section 3: Accessibility, Objectivity and Visual Appeal

1. **How do you rate the use of colors in the website?** (Excellent-Good-Poor)
2. **How do you rate the design layout?** (Excellent-Good-Poor)
3. **How do you rate the images at the home pages?** (Excellent-Good-Poor)
4. **How do you rate the text and graphics used on the website?** (Excellent-Good-Poor)
5. **The content is free from commercial, political, gender or racial bias?**
    a. Yes
    b. No
6. **Affiliations with educational organizations/companies are stated?**
    a. Yes
    b. No
7. **The website avoids advertising that may be a conflict of interest with the content?**
    a. Yes
    b. No
8. **The site avoids trying to persuade or sell something?**
    a. Yes
    b. No

9. Is there a need of special software requirements to view website's contents?

a. Yes

b. No

10. Does the website asked any personal information?

a. Yes

b. No

c. If yes where? _____

11. Is the website loading minimal?

a. Yes

b. No