

Signature Block

COSC 4351	Name	Signature	Date
SE Javier Rivera	Javier Rivera		2-11-15
SE Linh Tong	Linh Tong		2-11-15
SE Paul Miller	Paul Miller		2-11-15

DOCUMENT CONTROL

CHANGE HISTORY

Table 1: TLs entries (assigned work and due dates) before releasing to the team (all SQAs)

Revision	Name	Due Date	Description
1.A	TM Steven Pate	02/08/2015	Add your work to Document
1.B	TM Janaye Maggart	02/08/2015	Add your work to Document
1.C	DBA Logan Stark	02/08/2015	Add your work to Document
1.X	SQA Linh Tong	02/09/2015	Review Document
1.Y	SQA Paul Miller	02/10/2015	Review Document

Table 2: Entries when work completed (SVN Commit Comment matches Description)

Revision	Name	Completed Date	Description
1.A	TM Sarah Moore	02/09/2015	I added my feasibility study to the document
1.B	TM Janaye Maggart	02/08/2015	I appended my feasibility study to the document
1.C	DBA Logan Stark	02/08/2015	I appended my feasibility study to the document
1.D	DBA Jainesh Mehta	02/08/2015	I added my feasibility study to the .doc
1.X	SQA Linh Tong	02/10/2015	I reviewed Document
1.Y	SQA Paul Miller	2/10/2015	I reviewed Document

Table 3: TL entry for RED DELIVERABLES (SVN Commit Comment matches Description)

Revision	Name	Due Date	Description
2.0	TL Javier Rivera	02/11/2015	I changed Version to 2.0

DOCUMENT STORAGE

This file is stored in SVN at <https://svn.cs.uh.edu/svn/cosc4351/team4/TEAM PROJECT DELIVERABLES/Feasibility Study.doc>.

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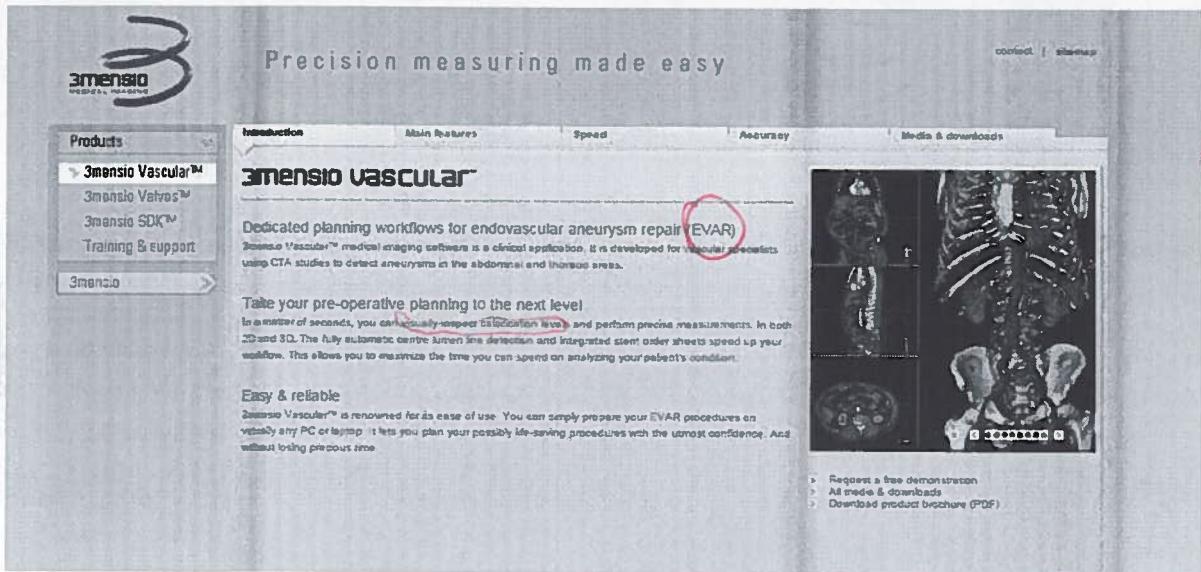
Executive Summary

TEAM4OIES has been assigned to build the Online International Evar System website, which has a large backend database of EVAR (EndoVascular aortic Aneurysm Repair) data. This is a feasibility report, from each member of TEAM4OIES, to help us build the website and decide what type of technology and features we can use for our OIES.

JAINESH FEASIBILITY STUDY

Good Example:

<http://www.3mensio.com/product-3mensio-vascular.aspx>



Easy to use. There is navigation menu and full of descriptions. It also shows product/procedures offered and their images.

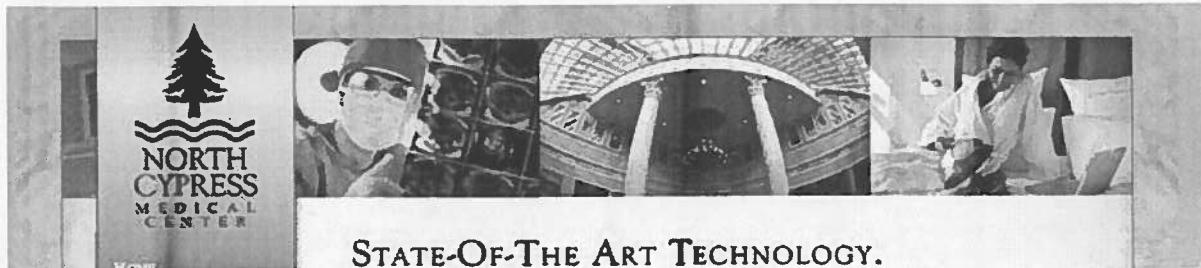
Technologies Used:

- IIS 6
- ASP.NET
- jQuery
- Javascript

Cost: \$9,545

②

Bad Example:
<http://ncmc-hospital.com/>



STATE-OF-THE ART TECHNOLOGY.

There is an annoying video that plays every time on the homepage, which can not be stopped or muted.



Technologies Used:
- IIS

- PHP
- jQuery
- Javascript

Cost: \$8,188

JANAYE FEASIBILITY STUDY

Good Example:

<http://www.earthlink.net/>



Home page has very good drop down menu and provides Live Chat future with almost zero wait time. Also very easy to find the contact phone number for support, which nowadays you have to dig through for most websites.

Cost: 30,000

Technologies:

- Apache
- J2EE
- Shockwave Flash Embed
- jQuery

Bad Example:

<http://www.ikea.com/us/en/>

The screenshot shows the IKEA website homepage. At the top, there is a search bar and a navigation menu with links like 'Offers New', 'Living room', 'Bedroom', 'Bathroom', 'Kitchen & Appliances', 'Children's IKEA', 'Textiles & Rugs', 'For Business', and 'Departments'. A 'Welcome!' message is visible. On the right side, there are links for 'Log In or Sign Up', 'My shopping cart', 'My shopping list', 'Join IKEA FAMILY', 'Join our email list', and 'Información en español'. A 'Ask Anna' chat window is open, showing a conversation between the user and Anna. The main content area features a large image of a man in a kitchen, with text overlaying it: 'Life is adve where finding the tools isn't' and 'Our SEKTION kitchens are fully customizable to fit your life, so everything is always exactly where you need it.' Below the image is a link 'See how IKEA kitchens help make mealtime better'. There are also three small circular icons at the bottom of the main image.

More news and inspiration from IKEA

Join our FREE loyalty program!

Offers valid January 28, 2015 - March 3, 2015

IKEA Foundation 'Brighter Lives for Refugees' Campaign
Helps UNHCR Refugee Camps around the world.

Website has chat function but chat is with AI, which can get frustrating and become a waste of time.

Cost: 20,000

https://www-112.ibm.com/software/howtobuy/buyingtools/paexpress/Express?P0=E1&part_number=D55WVLL,D55WZLL,D57P1LL,D57P6LL,D1038LL,D103BLL,D103GLL&catalogLocale=en_US&Locale=en_US&country=USA&PT=jsp&CC=USA&VP=&TACTICS=&STACT=&S_CMP=&brand=SB05

Technologies:

- IBM Websphere Commerce
- J2EE
- Perl
- AJAX Libraries

SARAH FEASIBILITY

Good Example
<http://www.heartland.com/>



Website has a nice drop down menu on top and a search button. Contents are well organized and do not have an annoying movie playing or sounds on the homepage. Much more appealing website, image-wise.

Technologies Used:

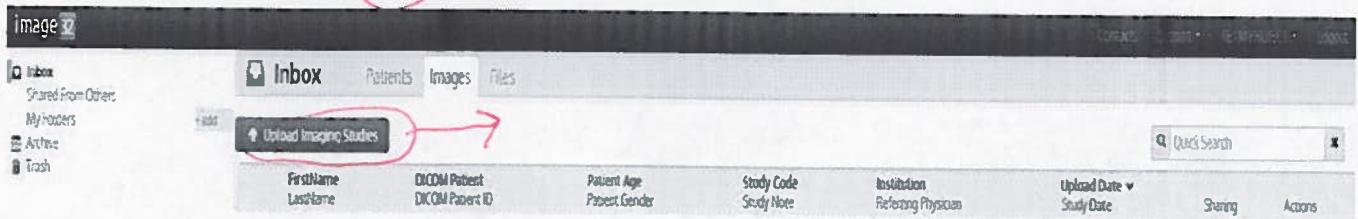
- Apache 2.2
- PHP
- jQuery
- Javascript

Cost: \$25,693

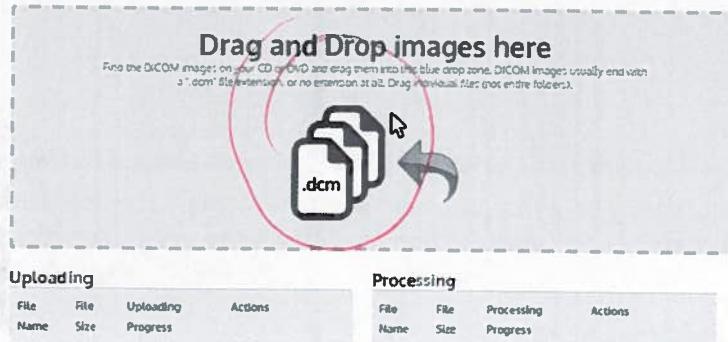
LINH FEASIBILITY

Good Example:

<https://www.image32.com>



Since our project requires for users to upload images, I looked into medical websites that lets users upload medical files to their account. I ran across [image32.com](https://www.image32.com) and I found their upload system very easy to use.



Simple drag and drop feature which allows users to upload their medical data to the server. Not only that but after uploading files, users can go back and search their previous uploads through "Quick Search".

Technologies Used:

- Apache
- J2EE
- PHP
- jQuery
- Javascript

Cost: \$3,555

Bad Example

<http://www.houstonphysicianshospital.com/index.html>

The screenshot shows the homepage of the Houston Physicians' Hospital website. At the top left is the hospital's logo with the text "HOUSTON PHYSICIANS' HOSPITAL". Below it is a banner with the text "A personal approach to specialty care." and a photo of the hospital building. To the right of the banner is a large photo of a smiling woman in a white lab coat. On the left side, there is a vertical navigation menu with links: Home, Specialty Services, Patient Information, Meet the Physicians, Directions to Facility, Take a Tour, and News. A small photo of two people in a medical setting is also present. The main content area is titled "Concierge Care" and contains two columns of text. The first column discusses the hospital's commitment to personalized care and its service area. The second column discusses patient interactions, staff-to-patient ratios, and amenities.

Scrolling text moves too fast to read. The home page automatically plays a video with sound, which gets annoying after replaying it over and over. Difficult to get to the exact page you are looking for.

The screenshot shows a page from the website. On the left, there is a sidebar with the text "Take a Tour & Directions" and a link "Directions to Facility". The main content area is titled "Operating Room" and contains a brief description of the hospital's operating rooms. Below the text is a large, dark gray rectangular area with a small puzzle piece icon in the center, likely a placeholder for a video or image that is not loading correctly.

Outdated software used for some video playbacks, which does not even load.

Technologies Used:

- Apache
- Perl
- jQuery
- Javascript

Cost: \$4,454

Bad Example:
<http://www.gonzalezmd.com/>

Industrial & Family Practice Clinic
Hugo R. Gonzalez, M.D. & Associates, P.A.
Hours: M-F 7:30 a.m. - 9:00 p.m.; Sat 8:00 a.m. - 5:00 p.m.
13125 East Freeway Houston, TX 77015
Industrial: (713) 453-
Family: (713) 453-

Family Medicine

Our facility has served the East Houston area for over 40 years, providing comprehensive healthcare for children, adults and seniors. We have both regular office hours and extended hours through our night clinic. Walk-ins are welcome and appointments are also available during regular office hours.

Services Include:

- Evaluation and treatment of acute and chronic medical illnesses
- Well child exams
- Immunizations
- School Physicals
- Well Male Exams
- Well Woman Exams
- Pap Smears
- EKG
- X-Ray
- Bone Density Testing/Dexascan (Osteoporosis)
- Comprehensive Physical Exams
- Foreign Travel Immunizations

If you are in need of medical care please call for an appointment (713-453-8328) or walk-in.

Clinic Hours:

	General Office Hours	After Hours/Urgent Care
Monday	7:30 am to 5:00 pm	5:00 pm to 9:00 pm
Tuesday	7:30 am to 5:00 pm	5:00 pm to 9:00 pm
Wednesday	7:30 am to 5:00 pm	5:00 pm to 9:00 pm
Thursday	7:30 am to 5:00 pm	5:00 pm to 9:00 pm
Friday	7:30 am to 5:00 pm	5:00 pm to 9:00 pm
Saturday	Closed	8:00 am to 5:00 pm
Sunday	Closed	Closed

Meet The Doctors!

Webpage looks too empty and uses a very old style layout, giving it a very old and outdated feel. Furthermore, clicking the website logo does not take you back to the homepage. Web menus are not drop down and does not show subcategories.

Technologies Used:

- Apache
- Adobe Dreamweaver
- Javascript

Cost: \$11,406

DANIEL FEASIBILITY

Good Example:

<http://www.antoinedental.com/>



At first, I thought this website had an AI bot chat window but I tested it out and to my surprise it was actually a real person. The website is full of smiling people which attracts customers.

Technology Used:

- Apache
- Comodo
- JQuery
- PHP

Cost: \$300

Bad Example:

<http://www.houstonmedicalcenterdental.com/>



The website template looked very nice but three of the six menu buttons do not work or is incomplete. Images used seem out of place. This website is for a dental office so the web developers could have used pictures of kids/families smiling instead of showing empty office rooms.

Technology Used:

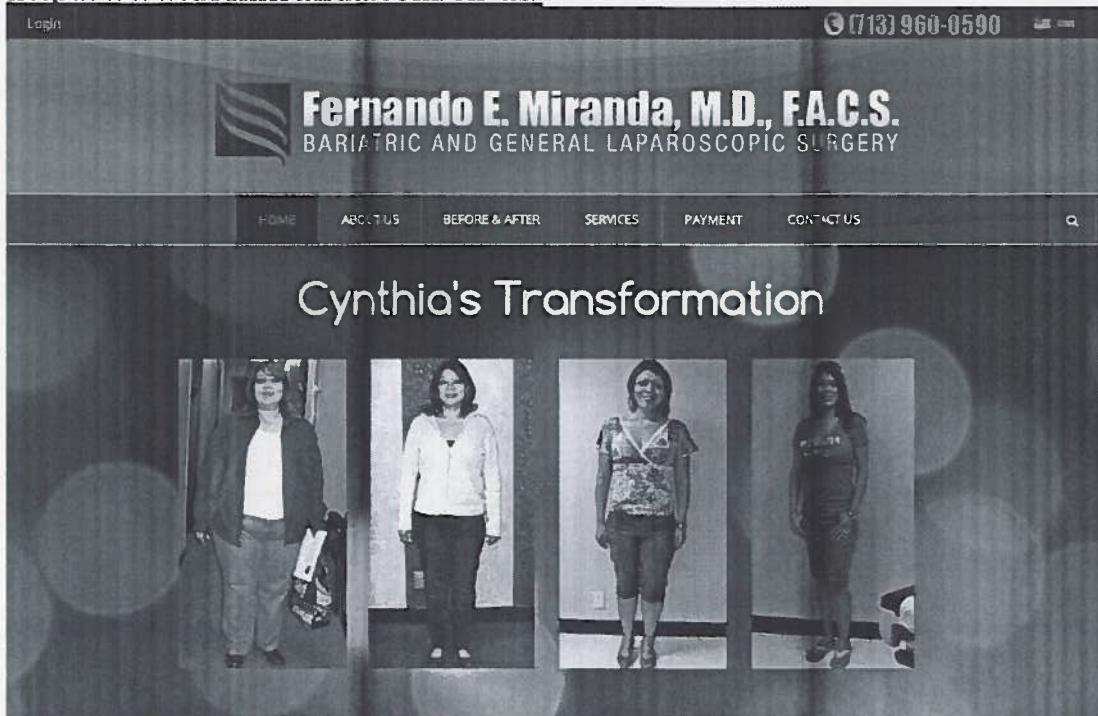
- Nginx
- Parallels SSL
- WordPress
- PHP
- Javascript

Cost: \$580

PAUL FEASIBILITY

Good Example:

<http://www.drfmiranda.com/en-us/>



Bariatric and Weight Loss Surgery in Houston, Texas

Website uses amazing flash work to capture user's attention and show the services they offer.

A testimonial from Melissa Gray. It includes a small photo of her labeled "After" and text from her. The text reads:

Dear Dr. Miranda and staff.
I want to take a minute and say thank you to all of you. Dr. Miranda has saved my life! He is a great surgeon and I want to thank his staff for helping me through out this journey!
Without all of you I wouldn't be 180 pounds healthier!
Sincerely,

TEAM4OIES is to implement testimonials on the website and this website shows testimonials from their customers and before and after pictures of procedures done.

Technologies Used:

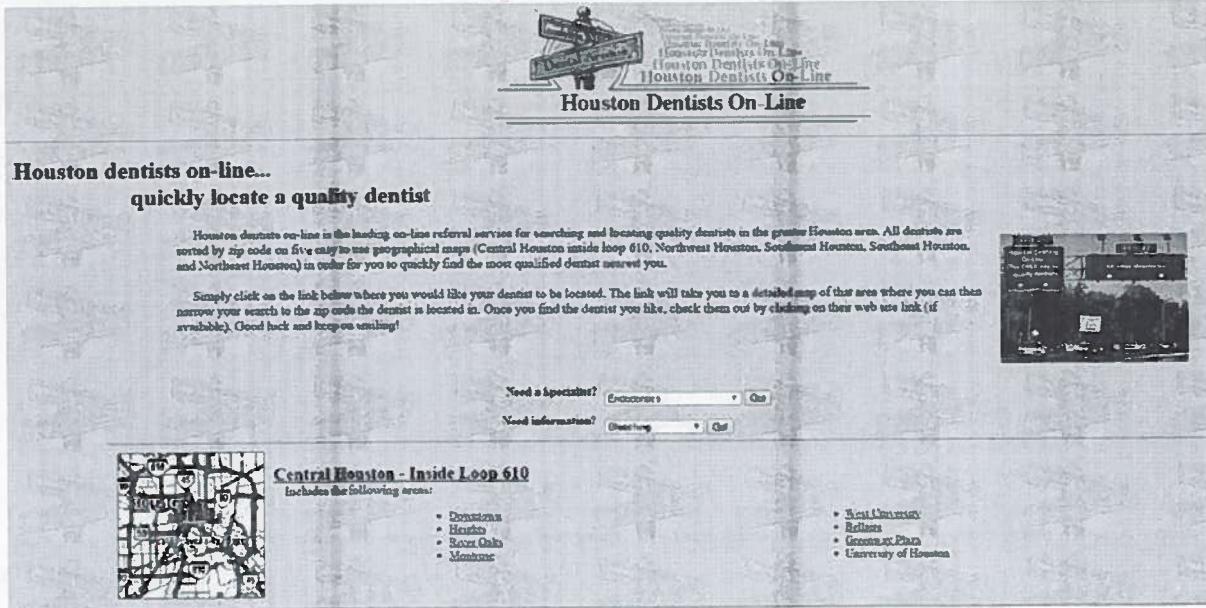
- IIS 7
- ASP.NET Ajax
- jQuery
- Javascript

Cost: \$4,455

Melissa Gray



Bad Example:
<http://www.dentistsofhouston.com/>



Website has no menus, no "About Us", or no "Contact Us" pages. Website is just plain text and could also use a better logo.

Technologies Used:

- nginx
- Comodo

Cost: \$500?

STEVEN FEASIBILITY

Good Example:

<http://www.memorialhermann.org/>

Site Technologies Include:

- IIS 7
- ASP.NET Ajax
- PHP
- Adobe ColdFusion
- JQuery UI
- Javascript

Cost: \$50,000

The screenshot shows the homepage of the Memorial Hermann website. At the top, there is a navigation bar with links for "About Us", "Careers", "Give & Volunteer", "Locations", and "Contact Us". Below the navigation bar, there is a search bar and a "Schedule Now" button. The main content area features logos for MD Anderson Cancer Center (Breast Care) and Memorial Hermann, followed by the text "Two names you know well. Now working together in five locations." A "Schedule Now" button is also present here. Further down, there is a "Find a Location" search bar, a "Specialty Services" section listing "Children's Health", "Heart & Vascular Care", "Neuroscience", and "Orthopedics & Sports Medicine", and a "Body of Experts" section with a "View All Videos" link. On the left side, there is a "Top News" section with three articles and a "View more news" link. In the center, there is an "Events & Classes" section with three event cards: "Knee/Joint Replacement Pre-Operative - Memorial City" (February 3, 2015), "Joint Pain Seminar - Managing Foot/Ankle Pain - JCC" (February 3, 2015), and "Epilepsy Support Group - Texas Medical Center" (February 3, 2015). A "View more events & classes" link is located at the bottom of this section.

Easy to use drop down menu on hover. Clear resize text option to adjust font size on website. Website logo takes you back to homepage from any point.

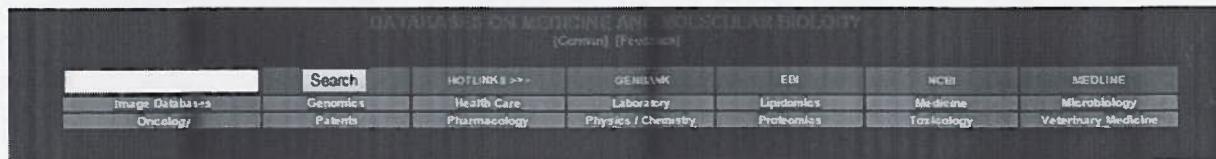
Bad Example:

<http://www.meddb.info/>

Site Technologies Include:

- Apache
- PHP

Cost: \$12,038?



Homepage just consists of menu, which is very small and hard to read.



Search	HOTLINKS >>	GENBANK	EBI	NCBI	MEDLINE
Image Databases Oncology EBM	Genomics Patients Epidemiology	Health Care Pharmacology History	Laboratory Physics / Chemistry Law	Lipidomics Proteomics Water supply	Medicine Toxicology Veterinary Medicine
AHRO - EBM	AGENCY FOR HEALTHCARE RESEARCH AND QUALITY - EVIDENCE-BASED MEDICINE™ INFO Collection of documents by the Agency for Healthcare Research and Quality. http://www.ahrq.gov/clinic/epicx.htm				
ALLIE	A SEARCH SERVICE FOR ABBREVIATION / LONG FORM Allie is a search service for abbreviations and long forms utilized in Lifesciences. It provides a solution to the issue that many abbreviations are used in the literature, and polysemous or synonymous abbreviations appear frequently, making it difficult to read and understand scientific papers that are not relevant to the reader's expertise. Allie searches for abbreviations and their corresponding long forms from titles and abstracts in the entire MEDLINE database. http://allie.ncbi.nlm.nih.gov/				
CEHA	WHO - CEHA LIBRARY DATABASE It includes more than 9,500 titles covering all Environmental Health aspects with clear focus on water supply and sanitation as a priority in the Eastern Mediterranean Region. Great portion of the available documents are gray literature on Environmental Health in the Region. http://www.emro.who.int/HIS/VHSL/Cehalib.htm				
DARE	DATABASE OF ABSTRACTS OF REVIEWS OF EFFECTS (DARE)™ INFO DARE is a high quality database with structured abstracts of reviews published in the world wide literature, including otherwise difficultly accessible grey literature. http://www.crd.york.ac.uk/crdweb/				
DIRLINE	DIRECTORY OF HEALTH ORGANIZATIONS ONLINE DIRLINE (Directory of Information Resources Online) is the National Library of Medicine's online database containing location and descriptive information about a wide variety of information resources including organizations, research resources, projects, and databases concerned with health and biomedicine. This information may not be readily available in bibliographic databases. Each record may contain information on the publications, holdings, and services provided. DIRLINE contains approximately 10,000 records and focuses primarily on health and biomedicine, although it also provides limited coverage of some other special interests. http://dirline.nlm.nih.gov/				
ETOH	ALCOHOL AND ALCOHOL PROBLEMS SCIENCE DATABASE (ETOH) The Alcohol and Alcohol Problems Science Database, commonly referred to as ETOH, is the most comprehensive online resource covering all aspects of alcohol abuse and alcoholism. Produced by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), ETOH contains over 110,000 records and is accessed by both researchers and clinicians worldwide. Included in ETOH are abstracts and bibliographic references to journal articles, books, dissertation abstracts, conference papers and proceedings, reports and studies, and chapters in edited works. Updated monthly, ETOH contains research findings from the late 1960s to the present, as well as historical research literature. http://etoh.niaaa.nih.gov/expanded.htm				

Federal Science Register

FEDERAL RESEARCH & DEVELOPMENT PROJECT SHAREWARE

Bad use of font and colors, which makes it really hard to read for users. Search function does not work properly.

LOGAN FEASIBILITY

Good Example:

<http://aokemergencyroom.com/>

The screenshot shows the homepage of the AOK Emergency Room website. At the top, there's a navigation bar with links for About Us, Locations & Hours, Services, Community, and Contact. A phone number (832) 429-2402 is prominently displayed. The main header features the AOK logo (a cross inside a square) and the text "EMERGENCY ROOM". Below the header is a large image of medical staff attending to a patient. To the right of the image, text reads "OPEN 24 Hours 7 Days a Week" and "PATIENT TOOLS" with links for Conditions & Injuries, Billing Information, Travel Information, Insurance, Helpful Tips, Laboratory Services, Provide Feedback, and FAQs. On the far right, there are social media links for Facebook and Twitter. The central content area has sections for "Houston 24 Hour Emergency Room", "Houston Emergency Care", "Conditions, Illnesses, & Injuries", "Imaging Services", and "Travel Information", each with a "Read More" button.

Website has easy to use drop down menus. Easy access to About Us and Contact us. Easy links to social medias such as Facebook and twitter.

Technologies Used:

- Apache
- Perl
- jQuery
- Javascript

Cost: \$746

Bad Example:

<http://www.houstonkidsdds.com/>



Website is for a children's dentistry but that does not mean kids will be logging on to it. More than likely parents will be logging onto the website and therefore website should look more professional and easy to access.

Technologies Used:

- Apache
- PHP
- jQuery
- Javascript

Cost: \$4,996

JAVIER FEASIBILITY

Good Example:

<https://www.healthvault.com/us/en>



The screenshot shows the HealthVault homepage. At the top left is the HealthVault logo. To its right are links for "Explore HealthVault" and "Discover apps & devices". On the far right is a "Sign up or sign in" button. Below the header is a large image of a woman playing a cello. To the left of the image, the text "Take control of your health." is displayed, along with a "Explore HealthVault" button. Below the image, the text "What is HealthVault?" is followed by a brief description: "Microsoft HealthVault is a trusted place for people to gather, store, use, and share health information online. Learn more". To the left of this text is a large red checkmark. Below the description are four dark rectangular boxes with white text: "Organize your family's health information.", "Be better prepared for doctor visits and unexpected emergencies.", "Create a more complete picture of your health, with you at the center.", and "Achieve your fitness goals.". Further down the page are sections titled "Connect anywhere" (showing mobile device screenshots) and "Connect your health data" (showing a diagram of data flow between a smartphone, HealthVault, and a computer). A red circle highlights the "Connect anywhere" section.

This website is similar to what I and my team will be building. Website has a clear description on the homepage of what it offers, which attracts customers.



Please enter your email address in the format
someone@example.com.

Microsoft account What's this?

someone@example.com

Please enter the password for your Microsoft account.

Password

Keep me signed in

Sign in

One of the features I really liked on this website and would like to implement in our project is the login function. When a user enters invalid login information, the webpage uses script to give an error message to the user right away instead of sending it to the server.

Technologies Used:

- IIS 7
- ASP.NET
- jQuery
- Javascript
- IFrame

Cost: \$550,000

Bad Example:

<https://www.tuftsmedicalcenter.org>

Technologies Used:

- IIS 7
- Entrust SSL
- ASP.NET 4.0
- JQuery UI

Cost: \$19,222



I think this is a perfect example of a bad website, because it glitches in Chrome browser. Also when user clicks login button, the webpage does nothing (login function not functioning).

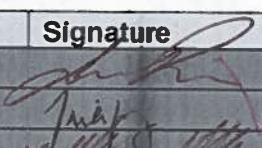
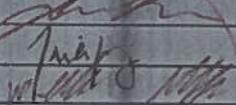
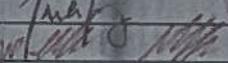
TEAM4OIES

90

Please copy Table 15.3
and adapt to Purple

Version 2.0

Signature Block

COSC 4351	Name	Signature	Date
SE Team Leader	Javier Rivera		2-11-15
SE SQA	Linh Tong		2-11-15
SE SQA	Paul Miller		2-11-15
SE Team Leader			
SE SQA			
SE SQA			
SE Team Leader			
SE SQA			
SE SQA			

Example Actor: Guest

1. Search Testimonials: A guest is able to search through testimonials at their leisure. Once entering the site they will be presented with a button they must press to see available testimonials. After pressing the button the guest will see a table full of testimonials sorted by date.

Input Form:

A screenshot of a web page titled "Testimonials". The title is displayed in a large, bold, black font with a dark gray arrow pointing towards it from the top right. Below the title is a search bar containing the placeholder text "Search...". To the right of the search bar is a blue rectangular button with the word "Go!" in white. The entire interface is set against a light gray background.

Output Report:

Testimony	Date
Customer message Customer message	Month\Day\Year

DOCUMENT CONTROL

CHANGE HISTORY

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1.C	Jainesh Mehta	02/08/2015	Add your work to Document
1.X	Paul Miller	02/09/2015	Review Document
1.Y	Linh Tong	02/09/2015	Review Document

Table 2: Entries when work completed (SVN Commit Comment matches Description)

Revision	Name	Completed Date	Description
1.A	TM Daniel Gonzalez	02/10/2015	Created the output report
1.B	TM Steven Pate	02/09/2015	I put together a design for the input report
1.C	DBA Jainesh Mehta	02/10/2015	Changed text for output report.
1.X	SQA Paul Miller	02/10/2015	I reviewed Document
1.Y	SQA Linh Tong	02/10/2015	I reviewed Document

Table 3: TL entry for RED DELIVERABLES (SVN Commit Comment matches Description)

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2.0	TL Javier Rivera	02/11/2015	I changed Version to 2.0

DOCUMENT STORAGE

This file is stored in SVN at <https://svn.cs.uh.edu/svn/cosc4351/team4/TEAM PROJECT DELIVERABLES/Input Forms and Output Reports.doc>.

Put due date?

TEAM4OIES

Team Project Report

Note: Please
copy Table 1, 2, 3
and
adapt for
PURPLE TOTALS
DELIVERABLES

Version 2.0

Signature Block

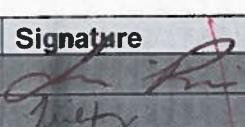
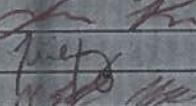
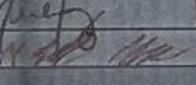
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SE Javier Rivera	Javier Rivera		2-11-15
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SE Team Leader			
SE SQA			
SE SQA			
SE Team Leader			
SE SQA			
SE SQA			

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1. CHAPTER I: INTRODUCTION TO TEAM4OIES

1.1 INTRODUCTION

TEAM4OIES is an international online database system to be used to store, manage, visualize, and query EVAR (EndoVascular Aneurysm Repair) data in the form of medical images.

TEAM4OIES will allow Surgeons, Technicians, and Computational Scientists to collaborate in collecting data on the patients that have had this surgery. The goal will be to have a large patient database with metrics on the distention of the aorta before and years after the endovascular aneurysm repair.

1.2 RESEARCH METHODOLOGY

TEAM4OIES will be the first of its kind. Doctors will be able to upload anonymous patient information. Technicians will be able to upload patient data. Computational Scientist will be able to download, run metrics on the data, and upload the data. Although this type of program will be the first of its kind, the technology to accomplish this is accessible.

1.3 REPORT ORGANIZATION

We have organized the report with the user in mind. Chapter II will offer a better understanding to the on the Historical, Economical, and Maintenance Aspect that we have taken into account and addressed in TEAM4OIES.

Chapter III will offer a better understanding to the layperson on what variables will go into creating a software product. Anyone can hire a few programmers to "hack" a product together, but it takes meticulous design to create a great product that will be future proof.

Please
make
sure
you
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subsequent
chapters

2. CHAPTER II: REQUIREMENTS

2.1 PROBLEM STATEMENT

Historical aspect

The majority of software products are not delivered on time, exceed budget limits, lack functions that were promised or have several bugs and faults. In a study performed in 2006, approximately 46% of projects fit into this category. Although these projects were completed and installed, they faced one of the problems listed. To prevent our project from experiencing any of these problems, we need to take several precautions.

To ensure that our project would be delivered on time, deadlines have been set for our deliverables and work has been delegated equally among the members of the team. Having the work split evenly among members assures a higher probability of having the work completed on time. We also want to make sure our project

will function the way the client needs it to. During the requirements and analysis phase, we will determine what the client needs and will research ways to satisfy these requirements. For our project to be bug-free as possible, we will rely on our SQA's to continuously test and check our deliverables to make sure that everything is functioning properly without errors. Because this is a class project, we will not need to worry about exceeding the budget.

Economical Aspect

The economic principle of software development dictates that as the software developers, we must take into consideration the short and long-term impact of our software on our client. The product that we create needs to work according to our client's specification, and at the same time, it also needs to be easy to maintain. We would like develop the product using a simple user interface that the client can easily navigate. By doing so, it eliminates the extra cost and time incurred to train the employees on how to use the software. This will also help the client in the long run if they decide to hire new employees that will need training for the software.

Maintenance Aspect

As software developers, we will need to develop the product using the waterfall model. The waterfall model consists of six different stages. During the first stage, the requirements phase, we identify the client's requirements and the concept of the software. Then the analysis phase requires that we produce the specification document and the software project management plan. The specification document explains what the product should do and the software project management plan describes the software development process in detail. The design phase contains two design procedures: the architectural design and the detailed design. The architectural design is where the project will be broken into parts called modules and will then be designed in the detailed design procedure. The implementation phase involves two steps, coding and testing. When our product has been coded, it will then be sent to the client for testing. Once the client is satisfied with the product, this marks the end of the implementation phase and the beginning of postdelivery maintenance. In this phase, we perform corrective maintenance. Any errors or faults that happen after the software is installed will need to be corrected. We may also need to enhance or update the software by making changes to the specifications and having these changes implemented. The final stage is retirement in which the product is no longer useful to the client and will need to be removed. If our software is deemed inadequate by the client, we will remove the software.

2.2 EXPANDING THE BORDERS

The postdelivery maintenance stage in the software life cycle is very important. This phase incurs the majority of software costs. Our product serves as a model of the real world, but the real world is constantly shifting. Therefore, we would expect that our software product would also change to reflect the real world. Such

Please add

changes can include a change in sales tax or a change in company policy. For our software project, we should employ techniques that would help to decrease the overall cost of postdelivery maintenance. The client may need to make changes to the software. For example, the client's company decides to change the formatting of the patient IDs. Therefore, we will need to code our software so that it will allow for easy changes to be made.

on TEAM4IES

2.3 EXPANDING VS. REPLACING THE SYSTEM

During postdelivery maintenance, we may need to perform two types of enhancement: perfective maintenance and adaptive maintenance. Perfective maintenance are changes made to the software that will boost its effectiveness where adaptive maintenance is changes that are made when the environment fluctuates. Under perfective maintenance, our client may request for additional functionality. At the moment, only certain users (i.e. surgeons) are allowed to upload EVAR CT scans and download CFD flow simulations. In the future, our client may want other users to have that ability, so as the software developers, we should be able to implement this additional function for them. Changes in the environment may necessitate adaptive maintenance. Our website should run on Chrome and Firefox browsers. Updates to the browsers may cause our website not to function properly. Therefore, we need to remain up-to-date and make sure that our software will always be up and running.

2.4 CONCLUDING REMARKS

TEAM4IES will develop a software product that will meet the requirements and contain the functionalities requested by the client. It will need to be bug-free, delivered on time, and easy to maintain. In order to accomplish this, we will follow the stages of the software life cycle and incorporate techniques that follow the software development process. We will try to minimize future maintenance costs and produce a completed software product that will fulfill the client's needs.

3. CHAPTER III: EDUCATING THE USER

3.1 THE SOFTWARE PROCESS

The Unified process consists of Inception, Elaboration, Construction, and Transition. During the Inception phase, there is emphasis on the business modeling and the requirements of the project. During this phase we discuss risks and specifications of the projects. After the Inception phase we will get into the Elaboration phase which is where we really get an idea of how to do our project. We will also discuss the requirements in more detail along with the risk factors. During this phase, we will build use case diagrams and basic class diagrams. Finally we will get a cost and schedule to develop the project. Next we transition into the Construction Phase where we will implement and build our software. We will prioritize the foundation of the project using more in depth

Please change

MVC UML diagrams. Every iteration of this phase will result in more software changes to eventually complete the foundation. Finally the last phase is the transition phase where we will turn the project in to the client and receive feedback. If the client wants something to change we will give him an estimate on how long and how much and get to work to meet specifications. As we work on this project, we will add compatibility maturity models to assist us in having as few bugs as possible.

3.2 PROBLEMS WITH SOFTWARE COMPLEXITY

Software is the most complex thing built by human kind. Because of this, great care must be taken into building the software. Our group will take great care into designing the software with models and UML to ensure that we fix most potential bugs in planning as opposed to during development.

3.3 PROBLEMS WITH SOFTWARE CONFORMITY

An important part of software is to work in unison with existing software. As a team we will carefully plan out the software we use to design the web app/database and make sure that our software meshes well with software already developed by the client.

3.4 PROBLEMS WITH SOFTWARE CHANGEABILITY

A large problem with software changeability is that the software must be constantly updated if the software doesn't adapt, it WILL die. If the software is well designed, there will be pressure from happy customers to constantly improve the product. Despite these things, software is very easy to change and modify. In our group we hope to make the best software and keep the customer satisfied.

3.5 PROBLEMS WITH SOFTWARE INVISIBILITY

A huge problem with software development is the fact that it is hard to see the product as we are making and hard to imagine it during development. A good way to counteract invisibility is with UML Models and flowcharts. Even with good flowcharts, it is impossible to get a grasp of the product fully. In our group, we plan to have a very detailed model and if we miss something during planning we will quickly modify our charts and models.

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This project requires that we have great models and UML. By planning the project appropriately, we will hopefully avoid the five issues faced above and build a successful database for our client. As long as our group follows the Unified Process and our models, we are sure to create great software for our client.

please
add
TENTH POINTS
recommendations

DOCUMENT CONTROL

CHANGE HISTORY

Table 1: TLs entries (assigned work and due dates) before releasing to the team (all SQAs)

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2.0	TL Javier Rivera	02/11/2015	I changed Version to 2.0

DOCUMENT STORAGE

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Please add

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on TEAM4IES

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1.Y	SQA Linh Tong	02/10/2015	I reviewed Document

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2.0	TL Javier Rivera	02/11/2015	I changed Version to 2.0

DOCUMENT STORAGE

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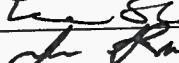
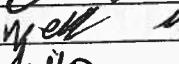
TEAM4OIES

DB Team Project with Line Numbers for ERD Modeling

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Version 2.0

Approvals Signature Block

	Name	Signature	Date
DBA	JAINESH MEHTA		2/11/2015
DBA	Logan Stark		2/11/2015
TL	Javier Riveron		2-11-2015
SQA	Paul Miller		2/11/2015
SQA	Linh Tong		2/11/2015

of Es: 7

Table of Es:

E #	E Name
E1	E Patient
E2	E CTScan
E3	E Study
E4	E Series
E5	E Slice
E6	E User
E7	E AnatomicalData

of E Attributes: 70

Table of Attributes:

E Name	Attribute #	Attribute Name
E Patient	A1	id
	A2	originalID
	A3	firstName
	A4	lastName
	A5	birthdate
	A6	sex
	A7	age
	A8	entryDate

E Name	Attribute #	Attribute Name
E CTScan	A1	id
	A2	dateOfSurgery
	A3	brand
	A4	diameter
	A5	length
	A6	unilateralLegDiameter
	A7	unilateralLegLength
	A8	controlaterLegDiameter
	A9	controlaterLegLength
	A20	entryPoint
E Study	A1	id
	A2	originalId
	A3	description
	A4	modality
	A5	date
	A6	time
	A7	referringPhysician
	A8	institution
	A9	additionalPatientHistory
	A10	entryDate
E Series	A1	id
	A2	originalSeriesId
	A3	description
	A4	entryDate
E Slice	A1	id
	A2	inOrder
	A3	filename
	A4	title
	A5	width
	A6	height
	A7	resolution
	A8	coordinateOrigin
	A9	bitsPerPixel
	A10	displayRange
	A11	entryDate

E Name	Attribute #	Attribute Name
E User	A1	userType
	A2	firstName
	A3	lastName
	A4	username
	A5	password
	A6	email
	A7	institution
	A8	active
	A9	online
E AnatomicalData	A1	lumenVolume
	A2	partialLumenVolume
	A3	skeletalCoordinates
	A4	skeletalCurviture
	A5	bifurcationAngles
	A6	neckAngle
	A7	sacArea
	A8	aDataID

of Rs : 5

Table of Rs:

R #	R Name
R1	Has
R2	Has
R3	Has
R4	Has
R5	Analysis

of R Attributes: 0

Table of Descriptive Attributes:

R Name	Attribute #	Attribute Name

of Views : 0

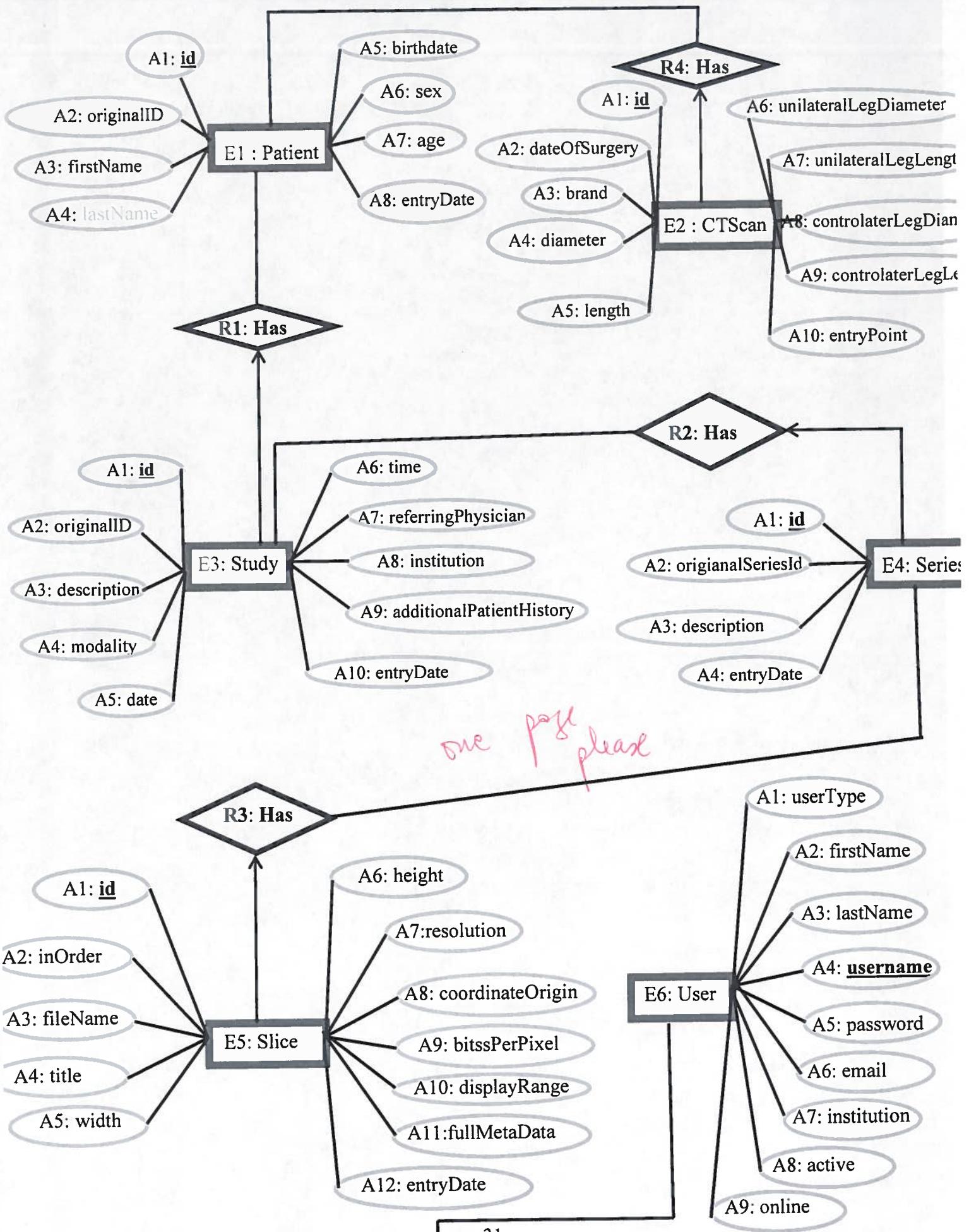
Table of Vs: V # V Name

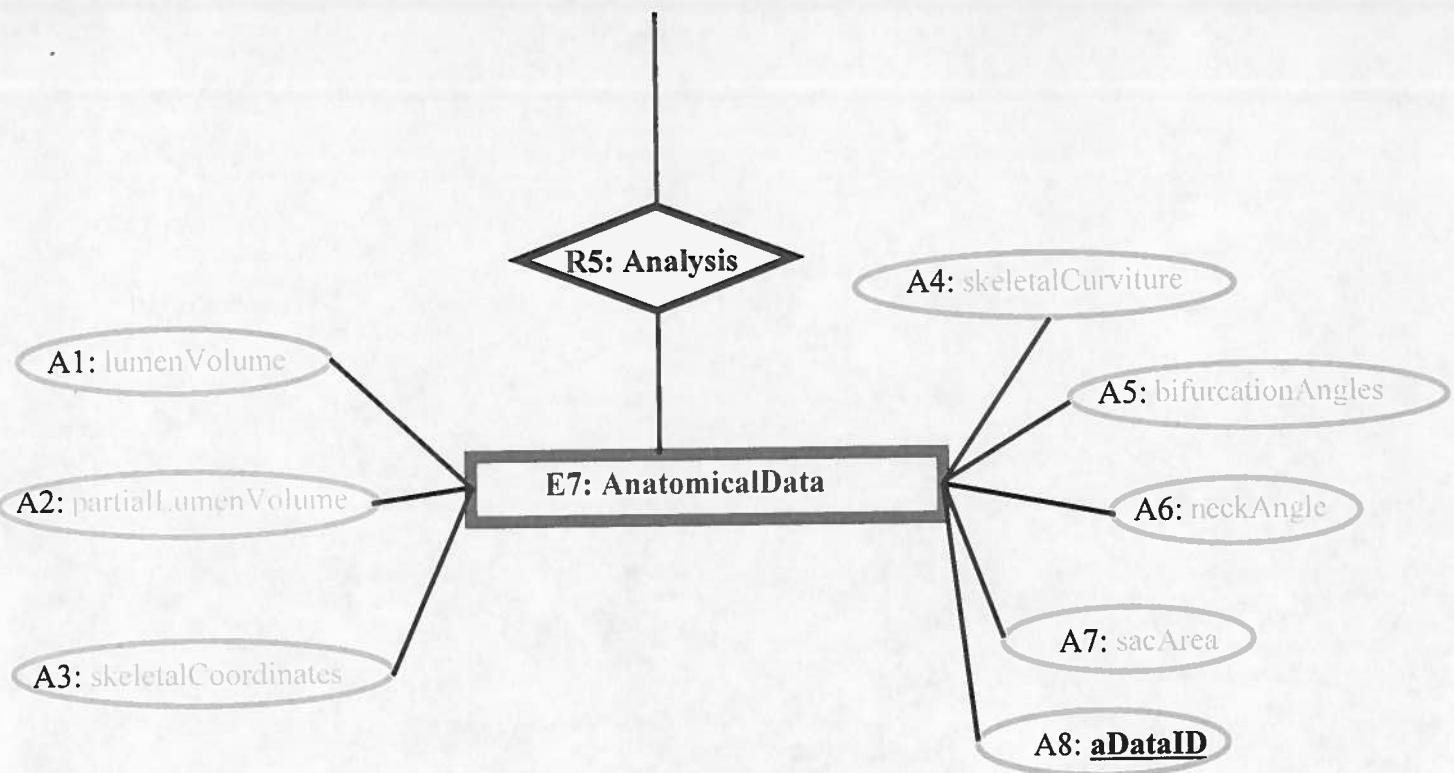
V #	V Name	I/O Attributes

of Triggers : 1

Table of Ts: **T #** **T Name**

T #	T Name	Attributes
1	Email	





Document Control

CHANGE HISTORY

Table 1: TLs entries (assigned work and due dates) before releasing to the team (all DBAs & SQAs)

Revision	Name	Due Date	Description
1.A	Logan Stark	02/08/2015	Complete XXX
1.B	Jainesh Mehta	02/08/2015	Complete YYY
1.X	Linh Tong	02/09/2015	Review Document
1.Y	Paul Miller	02/10/2015	Review Document

Table 2: DBAs & SQAs entries when they completed their work

Revision	Name	Completed Date	Description
1.A	Logan Stark	02/10/2015	I completed textual analysis, and created charts. I certify that the TEAM has used "COMPILED" ERD LANGUAGE where EACH E, R, and A has a NUMBER and LABEL and they are marked on THIS DOCUMENT.
1.B	Jainesh Mehta	02/10/2015	I completed ERD diagrams, some Relationships, charts on page 2-10. I certify that the TEAM has used "COMPILED" ERD LANGUAGE where EACH E, R, and A has a NUMBER and LABEL and they are marked on THIS DOCUMENT.
1.X	Linh Tong	02/10/2015	I reviewed Document
1.Y	Paul Miller	02/10/2015	I reviewed Document

355

Table 3: TLs entry for RED DELIVERABLES (SVN Commit Comment matches Description)

Revision	Name	Due Date	Description
2.0	Javier Rivera	2/11/2015	I changed Version to 2.0 And finalized the document

DOCUMENT STORAGE

This file is stored in SVN at <https://svn.cs.uh.edu/svn/cosc4351/team4/DB TEAM PROJECT DELIVERABLES /DB Team Project with Line Numbers for ERD Modeling.doc>.

Assumptions: **None**

	3. Controller receives the user input and changes the account permission
Alternative:	Actor requests to modify user account <ul style="list-style-type: none"> 1. Controller receives the request and the account information 2. Controller returns account not found message
Pre-Condition:	Actor requests to modify user account
Post-Condition:	User account is modified or an account not found message is returned
Assumptions:	None

Name:	UCuploadAnatomicalData
Actor:	Super Admin, Admin, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Computational Scientist) to upload anatomical data
Successful Completion:	Actor requests uploading anatomical data <ul style="list-style-type: none"> 1. Controller calls function anonymizeData, which will anonymize the data 2. Anonymized data is uploaded to the Database and successful message is sent to the user
Alternative:	Actor requests uploading anatomical data <ul style="list-style-type: none"> 1. Controller calls function anonymizeData, which will anonymize the data 2. Controller is unable to upload to database and error message is returned
Pre-Condition:	Actor requests uploading anatomical data
Post-Condition:	The data is uploaded or an error message is returned

Condition:	receives an error message
Assumptions:	None

Name:	UCaccessSupport
Actor:	Super Admin, Admin, Doctor, Technician, Visitor, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician, Visitor, Computational Scientist) to access live online support chat
Successful Completion:	<p>Actor requests to access support</p> <ol style="list-style-type: none"> 1. Controller receives the request 2. Controller displays live online chat window
Alternative:	<p>Actor requests to access support</p> <ol style="list-style-type: none"> 1. Controller receives the request 2. Controller displays a representatives are busy message or a chat is offline message
Pre-Condition:	Actor requests to access support
Post-Condition:	A chat window is displayed, a busy message is displayed, or an offline message is displayed
Assumptions:	None

Name:	UCmodifyAccount
Actor:	Super Admin, Admin
Description:	This use case describes the process used by (Super Admin, Admin) to modify a user's account
Successful Completion:	<p>Actor requests to modify user account</p> <ol style="list-style-type: none"> 1. Controller receives the request and the account information 2. Controller displays the account permission for the user

	metadata
Alternative:	Actor requests to download metadata <ol style="list-style-type: none"> 1. Controller receives request and the metadata parameters 2. Controller fails to retrieve and displays error message
Pre-Condition:	Actor requests to download metadata
Post-Condition:	Actor receives requested metadata or an error message is displayed
Assumptions:	None

Name:	UCproduceExcel
Actor:	Super Admin, Admin, Doctor, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Computational Scientist) to produce an excel document containing the requested information
Successful Completion:	Actor requests to produce an excel document <ol style="list-style-type: none"> 3. Controller receives request and the information parameters 4. Controller retrieves the requested information and produces an excel document
Alternative:	Actor requests to produce an excel document <ol style="list-style-type: none"> 1. Controller receives request and the information parameters 2. Controller fails to retrieve requested information and returns an error message
Pre-Condition:	Actor requests to produce an excel document
Post-	Actor receives excel document with requested information or

Assumptions: **None**

Name:	UCdownloadEVARDATA
Actor:	Super Admin, Admin, Doctor, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Computational Scientist) to download a patient's EVAR data
Successful Completion:	<p>Actor requests to download a patient's EVAR data</p> <ol style="list-style-type: none"> 1. Controller receives download information 2. Controller retrieves and delivers the requested EVAR data
Alternative:	<p>Actor requests to download a patient's EVAR data</p> <ol style="list-style-type: none"> 1. Controller receives download information 2. Controller fails to retrieve the requested EVAR data and displays an error message
Pre-Condition:	Actor requests to download a patient's EVAR data
Post-Condition:	Actor receives requested EVAR data or receives an error message
Assumptions:	None

Name:	UCdownloadMetadata
Actor:	Super Admin, Admin, Doctor, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Computational Scientist) to download metadata
Successful Completion:	<p>Actor requests to download metadata</p> <ol style="list-style-type: none"> 1. Controller receives request and the metadata parameters 2. Controller retrieves and delivers the requested

Successful Completion:	<p>The System finishes the anatomical and functional analysis</p> <ol style="list-style-type: none"> 1. Controller receives request to send an email to the appropriate doctor 2. Controller sends the email
Alternative:	
Pre-Condition:	Doctor requests analysis
Post-Condition:	The email is sent to the appropriate doctor
Assumptions:	None

Name:	UCsearchDatabase
Actor:	Super Admin, Admin, Doctor, Technician, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician, Computational Scientist) to search the database
Successful Completion:	<p>Actor requests to search the database</p> <ol style="list-style-type: none"> 1. Controller receives the search parameters 2. Controller displays the desired search
Alternative:	<p>Actor requests to search the database</p> <ol style="list-style-type: none"> 1. Controller receives the search parameters 2. Controller displays no results found
Pre-Condition:	Actor requests to search the database
Post-Condition:	The search results are displayed

Pre-Condition:	Actor requests to view Slice Data
Post-Condition:	View is retrieved to the Actor successfully or unsuccessfully
Assumptions:	None

Name:	UCviewVTU
Actor:	Super Admin, Admin, Doctor, Technician, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician, Computational Scientist) to view the VTU Data of a patient
Successful Completion:	<p>Actor requests to view a specific Slice Data</p> <ol style="list-style-type: none"> 1. Controller receives request to view data 2. Controller displays data to the view
Alternative:	<p>Actor requests to view a specific Slice Data</p> <ol style="list-style-type: none"> 1. Controller receives request to view data 2. Controller denies access and error message is sent to the Actor
Pre-Condition:	Actor requests to view VTU Data
Post-Condition:	View is retrieved to the Actor successfully or unsuccessfully
Assumptions:	None

Name:	UCtriggerEmail
Actor:	
Description:	This use case describes the process used by (System Name) to trigger an email when anatomical and functional analysis are ready to be viewed

Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician) to upload CT Meta Data
Successful Completion:	<p>Actor requests uploading Meta Data</p> <ol style="list-style-type: none"> 1. Controller calls function anonymizeData, which will anonymize the data 2. Anonymized data is uploaded to the Database and successful message is sent to the user
Alternative:	None
Pre-Condition:	Doctor uploads Meta data
Post-Condition:	Meta Data is entered into the database after it is anonymized
Assumptions:	

Name:	UCviewSliceData
Actor:	Super Admin, Admin, Doctor, Technician, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician, Computational Scientist) to view the Slice Data of a patient
Successful Completion:	<p>Actor requests to view a specific Slice Data</p> <ol style="list-style-type: none"> 1. Controller receives request to view data 2. Controller displays data to the view
Alternative:	<p>Actor requests to view a specific Slice Data</p> <ol style="list-style-type: none"> 1. Controller receives request to view data 2. Controller denies access and error message is sent to the Actor

Alternative:	None
Pre-Condition:	Doctor uploads medical data
Post-Condition:	Medical data is anonymized and entered into the database
Assumptions:	

Name:	UCuploadSliceData
Actor:	Super Admin, Admin, Doctor, Technician
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician) to upload CT Slice Data
Successful Completion:	<p>Actor requests uploading Slice Data</p> <ol style="list-style-type: none"> Controller calls function anonymizeData, which will anonymize the data Anonymized data is uploaded to the Database and successful message is sent to the user
Alternative:	None
Pre-Condition:	Doctor uploads Slice data
Post-Condition:	Slice data is entered into the Database after it is anonymized
Assumptions:	None

Name:	UCuploadMetaData
Actor:	Super Admin, Admin, Doctor, Technician

UC2? ↗

Successful Completion:	Actor submits username and password <ol style="list-style-type: none"> 1. The login form is sent to the controller 2. The controller queries the database for the given username and password 3. The controller accepts the request and initiates a Session for the Actor
Alternative:	Actor submits username and password <ol style="list-style-type: none"> 1. The login form is sent to the controller 2. The controller queries the database for the given username and password, finds no match 3. The controller rejects the request and sends error message to the Actor
Pre-Condition:	Actor submits username and password
Post-Condition:	Session is initiated for the Actor and main page is shown or error message is sent
Assumptions:	Actor is already registered into the Database

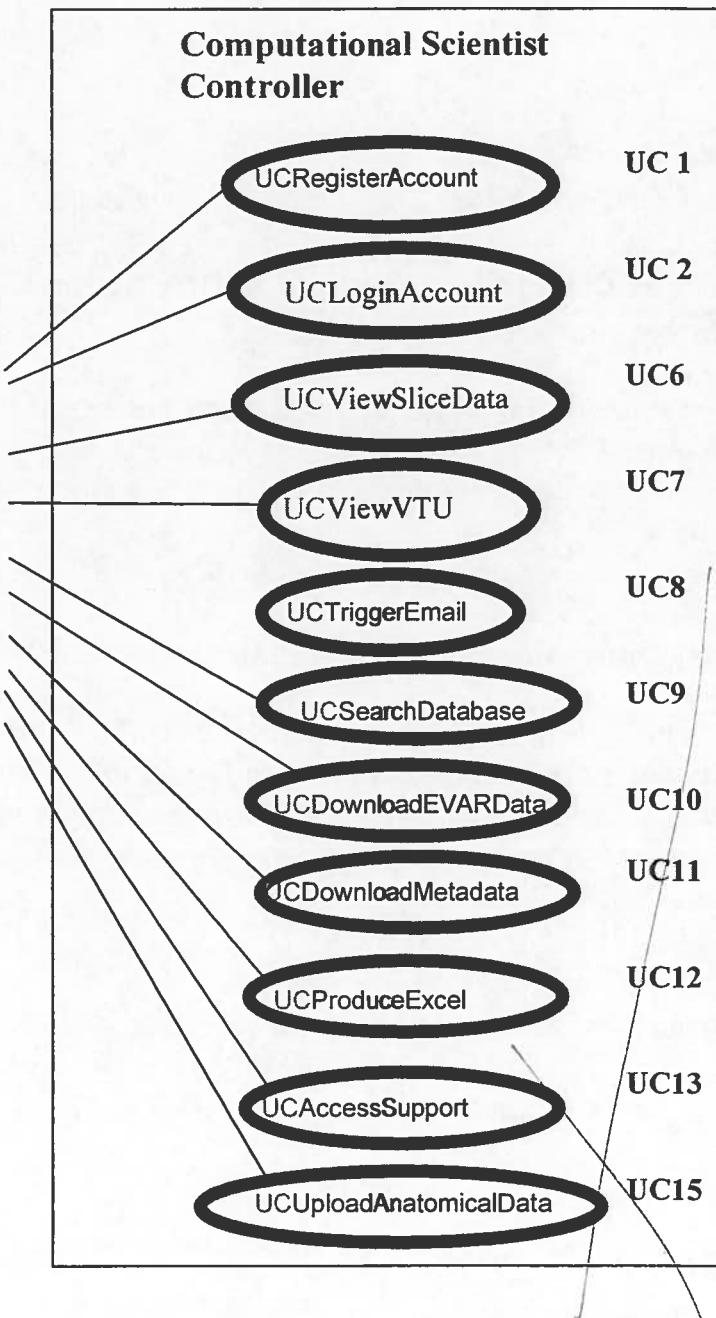
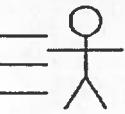
UC# ↗

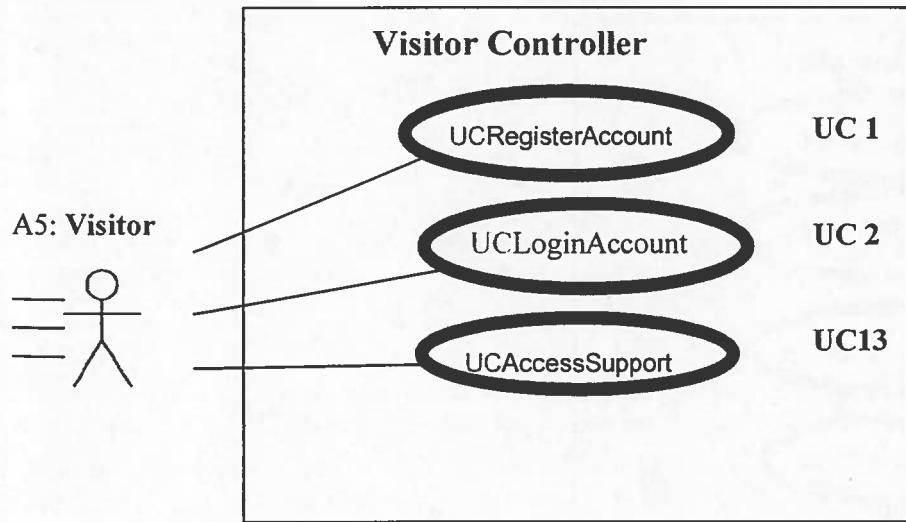
Name:	UCanonymizeData
Actor:	
Description:	This use case describes the process used by the (System Name) to anonymize any Medical data
Successful Completion:	Doctor sends request to upload medical data <ol style="list-style-type: none"> 1. Controller calls function to anonymize the data 2. After completion data is stored into the Database and successful message is sent to the Actor

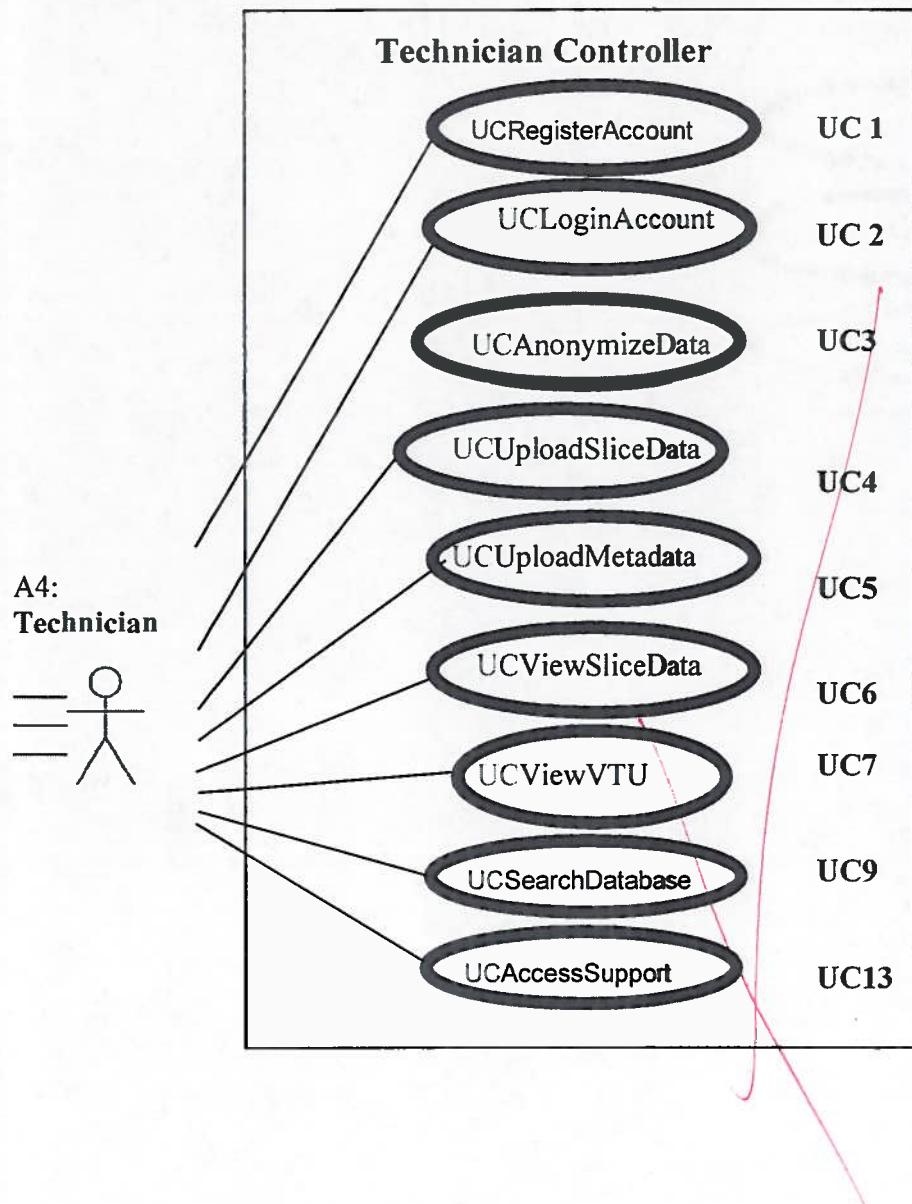
Name:	UCregisterAccount
Actor:	Doctor, Technician, Visitor, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician, Visitor) to register for an Account
Successful Completion:	<p>Actor sends request to register an Account</p> <ol style="list-style-type: none"> 1. The registration form is sent to the controller, and the controller validates the form 2. Controller accepts the form and values are stored into the database 3. Successful message is sent to the Actor
Alternative:	<p>Actor sends request to register an Account</p> <ol style="list-style-type: none"> 1. The registration form is sent to the controller, and the controller finds there is an error in the form 2. Controller rejects the form and error message is sent to the Actor
Pre-Condition:	Actor submits the form
Post-Condition:	Actor information is stored in the database or error message is shown
Assumptions:	None

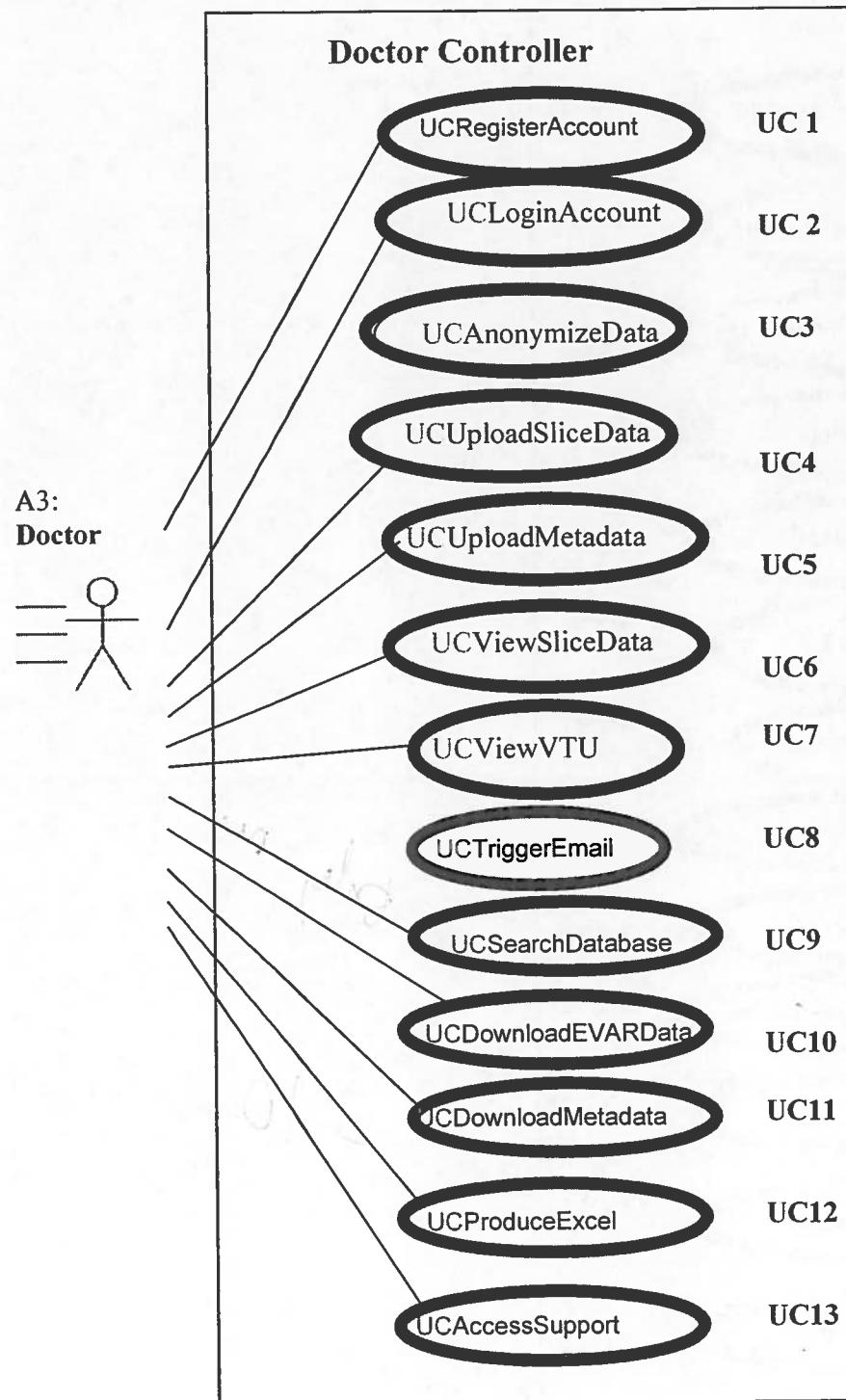
Name:	UCloginAccount
Actor:	Super Admin, Admin, Doctor, Technician, Visitor, Computational Scientist
Description:	This use case describes the process used by (Super Admin, Admin, Doctor, Technician, Visitor, Computational Scientist) to login into the system

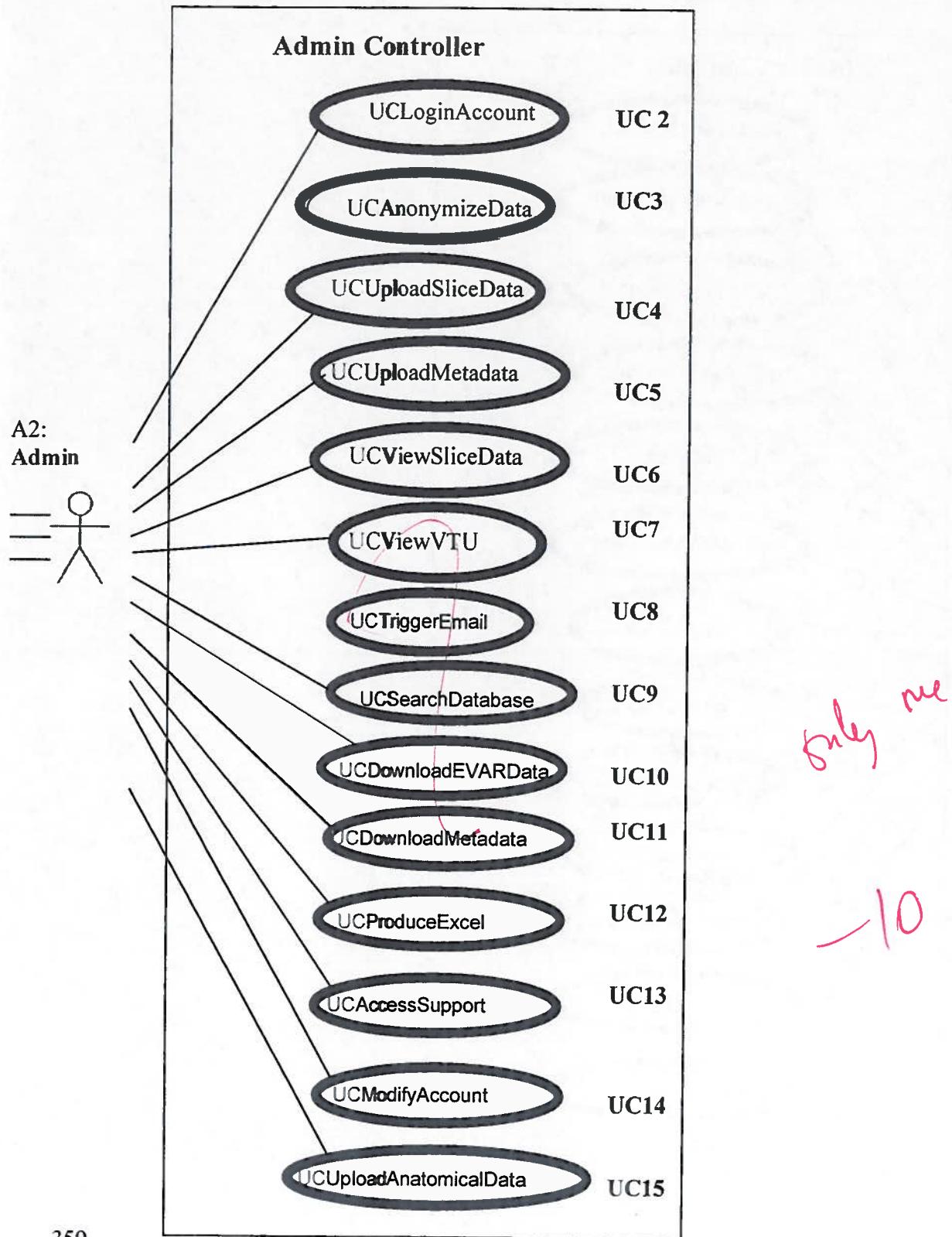
A6:
Computational
Scientist

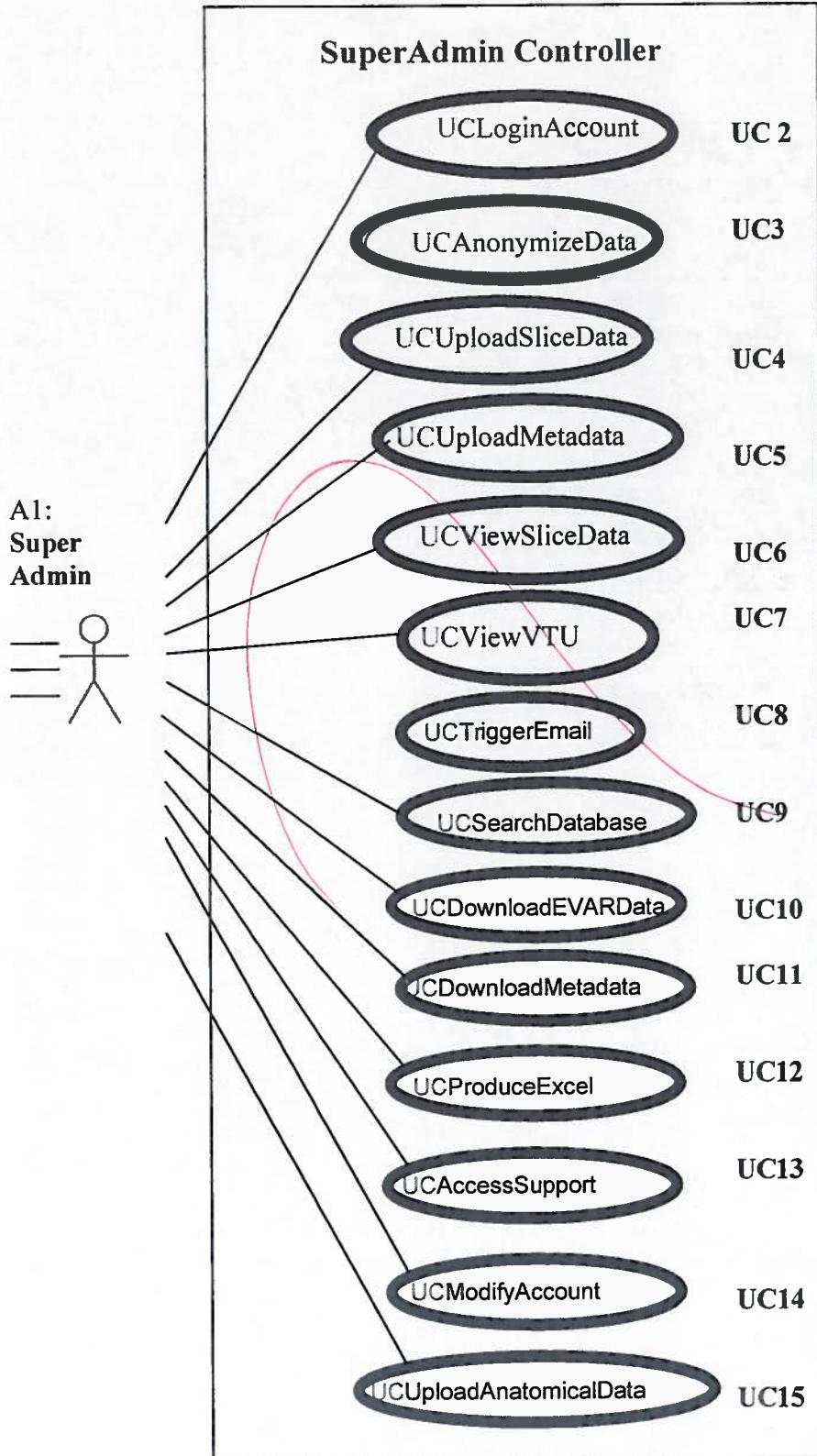












of UCs: 15

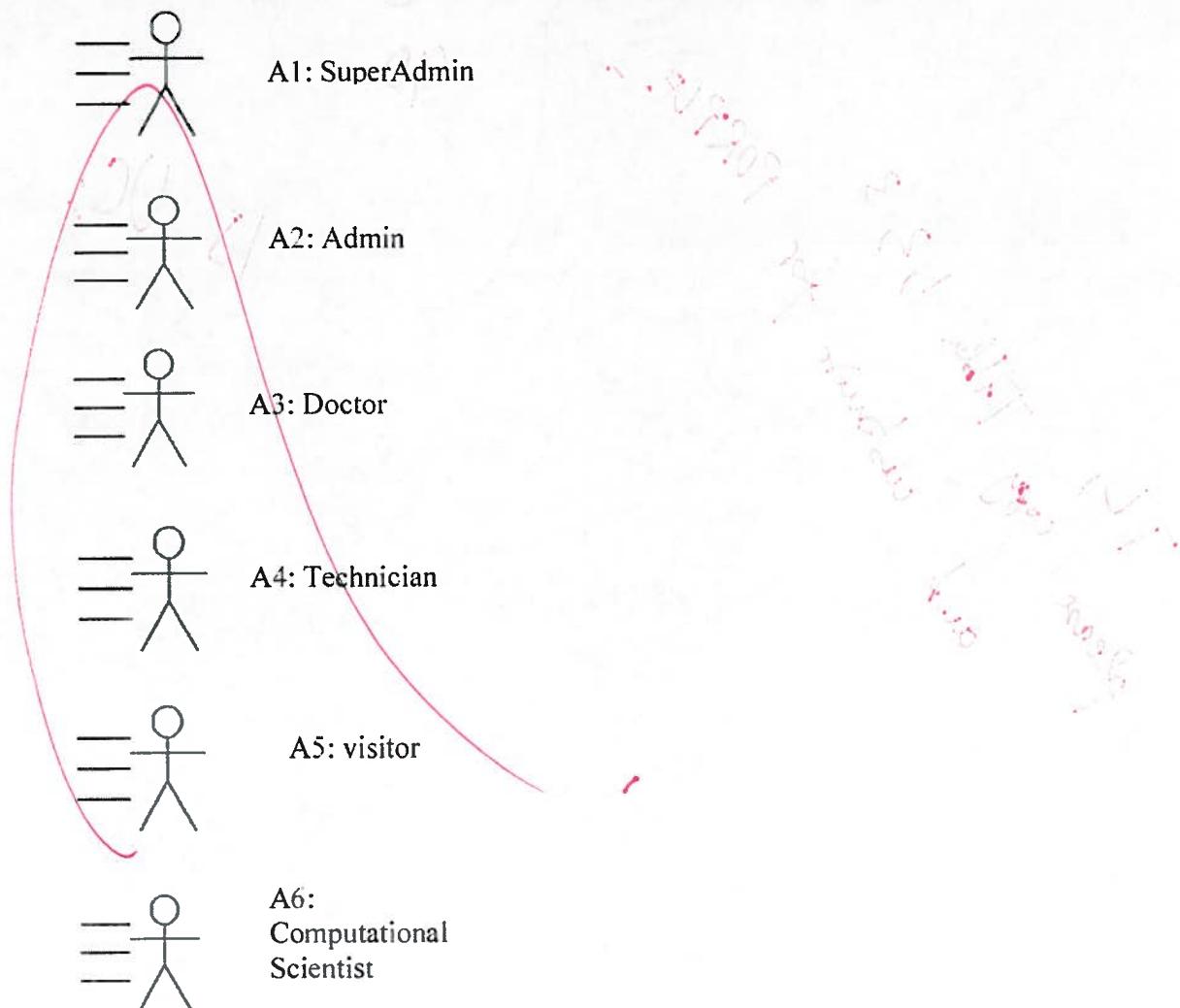
Table of UCs:

UC #	UC Name
1	<i>registerAccount</i>
2	<i>loginAccount</i>
3	<i>anonymizeData</i>
4	<i>uploadSliceData</i>
5	<i>uploadMetadata</i>
6	<i>viewSliceData</i>
7	<i>viewVTU</i>
8	<i>triggerEmail</i>
9	<i>searchDatabase</i>
10	<i>downloadEVARDATA</i>
11	<i>downloadMetadata</i>
12	<i>produceExcel</i>
13	<i>accessSupport</i>
14	<i>modifyAccount</i>
15	<i>uploadAnatomicalData</i>

of Actors: 6

Table of Actors:

Actor #	Actor Role
1	<i>Super Admin</i>
2	<i>Admin</i>
3	<i>Doctor</i>
4	<i>Technician</i>
5	<i>Visitor</i>
6	<i>Computational Scientist</i>



27 - 32
only me - 10
44 ?

TEAM40IES

SE Team Project with Line Numbers

TEXTUAL ANALYSIS for Requirements Workflow

UML USE CASE DIAGRAM

90
15 UCs

12, 13, 14
Please copy this and construct for P.R.P.U. ~

Version 2.0

DOCUMENT CONTROL

CHANGE HISTORY

Table 1: TLs entries (assigned work and due dates) before releasing to the team (both SQAs)

Revision	Name	Due Date	Description
1.A	TM Daniel Gonzalez	02/08/2015	Complete Use Case Modeling
1.B	TM Steven Pate	02/08/2015	Complete Use Case Modeling
1.C	DBA Jainesh Mehta	02/08/2015	Complete Use Case Modeling
1.D	DBA Logan Stark	02/08/2015	Complete Use Case Modeling
1.X	SQA Linh Tong	02/09/2015	Review Document
1.Y	SQA Paul Miller	02/10/2015	Review Document

Table 2: Entries when work completed (SVN Commit Comment matches Description)

Revision	Name	Completed Date	Description
1.A	TM & Name <i>On</i>	02/10/2015	Contributed to the textual analysis (copy and paste), use case modeling, and some of the UC descriptions
1.B	TM Steven Pate	02/09/2015	Completed tables, controllers, and part of the UC descriptions
1.C	DBA Jainesh Mehta	02/10/2015	Fixed some stuff on page 7-10 and page 30.
1.D	DBA Logan Stark	02/10/2015	I fixed a few errors in the USE case descriptions
1.X	SQA Paul Miller	02/10/2015	I reviewed Document
1.Y	SQA Linh Tong	02/10/2015	I reviewed Document

Table 3: TL entry for RED DELIVERABLES (SVN Commit Comment matches Description)

Revision	Name	Due Date	Description
2.0	TL Javier Rivera	02/011/2015	I changed Version to 2.0

DOCUMENT STORAGE

This file is stored in SVN at <https://svn.cs.uh.edu/svn/cosc4351/team4> TEAM PROJECT DELIVERABLES/SE Team Project with Line Numbers for UML USE CASE DIAGRAM.doc.

Part due late?

-65

-71

-30

-34

-32

OOD?

TEAM4OIES

SE Team Project with Line Numbers

TEXTUAL ANALYSIS for

OOA Workflow

UML MVC CLASS DIAGRAM

90
90

close

23

Tables 1, 22 and
Customer for ;
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Version 2.0

of Classes: 23

Table of Classes:

Class #	Class Name	MVC ?
1	Team4OIES	Model
2	Controller	Controller
3	View	View
4	ViewUpload	View
5	ViewDownload	View
6	User	Model
7	Customer	Model
8	Doctor	Model
9	MedTech	Model
10	ComputationalScientist	Model
11	Admin	Model
12	SuperAdmin	Model
13	Patient	Model
14	Study	Model
15	Series	Model
16	CTScan	Model
17	Slice	Model
18	Results	Model
19	CustomerService	View
20	ViewHome	View
21	ViewAbout	View
22	ViewContact	View
23	ViewTestimonials	View

of Attributes: 79

Table of Attributes:

Class Name	Attribute #	Attribute Name
Team4OIES	1	- control: Controller
Team4OIES	2	- view: View
User	1	- firstName: String
User	2	- lastName: String
User	3	- username: String
User	4	- password: String
User	5	- email: String
User	6	- institution: String
User	7	- active: DateTime
User	8	- online: bool
Controller	1	- firstName: String
Controller	2	- lastName: String
Controller	3	- username: String
Controller	4	- password: String
Controller	5	- email: String
Controller	6	- institution: String
Controller	7	- active: DateTime
Controller	8	- online: Bool
Controller	9	- data: String
Controller	10	- annotations: String
Controller	11	- metadata: String
View	1	- patientData: List[Patient]
View	2	- imagePanel: Bitmap
View	3	- scanDropdown: Menu
Patient	1	- patientID: int
Patient	2	- originalID: int
Patient	3	- firstName: String
Patient	4	- lastName: String
Patient	5	- birthdate: DateTime
Patient	6	- sex: char
Patient	7	- age: int
Patient	8	- entryDate: DateTime
Patient	9	- study: List<Study>
Patient	10	- dicomFile: StreamWriter
Patient	11	- dicomHeader: String
Patient	12	- excelFile: StreamWriter
Study	1	- studyID: int

Study	2	- originalStudyID: int
Study	3	- description: String
Study	4	- modality: String
Study	5	- date: DateTime
Study	6	- time: DateTime
Study	7	- referringPhysician: String
Study	8	- institution: String
Study	9	- additionalPatientHistory: String
Study	10	- entryDate: DateTime
Study	11	- series: List< Series >
Study	12	- comparisonReport: List[Results]
Series	1	- seriesID: int
Series	2	- originalSeriesID: int
Series	3	- description: String
Series	4	- entryDate: DateTime
Series	5	- scan: List<CTScan>
CTScan	1	- cTID: int
CTScan	2	- dateOfSurgery: DateTime
CTScan	3	- brand: String
CTScan	4	- diameter: long
CTScan	5	- length: long
CTScan	6	- unilateralLegDiameter: long
CTScan	7	- unilateralLegLength: long
CTScan	8	- controlaterLegDiameter: long
CTScan	9	- controlaterLegLength: long
CTScan	10	- entryPoint: char
CTScan	11	- slice: List<Slice>
Slice	1	- sliceID: int
Slice	2	- inOrder: int
Slice	3	- fileName: String
Slice	4	- title: String
Slice	5	- width: double
Slice	6	- height: double
Slice	7	- resolution: double
Slice	8	- coordinateOrigin: int[]
Slice	9	- bitsPerPixel: int
Slice	10	- displayRange: String
Slice	11	- fullMetadata: data
Slice	12	- entryDate: DateTime

Results	1	- lumenVolume:double
Results	2	- partialVolume: double
Results	3	- coordinates: int[]
Results	4	- curvature: double
Results	5	- bifacAngle: double
Results	6	- neckAngle: double
Results	7	- sacArea: double
CustomerService	1	- visitorId: int
CustomerService	2	- customerId: int
ViewTestimonials	1	- testimonial: String

of Methods : 28

Table of Methods:

Class Name	Method #	Method Name + Params
Team4OIES	1	+ main(): void
View	1	+ viewCTData(): void
View	2	+ zoomImage(image): void
View	3	+ changeDisplay(image): void
Controller	UC1	+ UCRegiserAccount(String firstName, String lastName, String username, String password, String email, String institution, int active, bool online): void
Controller	UC2	+ UCLoginAccount(String username, String password): void
Controller	UC3	+ UCAnonymizeData(String firstName, String lastName): void
Controller	UC4	+ UCUploadSliceData(String data, String annotation): void
Controller	UC5	+ UCUploadMetadata(metadata): void
Controller	UC6	+ UCViewSliceData(): void
Controller	UC7	+ UCViewVTU(): void
Controller	UC8	+ UCTriggerEmail(): void
Controller	UC9	+ UCSearchDatabase(int id): void
Controller	UC10	+ UCDownloadEVARDATA(): void
Controller	UC11	+ UCDownloadMetadata(): void
Controller	UC12	+ UCProduceExcel(): void
Controller	UC13	+ UCAccessSupport(): void
Controller	UC14	+ UCModifyAccount(): void
Controller	UC15	+ UCUploadAnatomicalData(): void
Doctor	1	+ uploadCTData(String data): void
Doctor	2	+ viewPatientInfo(): void
MedTech	1	+ uploadCTData(String data): void
CompSci	1	+ downloadCTData(): void
CompSci	2	+ uploadAnalysisData(String data): void
Admin	1	# editPatientInfo():void
Admin	2	# viewPatientInfo():void
Admin	3	# uploadCTData(String data):void

Admin	4	# downloadCTData():void
Admin	5	# modifyUser(int id): void
CustomerService	1	+ onlineChat(): void
ViewTestimonials	1	+ searchTestimonials(String keyword): String
ViewUpload	1	+uploadData(String data):void
Patient	1	+ extractMetadata(dicomHeader):
Study	1	+ retrieveReport()

DOCUMENT CONTROL

CHANGE HISTORY

Table 1: TLs entries (assigned work and due dates) before releasing to the team (both SQAs)

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1.A	TM Sara Moore	02/08/2015	Complete MVC Class Modeling
1.B	TM Janaye Maggart	02/08/2015	Complete MVC Class Modeling
1.C	DBA Jainesh Mehta	02/08/2015	Complete MVC Class Modeling
1.D	DBA Logan Stark	02/08/2015	Complete MVC Class Modeling
1.X	SQA Linh Tong	02/09/2015	Review Document
1.Y	SQA Paul Miller	02/10/2015	Review Document

Table 2: Entries when work completed (SVN Commit Comment matches Description)

Revision	Name	Completed Date	Description
1.A	TM Sarah Moore	02/10/2015	I completed MVC diagram.
1.B	TM Janaye Maggart	02/08/2015	I completed TA and tables
1.C	DBA Jainesh Mehta	02/10/2015	I added some changes to pages 9-16.
1.D	DBA Logan Stark	02/10/2015	I made alterations on pages 17-23
1.X	SQA Linh Tong	02/11/2015	I reviewed Document
1.Y	SQA Paul Miller	02/11/2015	I reviewed Document

Table 3: TL entry for RED DELIVERABLES (SVN Commit Comment matches Description)

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