



Course # CECS 542

Professor: Birgit Penzenstadler

Semester: Spring 2017

Lab 6–Stakeholders

Team members:

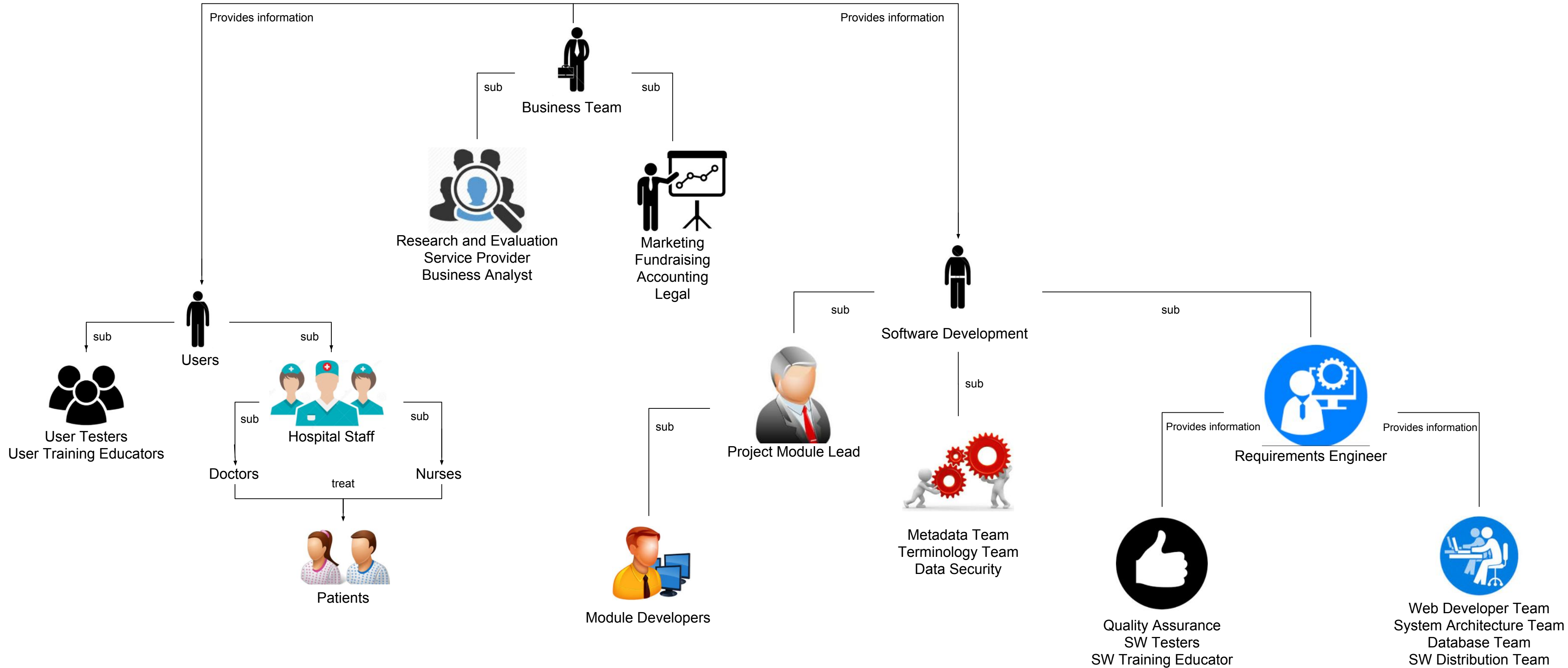
Chris Cervola

Stephanie Lopez

Date: 2/20/17

1. Please make a list of all stakeholders you can find for the system. Believe me, there are certainly more than 25 you can find.

01. Module Developers
02. Doctors
03. Nurses
04. Patients
05. SW Testers
06. User Testers
07. Project (module) lead
08. Database team
09. Web developer team
10. Fundraising
11. Legal
12. Accounting
13. Marketing
14. Research and evaluation
15. Quality assurance
16. SW Distribution team
17. System architecture team
18. Terminology team
19. Metadata team
20. Service provider
21. Requirements gathering and documentation
22. SW Training educator
23. User Training educator
24. Business Analyst
25. Data security



Role	Functions	Motivation	Main Concern	Availability	Relationship to Stakeholders
Doctors	Diagnose patients illness Explains to the patient their illness and their options Prescribes medicine to patients	To correctly diagnose and successfully treat patients to improve their patients quality of life	Patients will not be helped or their medical history is incomplete, thus making a diagnosis more difficult	Normal operating hours for the clinic	Interacts with the nurses to obtain a summary of the patients information Interacts with the patients to diagnose and prescribe medicine
Nurses	Lead patients to their procedure room Takes the patients vitals and a summary of their symptoms Puts patients in the doctors queue to be seen	Assist the doctors by providing the doctor with a summary, therefore the doctors are able to treat each patient more quickly, meaning more patients can be helped	Patients records are incomplete, which increases each patients visit time, and reduces the number of patients that can be seen each day	Normal operating hours for the clinic	Provide doctors with a summary of the patients medical history and current condition Obtains medical history and symptoms from patient
Patients	Check into the clinic Interacts with the hospital staff, nurses, and doctors Receives diagnoses as medicine if needed	Receive the proper treatment as quickly as possible, in order to hopefully overcome their illness	Clinic being to busy for them to obtain proper medical treatment	Normal operating hours for the clinic	Provides the nurses with medical history and symptoms Explains to situation to the doctor and ask questions about diagnosis
Business Analyst	Identifies business opportunities for new software Ensure the program is financially and functionally feasible	To ensure OpenMRS stays on the cutting edge of medical technology To ensure clinics have the features they need to successfully care for patients	The software is not feasible to develop or the customer base cannot use the software they developed	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Passes their new ideas to the Requirements Engineers who further flesh out the concept
Requirements Engineer	Elicit Requirements Analyze requirements Creates the specifications Validate and Verify the solution	Create well requirements document that can be reviewed by the customer, coded by developers, and tested by QA to ensure the system was designed correctly	Requirements are not properly elicited or documented. Worst case being a system is developed that does not meet their customer's needs	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Works with doctors, nurses, and potentially patients to elicit requirements for the software Reviews specifications with developers and quality to ensure everything is feasible and agreed upon
Research and evaluation	Research the market need to determine if they are creating the right SW and what other features are needed	To determine in what capacity OpenMRS is needed	Scope of the software is too limited, therefore it is not very beneficial to clients in different countries	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Researches trends and data about patients, nurses, and doctors in developing countries that do not have medical systems

Role	Functions	Motivation	Main Concern	Availability	Relationship to Stakeholders
Accounting	Performs bookkeeping activities for all expenses Manages payroll to pay full time employees Provides data used to determine each departments budget	To ensure OpenMRS can continue to function many years into the future, rather than being shutdown due to poor accounting / tax practices	Fraud, waste, tax codes, etc. All issues that could shut down the company if not handled correctly	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Manages funds raised by fundraising Interacts with all core OpenMRS members by distributing their paychecks
Legal	Ensures work products follows laws and regulations Resource for developers to ask legal questions regarding the software -Such as data security requirements for medical software	Prevent lawsuits against the company that would cripple development	Lawsuits due to developers not implementing features required by laws and regulations	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Closely works with core OpenMRS leadership team to ensure the projects are abiding by laws and regulations Interacts with developers when legal question arise, such as encryption needed for patient data
Marketing	Create advertising campaigns to promote to software Create advertising campaigns to support fundraising events	Attract as many clinics as possible to use OpenMRS, maximizing the number of people who can benefit from the software	Fundraising events and adoption of the software do not meet expectations, which could potentially force OpenMRS to close	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Interacts with fundraising to promote fundraisers Interacts with Business Analysts to promote new innovation ideas
Fundraising	Raise funds to support the OpenMRS Infrastructures (such as servers) Raise funds to enable the continued software development Raise funds to pay the core OpenMRS team	Ensure OpenMRS has enough money to continue to provide the infrastructure and support needed to keep OpenMRS's doors open for business	Fundraisers are not successful, meaning the infrastructure and core leadership team are not maintainable	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Interact with Legal to ensure fundraising events abide by all laws and regulation Interacts with Accounting to ensure money from events is tracked properly, Works with Marketing who will promote the event
Project (module) lead	To prioritize tasks and assign tasks to different developer teams	Ensures all features and bugs are completed to enhance the user's interactions with the software	Features are not completed on time, are rushed and contain multiple bugs, or the software crashes	Every Monday at 11 AM Est during their Project Management Meeting. Additionally they are probably available off and on throughout the week	Interact with the SW Testers, User Testers, Database Team, Web Developers, System Architecture, Metadata team, QA. All teams need to be engaged to ensure new software components work with existing system

Role	Functions	Motivation	Main Concern	Availability	Relationship to Stakeholders
Module Developers	Writes the code Performs basic testing during coding Creates module API Integrates modules into the system	Provide new features that streamline and enhance the user experience for users of OpenMRS	Unable to finished modules due to hardware, software, or technical ability issues	Every Thursday at 10 AM Est during the Developers Forum. Additionally they are probably available off and on throughout the week	Main interactions will be with their Project Leads, who are responsible for engaging other stakeholders as needed
Database team	Ensures data is stored successfully Back up data to prevent data loss Ensures the database has a high uptime Creates the entity relationships	To ensure that users of OpenMRS will feel confident that using the software is beneficial and their data is safe and secure	Data loss due to system failures, power outages, etc.	Every Thursday at 10 AM Est during the Developers Forum. Additionally they are probably available off and on throughout the week	Main interactions will be with their Project Leads, who are responsible for engaging other stakeholders as needed Interacts with metadata team to ensure the metadata fields are feasible
Web developer team	Develop the user interface for OpenMRS Ensures the UI communicates with the Database correctly Ensures the UI is intuitive and responsive	Create an intuitive user interface that allows the staff and patients to access medical records quickly and easily	Ensure only authorized users can access the data, all features work in all web browsers, the website getting hacked.	Every Thursday at 10 AM Est during the Developers Forum. Additionally they are probably available off and on throughout the week	Interact with the SW Testers, User Testers, Project Lead, Database Team, System Architecture, Metadata team, QA
SW Distribution team	Controls the configuration management of the OpenMRS builds Hosts current software builds for download	Ensure all users/potential users have access to different OpenMRS builds as needed	Builds are not controlled and compatibility issues arise	Every Thursday at 10 AM Est during the Developers Forum. Additionally they are probably available off and on throughout the week	Works with web developer team to host the latest builds
System architecture team	Selects the hardware components necessary to run OpenMRS Selects the software components necessary to run OpenMRS	To create the perfect balance of HW and SW components are needed for the system to be successful	Wrong mix of HW and SW are used resulting in data loss, slow performance, or an overall poor user experience	Every Thursday at 10 AM Est during the Developers Forum. Additionally they are probably available off and on throughout the week	Interact with the Project Lead, Database Team, and Web developer team to understand the hardware and software requirements
Metadata team	Define a common set of metadata for each record	Ensure all records have an appropriate amount of metadata that can be used through modules to help enhance the user experience	Metadata is not sufficient and cannot be used throughout the system to increase automation, tracking, and fidelity of the records	Every Thursday at 10 AM Est during the Developers Forum. Additionally they are probably available off and on throughout the week	Main interactions will be with their Project Leads, who are responsible for engaging other stakeholders as needed Works with database team to ensure metadata attributes work with current database schema
SW Testers	Compile new software builds Test new software builds Review code for logical errors	Ensure the software works well with all other modules to provide the user with the best experience possible	The software contains bugs that negatively impact the user experience	Limited to full time depending if they are on staff or just a contributor	Interact with the Project Lead and QA to report any issues found during testing

Role	Functions	Motivation	Main Concern	Availability	Relationship to Stakeholders
User Testers	<p>Load the user interface and ensure its intuitive</p> <p>Test the user interface to ensure all features are working as expected</p> <p>Provide feedback for bugs and enhancements</p>	<p>Ensure the software is intuitive and easy to use. Make sure all the features are value added to the end users</p>	<p>All features are not thoroughly tested and software contains bugs that make the software more frustrating then helpful</p>	<p>Limited to full time depending if they are on staff or just a contributor</p>	<p>Interact with the Project Lead and QA to report any issues found during testing</p>
SW Training educator	<p>Determines the coding style and templates for all code</p> <p>Creates documentation that new developers can reference to ensure they are coding in the correct format</p> <p>Provides users with a basic infrastructure and data model so developers can better understand dependencies</p>	<p>Ensuring a common coding format ensures any developer can contribute to a project with a low barrier to entry</p>	<p>Code is written in multiple styles based on each user's preference which makes maintenance and collaboration very difficult</p>	<p>Every Wednesday at 10 AM Est during the OpenMRS University meeting. Additionally they are probably available off and on throughout the week</p>	<p>Interacts with Project Lead to understand the required coding templates and format</p>
User Training educator	<p>Creates documentation for the core features of OpenMRS</p> <p>Provides a template that module developers can use to create training for their features</p>	<p>Ensures the end users understand how to use the SW to its fullest potential</p>	<p>OpenMRS develops a ton of features that are never used because the users do not know they exist, or how to use them</p>	<p>Every Wednesday at 10 AM Est during the OpenMRS University meeting. Additionally they are probably available off and on throughout the week</p>	<p>Interacts with Project Lead to understand feature capabilities in order to create the training</p>
Quality assurance	<p>Ensures the requirements were implemented in the code (backend and front end)</p>	<p>To ensure each software build is stable and ready meets all stakeholder requirements</p>	<p>Code does not satisfy the agreed upon requirements</p>	<p>Limited to full time depending if they are on staff or just a contributor</p>	<p>Works with Project Lead to report bugs found during final testing</p> <p>Works with Requirements Engineer to ensure all requirements are satisfied</p>
Data security	<p>Implement security protocols to ensure users data is protected</p> <p>Determines encryption schema to use to protect data in case the system has been breached</p> <p>Ensures data security standards meets minimum requirements set by laws and regulations</p>	<p>To protect users data and ensure that all data entered into the system is saved/edited/deleted correctly so the users can trust the software and continue to use it</p>	<p>Unauthorized users accessing system data or data is not protected according to laws and regulations leading to fines</p>	<p>Limited to full time depending if they are on staff or just a contributor</p>	<p>Works with Database team to implement core security features at the database level</p> <p>Works with Legal to ensure all data is protected at the minimum level required by laws and regulations</p>

Role	Functions	Motivation	Main Concern	Availability	Relationship to Stakeholders
Terminology team	Develops a glossary of terminology for OpenMRS Terminology benefits developers and end users of the system because it ensures everyone is using the same lingo	Ensure all users/developers of the system are able to effective communicate using a common "language"	Each users has a slightly different term which makes meetings, forums, and training material very difficult to understand. It increases the learning curve for all developers and users.	Limited to full time depending if they are on staff or just a contributor	Works with Project Lead and core leadership team to create terminology glossary
Service provider	Set up new clinics with the OpenMRS Software Keep an open line of communication with clinics to help with any issues that may arise Pass bug and feature reports to the developers	To ensure users are able to use the SW for years to come, despite changes in the medical field	A clinic will stop using the SW because their needs are no longer being adequately addressed by OpenMRS	Every Thursday at 2 PM Est during the OpenMRS Leadership Meeting. Additionally they are probably available off and on throughout the week	Works with clinics that use OpenMRS to ensure needs are met Works with Project Lead to relay issues the customers are facing