

California State University Long Beach  
Department of Computer Engineering and Computer Science



Course # CECS 542

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### **Lab 10 – System Vision**

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## **Lab 10 Write Up**

OpenMRS is a free electronic health care system that provides many customizable features to its users. The purpose of our system vision is to show how the business and operational contexts work together with the infrastructure. Our goal was to keep the system vision easy to read while showing enough information for stakeholders to understand the software solution. The left portion of our diagram represents the business context and the right side of the diagram shows the operational context. The middle of the diagram is the goal of the entire system, which is to be an electronic health records system.

The top, left corner of our diagram represents the service provider and user training stakeholders. We believe these are two of the most important business stakeholders which is why they are at the top of the diagram. The success of a software solution is determined by customer satisfaction and adoption of the software. Those two stakeholders are responsible for communicating with the customers and ensuring they are having a good experience with the software and answering any questions and pass along issues to the developers when needed. To try and reduce the questions end users have, the user training team creates detailed training manuals detailed the functionality, common issues, and additional resources to ensure customers are able to use the software to its fullest potential.

The bottom, left corner of our diagram represents our business analysts, fundraising personnel, legal and accounting stakeholders. These stakeholders are responsible for identifying new features that would benefit the customers, ensuring sure the company can afford to support the infrastructure, ensure the software remains open source, and follows all applicable laws and regulations . These stakeholders are also vital for ensuring the success of the software.

Moving towards the center, we have a system scope section which is very brief, just enough to communicate that the tool will be web based and the data stored in servers. Being that the system vision caters to non technical stakeholders, we felt this level of detail was sufficient. Non technical stakeholders usually are more interested in the cost of the infrastructure, if at all, which is detailed in a different document.

The right half of the system vision represents the operational context our OpenMRS. OpenMRS has many amazing features, we narrowed the extensive feature set down to the most important features that display the main features of the software. The stakeholders most interested in the features of the software are the doctors, nurses, hospital staff, and patients. The doctors, nurses, and hospital staff want an intuitive interface that allows them to quickly navigate the tool to record and view the patient's information. The patients are also able to access their file, which makes them a stakeholder as well. Finally, the last stakeholder for the operational

context is the software developers, who are responsible for evaluation and implementing new features needed by different clinic.

We followed the definition for system vision and tried to model our diagram after the system vision example from class. We were able to easily identify what the system vision was, its characteristics, meaning, and purpose. We had been researching OpenMRS since the beginning of the semester and having done the stakeholder and goal model, it made finding the overall vision, characteristics, meaning, and purpose much easier. Since we were modeling our diagram after the class sample, we ensured that our findings were reflected in a manner that still showed a rich picture.

However, the most challenging aspect of this project was the presentation and showing the interdependencies. Having the diagram capture all the necessary information yet be readable was a real challenge. We wanted to be as detailed yet concise as possible. It took a little of trial and error to get that right.

Although it was not too difficult to know the interdependencies due to the goal model we previously created, it was different showing them on the system vision diagram. We analyzed the stakeholder and goal models to figure out any interdependencies and then tried to model them as shown in the class example.

