

**DEVELOPING A CUSTOMIZABLE E-HEALTH CARE FRAMEWORK USING
DIRECT RIA**



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**DEVELOPING A CUSTOMIZABLE E-HEALTH CARE FRAMEWORK USING
DIRECT RIA**

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ABSTRACT

The Group DAMEANS have decided to develop an e-health care framework for Physicians using Direct RIA. The aim of the study is to improve the healthcare system for the Physicians with the use of information technology.

Keywords:

eHealth Care System, Direct RIA, framework

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The past years have seen increasing technological advances and emerging websites increases. More and more people today are relying on internet and websites to support their basic needs and wants.

Many advance websites have been made through the years with the help of maturing; underlying technologies that are available in the market and some example are e-Business, e-Commerce, e-Healthcare and the like. These websites are used to support needs of people without bothering on moving away from their house.

E-Healthcare is an existing technology today. It provides outsourcing services to collect medical records of patients. It provides storage of patients and physicians records for fast and easy retrieval. Thus, physicians can easily browse patients and cater their medical needs and set up appointments directly on the site.

Through this service, decrease in the following issues will be possible: frustration and wasted time for physicians, since medical records will be available online, physicians can access it for history purposes before an appointment, unnecessary repeat studies and exams for patients and “broken” appointments.

However, e-Health Care is not well known here in Philippines. This can also aid the physicians in monitoring their patients while minimizing costs. It is a web based patient care system that will track a patient’s health record from the time that they have

joined the network and as long as the Physicians will provide and update their patients' health data.

The said system will be created using a Direct RIA. ZK is the primary IDE used in order to develop the project.

1.2 Technology Application Context

E-health care is an existing technology. However, it is not well known here in Philippines. Moreover, existing e-health care systems are not yet customizable.

Thus, the team had developed a customizable e-health care system using Direct RIA that will fit every type of Physicians.

Through this, frustration and wasted time for physicians will be decreased. Patient records can be retrieved and shared by other Physicians easily. And since medical records will be available online, physicians can access it anytime and anywhere they want.

1.3 Objectives of the Study

This study attempts to address the questions stated in the statement of the problem and to be able to produce substantial research paper work.

The specific objectives are:

- To be able to know and learn how to develop a customizable e-Healthcare system using Direct RIA.

- To be able to understand what an e-Healthcare system is and to research its components.
- To be able to know the capabilities of Direct RIA and apply it to the development of the system.
- To be able to know how to apply the forms in e-Healthcare system using Direct RIA.
- To be able to create the e-Healthcare system fit for every type of Physician.

1.4 Significance of the Study

The research that will be conducted will help in offering a better way to improve healthcare system. The aim of the study is to improve the healthcare system of Physicians regardless of their specialties by use of information technology. All relevant information that will be gathered in the research will be used in developing a web based patient care system that will keep track of the patient's medical records. Authorized physician's can access the patient's medical records through the web site. In case patients are referred to other medical institutions, and potentially from remote areas, clinical departments will now not depend on patients to collect their medical data and bring it to the appointment; clinical staff will not be hassled to contact the other institution and have them send the needed information.

The application will also let physicians to manage their medical practice. It includes keeping their entire patient's data on the web and to ensure that some key information of the patient is readily available in case of emergencies. Online medical advice will also be available especially for rural patients so they need not travel to far off places. The system will be able to use by other Physicians regardless of their country.

1.5 Scope and Limitations of the Study

The study will generally focus on gathering information relevant to the proposed topic. Specifically, the scope of the study includes the following:

- Implementing e-health care system using Direct RIA
- Creating a Customizable Framework
- Manage patient health records
- Physicians account
- Organize medical records for easy access and retrieval
- Backup database to ensure all records will be safe

The team should be careful in gathering only pertinent data and irrelevant data should be disregarded.

1.6 Definition of Terms

a. Direct RIA

Direct RIA is a robust and comprehensive rich Internet applications engine which turns any client (web browser, mobile device) into an efficient and engaging environment.

b. PDF (Portable Document Format from Adobe)

PDF is used for representing two-dimensional documents in a manner independent of the application software, hardware, and operating system and it will be used in viewing medical reports.

c. JPEG

JPEG (Joint Photographic Experts Group) is commonly used method of compression for photographic images.

d. TIFF

TIFF (Tagged Image File Format) is a file format for storing images, including photographs and line art.

e. XUL

XUL is an XML user interface markup language (developed by the Mozilla project) which operates in Mozilla cross-platform applications such as Firefox and Flock.