

**AN ENGINEERING PROJECT REPORT**

On

**Online Diagnostic Lab Reporting System**

**Submitted By**

**Aashis Regmi - 170101**

**Bibek Chaudhary - 170107**

**Nirmal Shrestha – 170122**

**Sugat Maharjan- 170141**

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**Cosmos College of Management & Technology**

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## **Abstract:**

It is an online diagnostic lab manager website that brings up various diagnoses working here. Here the lab reports of various patient details are uploaded & the patient may now see a variety of tests conducted by the lab. The lab test also consists of parameters like Hemoglobin, WBC, Sugar, Urine and many more tests provided by the corresponding lab or hospitals. This system allows admin to attach a copy of the report into the system.

## **Introduction:**

In this Diagnostic Lab reporting system, the reports are generated either by manually or by using data provided by the clients in which the details itself also needs to be filled. It serves the needs of various branches of Medical Science like: Pathology, Bio-chemistry, Hematology, X-ray, ECG & other lab testing reports. It is MS-windows centered, highly effective website for Diagnostic center. It is Multi-user, multi-tasking system, Effective, Flexible & confirm website. It allows faster service & easy to use.

## **Background:**

The main idea/goal behind this project is to implement online ideologies in the field of lab reporting system. We chose this subject with the aim of developing lab reporting system in the way that it will be easier, faster and more practicable to get the result of lab reports.

The main goal of this project as mentioned many times already is to help people get lab reports online. This happens to be our common goal as well. To completely carry out the project and to make it successful we've taken many measures. We have obtained various information from internet as well as from first hand source. We collected findings and obtained information that in context of Nepal, online lab report diagnostic system is not fluent and people in rural areas are not even aware about it. There has not been many surveys taken about online diagnostic systems

and its effects so there is not much history regarding such systems in Nepal which is a letdown for a country it's development.

All in all in our project, we did our best to bring a change about online diagnostic system and to promote it so that it can save valuable time of people and health measures of the country as a whole.

The online lab report system being the best and handy tool for hospital management to deliver faster results, convenient online lab report system plays a vital role in diagnostic labs so the scope of our project ranges from big hospitals/pathologies to even a small community health post where lab reports are taken to develop health services of people throughout the country.

### **Problem of Statement:**

The fact that Nepal is a developing country with about 66% literacy rate of the people, it is obvious that the main problem that arose is the people not being aware about the presence of online lab reporting systems and to be able to use it fully. And another problem is that the internet connection has not reached everywhere in the country so people living without internet facilities might find it not useful.

### **Objective:**

- To save time of the patient and to give fast result of lab test.
- To allow automate diagnostic system.

### **Scope and Limitation:**

The scope of our project ranges from big hospitals/pathologies to even a small community health post where lab reports are taken to develop health services of people throughout

the country. One of the best parts of our project is that it can be implemented again and again, with enhanced accuracy and minimal effort.

The main limitation of this project is that despite having support of people and us wanting to implement it for better uses, sometimes it takes long time to upload the lab reports because of internet issues.

### **System/Circuit Analysis & Design:**

Our system and our findings have been analyzed and design below.

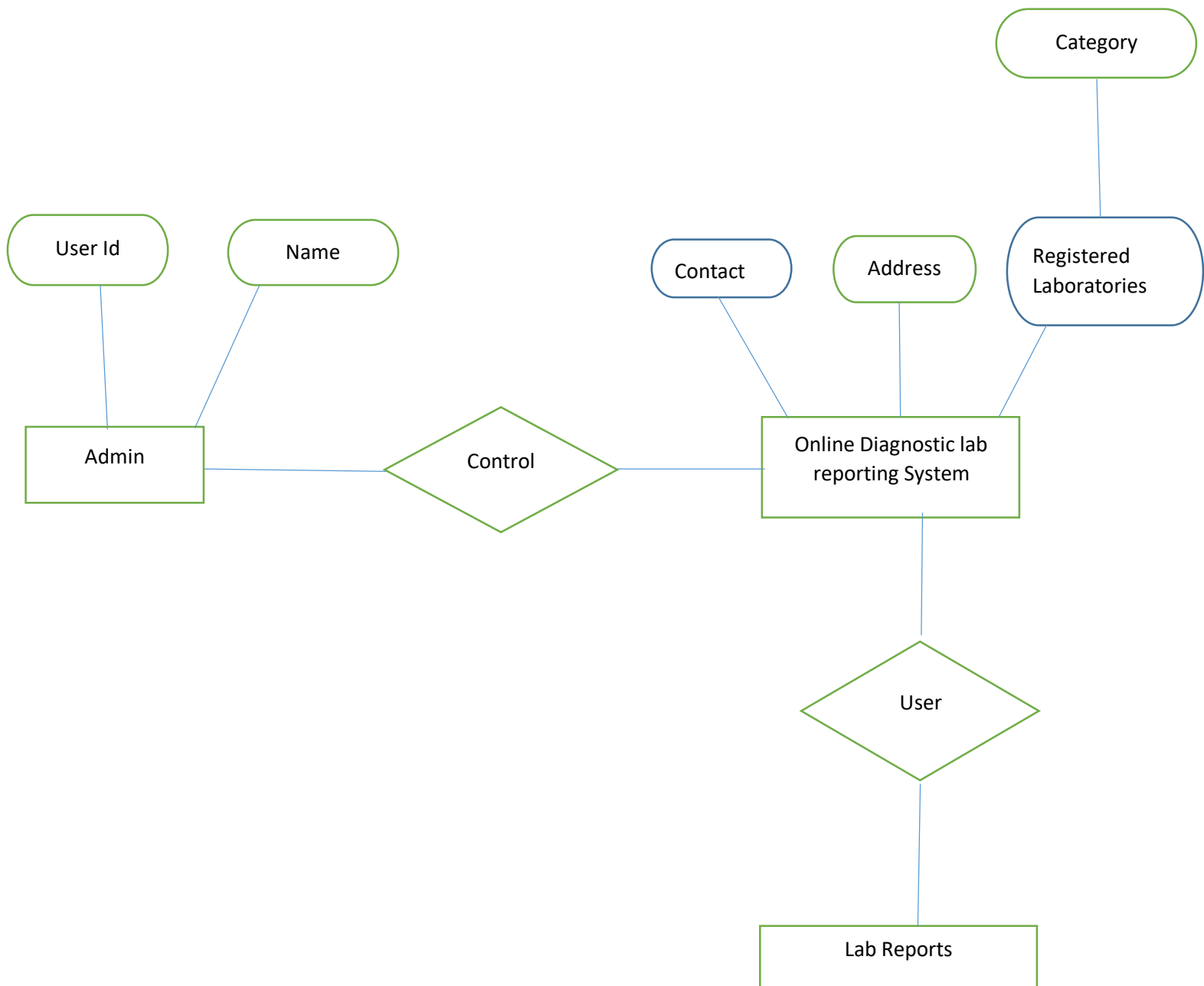
#### **- Project Methodology**

The methodology of data collection by the registry is both active and passive depending upon the data sources. There are two major ways through which data are obtained for the registry. One is from the facilities which include hospital, pathology laboratory, hospice and department of health service section. Other is from the internet and reference from the books. We also generated ideas required for the fruitful completion of the project through experienced IT professional. After collecting information, we researched people about their problems faced while collecting lab reports and their suggestions to improve the associated problems.

### **E-R Diagram:**

Entity-relationship model is an abstract way to describe a database. An E-R diagram is a specialized graphic that illustrates the relationship between entities in a database.

E-R diagram often use symbols to represent three different types of information.



## Working Volume:

Till date we had finished up to following works. We create our login form and registration form. Also we had connect our database to the site.


Messenger x Login page x localhost / 127.0.0.1 | phpMyAdmin x +

localhost/sample/index.php

Apps localhost/DemoProj...

Connected

### login form



**UserId:**  
Type your id

**password:**

123456

Register


Messenger x Register form x localhost / 127.0.0.1 | phpMyAdmin x +

localhost/sample/register.php

Apps localhost/DemoProj...

Connected

### Register form



**UserId:**

123456

**password:**

**Comform password:**

Submit

Back to login

## 5. Working Schedule:

## References:

1. <https://nevonprojects.com/online-diagnostic-lab-reporting-system/>  
(visited date: 2019/07/02)
2. <http://freeprojectsreport.com/2016/11/online-diagnostic-lab-reporting.html> (visited date: 2019/07/02)
3. <https://www.nphl.gov.np/page/online-report> (visited date: 2019/07/03)
4. <https://samyakdiagnostic.com/online-publication> (visited date: 2019/07/03)
5. <http://nhrc.gov.np/wp-content/uploads/2019/04/Annual-Report-of-NHRC-2074-75.pdf> (visited date: 2019/07/04)
6. [www.w3school.com](http://www.w3school.com) (visited date: 2019/08/10)



