

**J.D. WOMEN'S COLLEGE**  
(Constituent Unit of Patliputra University, Patna)

2<sup>nd</sup> Cycle NAAC Accredited at Grade 'B'

**Department Of MCA**

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**PROJECT REPORT ON**  
**'PATIENT INFORMATION**  
**MANAGEMENT SYSTEM'**  
*in partial fulfillment for the award of the degree*  
**Master of Computer Applications (MCA)**  
**2022**

**Under The Supervision Of**

**RAHUL RAJ**

**Organization :**

**Info Era Software Services Pvt. Ltd**

**Submitted by:**

**Ruchi Kumari**

**Roll No:-06**

**Class:-MCA VI Sem**

**Session:-2018-21**

**University Roll:-1940172082634**

**TITLE OF THE PROJECT:-**

# ***PATIENT INFORMATION MANAGEMENT SYSTEM***





# **CERTIFICATE**

This is to certify that the project report entitled “**PATIENT INFORMATION MANAGEMENT SYSTEM**” Submitted to **J.D Women’s College, Patliputra University** in partial fulfillment of the requirement for the award of the degree of **Master of Computer Applications (MCA)**, an authentic and original work carried by **RUCHI KUMARI** , VIth Semester of the MCA , Session 2020-22 of J.D WOMEN’S COLLEGE, Patna under the guidance of **Mr. RAHUL Raj**.

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**INTERNAL EXAMINER**

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**EXTERNAL EXAMINER**

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**HEAD OF DEPARTMENT**

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**PROJECT GUIDE**

## **DECLARATION**

*We hereby declare that the project work entitled "PATIENT INFORMATION MANAGEMENT SYSTEM" is an authentic work carried out by us at Patna under the guidance of" Mr. Rahul Sinhaa "for the partial fulfilment of the degree of M.C.A (Master of Computer Applications) and this project has not been submitted anywhere else for the award of any other degree*

**SUBMITTED BY:-**

Ruchi kumari	1940172082634
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# ACKNOWLEDGEMENT

The satisfaction and euphoria that accompanies the successful completion of any task would be incomplete the mention of the people who made it possible. The beginning, we do express our heartfelt gratitude in deep humility to the Head of Department, **HOD Name** who has provide us with all the facilities to conduct our project work and immense co-operation and inspiration. If there is a driving force that kept use going on doing this project, it is the constant support of our guide Mr. RAHUL Raj. We present our sincere and heartiest thanks to them, for giving us a patient hearing and clearing our doubts.

We are obliged to all the staff members of MCA department, for the valuable information provided by them in their respective fields. We are grateful for cooperation during the period of our project. Lastly, we thanks Almighty, our family and friends for their constant encouragement without which this project would not be possible.



## **PREFACE**

*“Practice makes a man perfect”. Practice orientation of software student is a must to qualify on a potential level . It is for reason that project training is prescribed as a part of the syllabus of Master of Computer Application. We are grateful to all the members of “INFO ERA SOFTWARE SERVICES PRIVATE LIMITED”, whose dedications and involvement helped in the completion of our project on the topic PATIENT INFORMATION MANAGEMENT SYSTEM. We would like to thank our Mentor Mr.Rahul Raj”, whose constant teaching helped us in developing software. During our training we got to learn and experienced how to work in a team for a particular project. We got to know about the current need and type of software required in the companies and how to face the interviews in these Companies and that has developed a little confidence in us. We grabbed the knowledge delivered by our Mentors which would definitely help us in the future and that for sure has brought a change in us from now.*



*PATIENT*

*INFORMATION*

*MANAGEMENT*

Patient Information Management System

# SYSTEM

## TECHNOLOGIES USED

### Backend



Python

### Database



### Frontend



HTML CSS





## **INTRODUCTION**

*The idea of patient health records (PHRs) emerged in the early 1970s [1,2] with the goal of increasing patient engagement and empowerment, which in turn was intended to enable continuity of care, error reduction [3], treatment choice, and patient-provider partnership building [1,2].*

*An extension of traditional electronic health records (EHRs), PHRs created a patient-centric platform supporting the new vision of health services that enables patient-provider information sharing and collaboration, with the goal of improving health outcomes and reducing costs. In recent decades, great strides have been made toward achieving these far-reaching goals in research and practice. Through the implementation in the United States of the Health Information Technology for Economic and Clinical Health (HITECH) Act passed in 2009, the use of PHR data is becoming more commonplace [4]. As defined by the program, the initial stage of meaningful use encourages providers to integrate technology into medical practice, making vast amounts of patient data available electronically. Later stages of the program focus on empowering patients by providing them with online access to their health data.*



## **OBJECTIVE**

*The objective of our study was to assess PHR data types and functionalities through a review of the literature to inform the health care informatics community, and to provide recommendations for PHR design, research, and practice.*

*The main objective of the Patient Information System is to manage the details of Reports, Patient, Medicines, Tests, Doctors. It manages all the information about Reports, Treatments, Doctors, Reports. ... It tracks all the details about the Medicines, Tests, Doctors.*



Patient Information



# **System Analysis**

**System analysis** is the practice of planning, designing and maintaining software systems. As a profession, it resembles a technology- focused type of business analysis.

A system analyst is typically involved in the planning of projects, delivery of solutions and troubleshooting of production problems.

The following are common types of system analysis.

## **Requirements**

Specifying non-functional requirements such as system availability.

## **Project Planning**

Contributing estimates, assumptions and constraints to project planning initiatives. A system analyst may act as a information technology expert who advises a project.

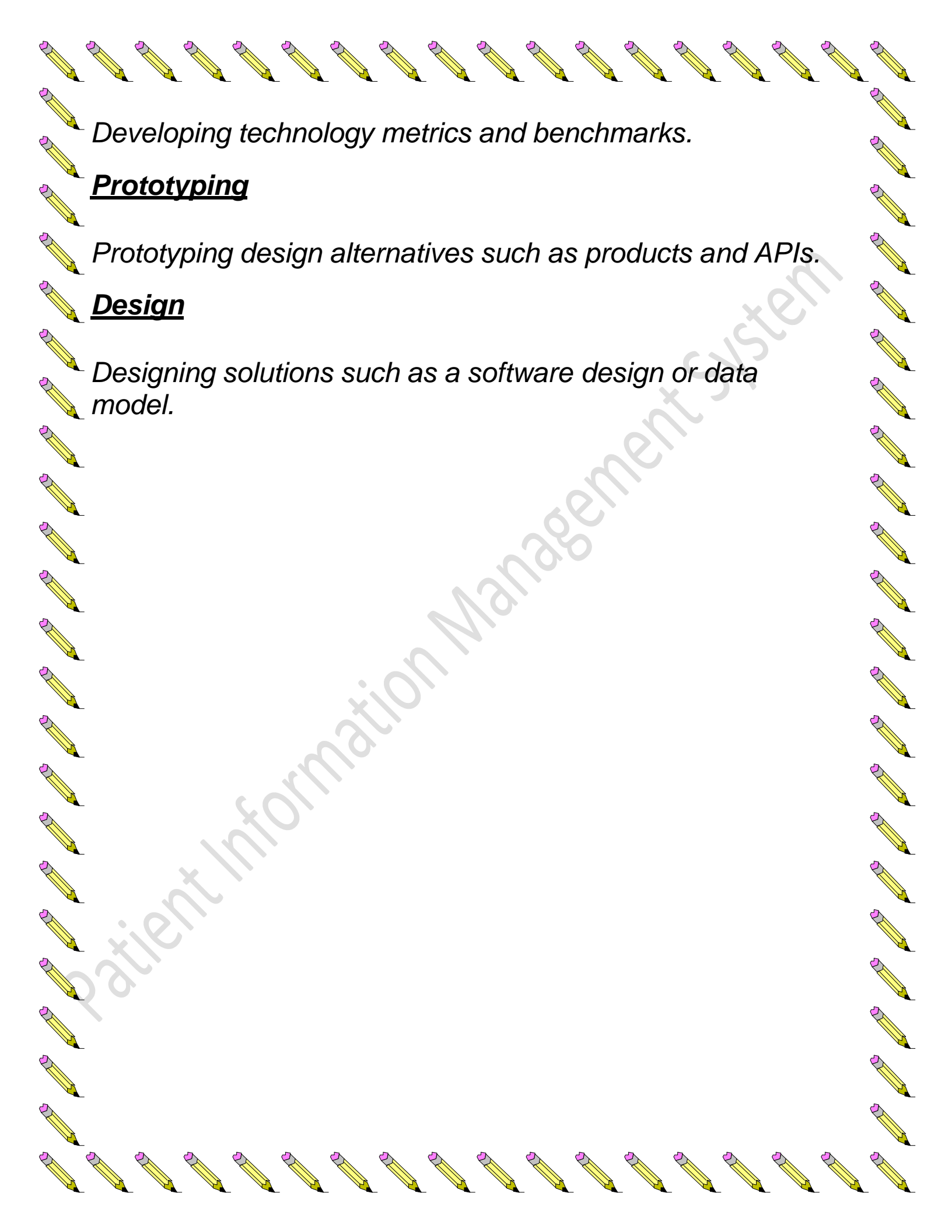
## **Data Analysis**

Data analysis such as an evaluation of data quality.

## **Integration Analysis**

Planning integration of processes, systems, services and data.

## **Measurement & Benchmarking**



*Developing technology metrics and benchmarks.*

**Prototyping**

*Prototyping design alternatives such as products and APIs.*

**Design**

*Designing solutions such as a software design or data model.*





## **Risk Management**

*Identification and analysis of information technology risks.*

*For example, an analysis of the risks associated with legacy system.*

## **Incidents & Problems**

*Troubleshooting incidents and resolving the root cause of problems.*

## **Quality assurance**

*The process of preventing problems and continually improving systems.*

## **EXISTING SYSTEM**

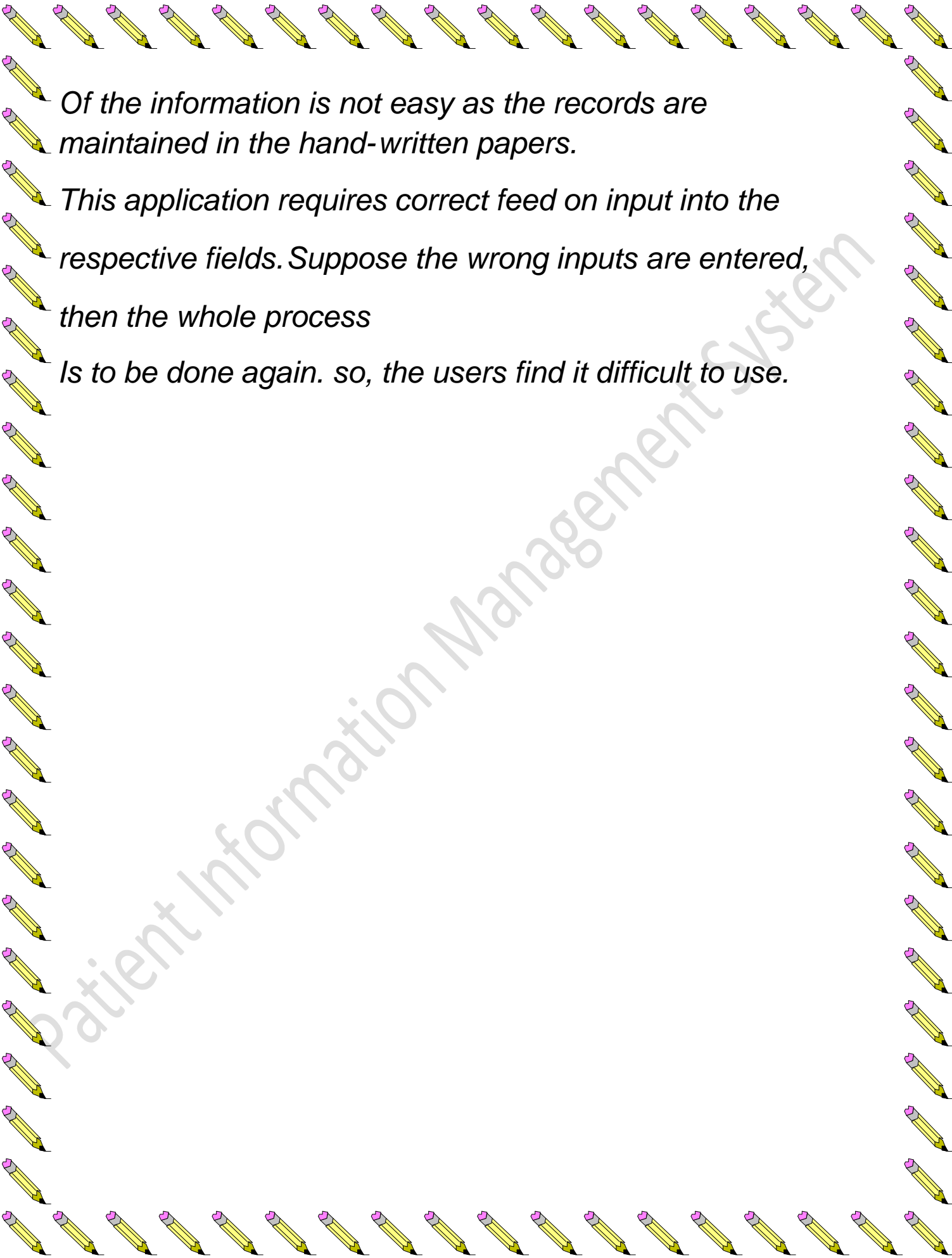
*The Existing system is a simple game to play with paper and pencil between two*

*People. Here the whole process will be carried out in the hand-written format*

*Making nine square grids, placing X's and O's and checking for the winner.*

*This process will repeat every time. So it will be a tedious job to draw a nine square grid*

*Every time paper and pencil. the human efforts is more here. along with that the retrieval.*

A decorative border of yellow pencils with pink erasers surrounds the text. The pencils are arranged in a rectangular frame, with some at the top, bottom, and sides.

*Of the information is not easy as the records are maintained in the hand-written papers.*

*This application requires correct feed on input into the respective fields. Suppose the wrong inputs are entered, then the whole process*

*Is to be done again. so, the users find it difficult to use.*



## PROPOSED SYSTEM

*The proposed system is Patient Management System. We can enhance this system by including more facilities like pharmacy system for the stock details of medicines in the pharmacy. Providing such features enable the users to include more comments into the system.*

### **LIMITATIONS**

- The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.*
- Training for simple computer operations is necessary for the users working on the system.*

## ADVANTAGE OF PROPOSED SYSTEM:-

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*the users working on the system.*

## **FEASIBILITY STUDY**

*Feasibility is the determination of whether or not a project is worth doing the process followed making this determination is called feasibility study. This of determines if a project can and should be taken. Once it has been determined that a project is feasible, the analyst can go ahead and prepare the project specification which finalizes project requirements. Generally, feasibility studies are undertaken within right time constraints and normally culminate in a written and oral feasibility report.*

### **ECONOMICAL FEASIBILITY**

*Economic analysis is the most frequently used technique for evaluating the effectiveness of a proposed system. More commonly known as cost/benefit analysis: the procedure is to determine the benefits and saving that are expected from a proposed system and compare them with cost. If benefits outweigh cost, a decision is taken to design and implement the system.*

### **OPERATIONAL FEASIBILITY**

*It is mainly related to human organizational*



*and political aspects. The points to be considered are:*

- *What changes will be brought with the system*
- *What organization structures are disturbed*





## **TOOLS/PLATFORM**

### **HARDWARE & SOFTWARE REQUIREMENTS**

#### **TOOLS/PLATFORM**

#### **S/W and H/W requirements**

**Processors** : **Intel Pentium4(1.50 GHz)or  
above**

**RAM** : **1GB**

**Minimum Hard Disk** : **128GB**

**Monitor** : **16"Color Moniter**

**MOUSE** : **PS/2**

**KEYBOARD** : **MICROSOFT**  
**COMPATIBLE**

#### **SOFTWARE REQUIREMENT SPECIFICATIONS**

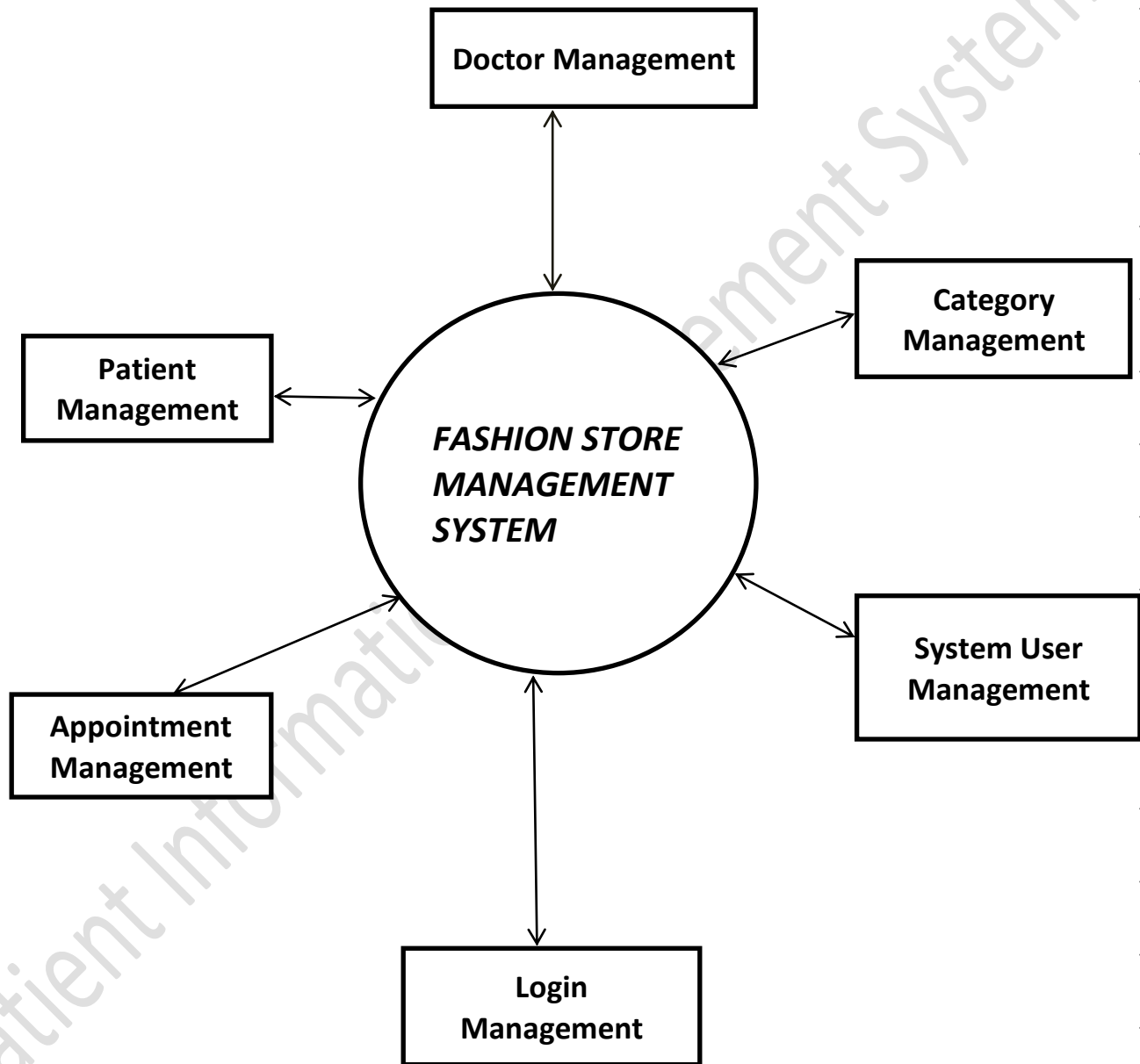
**Operating System** : **Windows 10Database**

: **SQLite3**

**Back End Language** : **python 3.7**

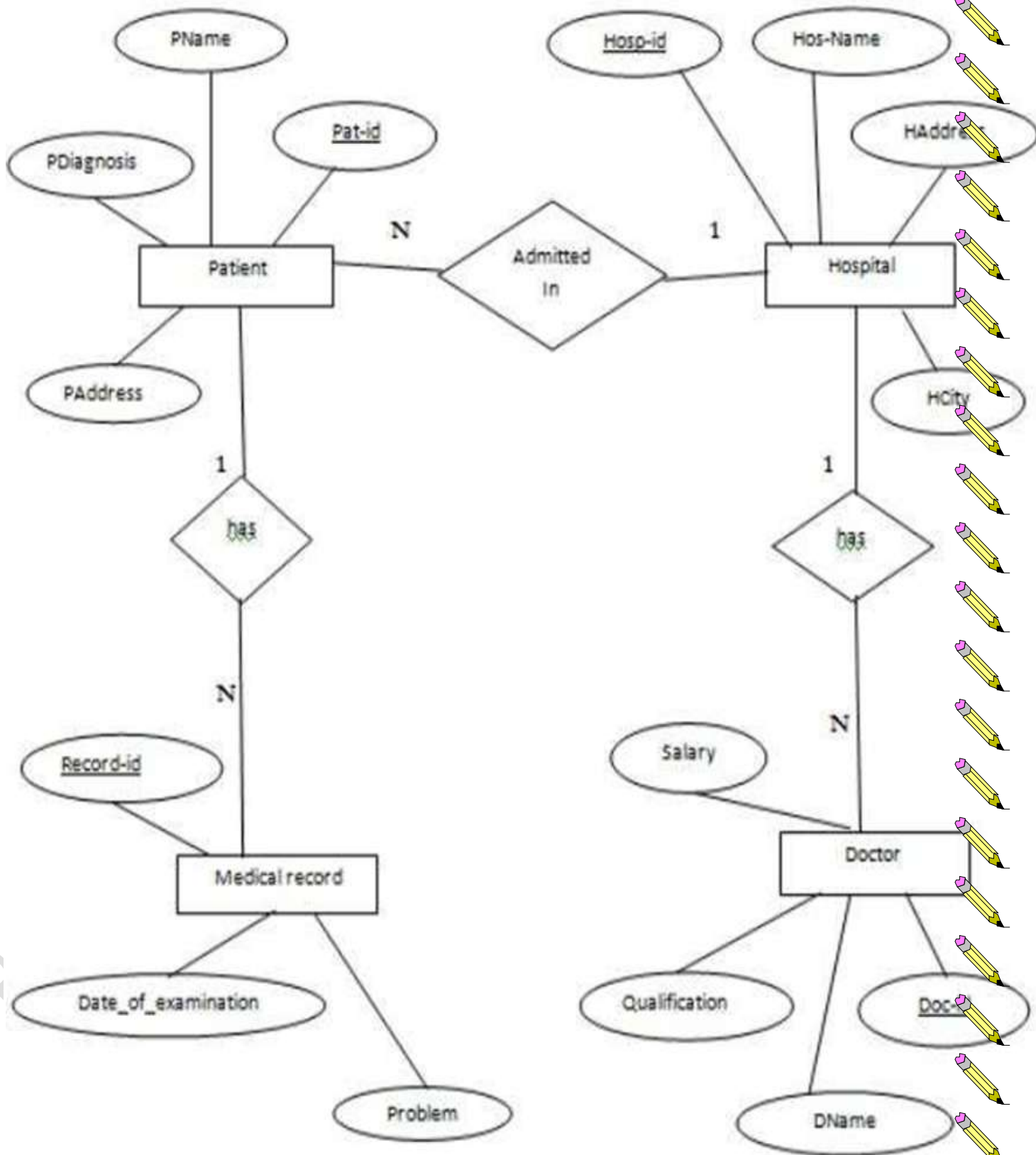
**Front End** : **Html,css,javascript**

# DATA FLOW DIAGRAM



ZERO LEVEL DATA FLOW DIAGRAM

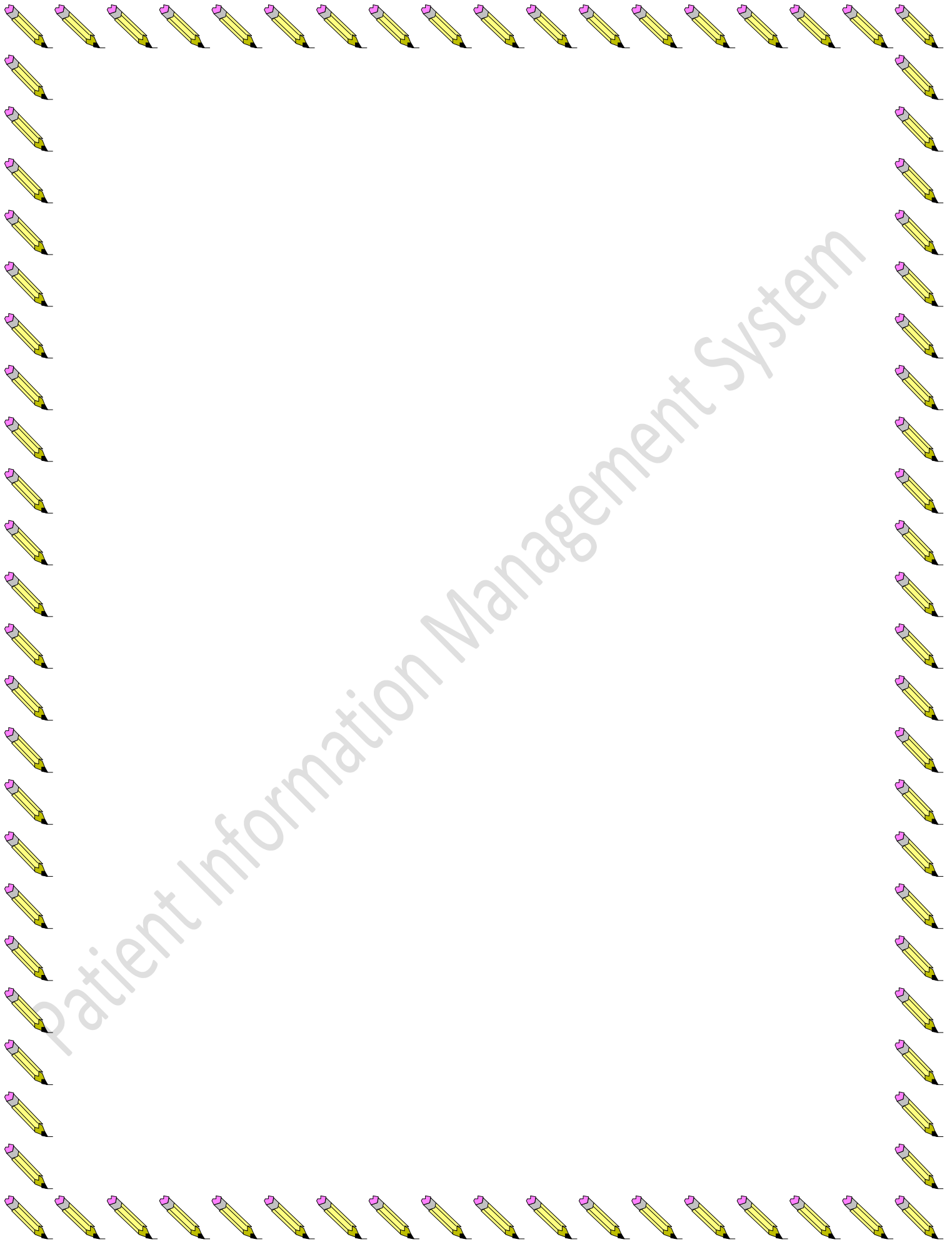
# ER-DIAGRAM





## Conclusion

*Without question, patient-powered patient registries and networks are a rapidly evolving contributor to research, and particularly to research that focuses on direct improvements in practice. These entities blur traditional boundaries, breaking the barrier of patient, family, and advocate involvement and control in research, translation, and dissemination. A clear movement has emerged to connect individual patient organizations and single-condition patient registries into broader networks that unify, standardize, and optimize the data collection and research generation process. Yet, incentives remain for organizations that wish to pursue their own agendas and create independent single-condition patient registries for their constituencies, which may or may not be possible when joining a PPRN.*



Patient Information Management System





Thank  
you

