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Batch Info: **EB – 09**

Title of The Project: **HealthCare Management System (HMS)**

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INTRODUCTION:

As long as the implementation of each phase should be accurate and clear, the clinical management system provides some automation of the various important daily procedures. The hospital system software incorporates services that integrate and simplify the work of healthcare professionals on an ongoing basis such as their communication with patients.

There is always a wide selection of features ready for installation within the system. In addition, the most important thing created is to deliver a variety of processes that meet the needs of all users. Quality and safety are still the mainstays in the medical industry. It is also known for the constant and rapid change to spice up the efficiency of medical services and patient satisfaction.

Hospital management has changed dramatically over the past decade. Business technology, state-of-the-art technology, connected devices, mobile applications, and health care information are key elements in the implementation of a hospital management plan project. the number of health care providers has increased and therefore patients are able to over-select medical professionals. The interaction between the hospital and thus the patient can be made easier for each side. Each center has the opportunity to create a more efficient, transparent and fast healthcare model. looking forward to hospital management software programs, can accommodate many tasks. The components of the hospital visit system can be selected and integrated into a final term plan that meets the needs and norms of the healthcare sector in addition to quality standards. one of the key requirements of the clinical management system is safety. All medical records must be protected and accessible only to authorized users. Simple and informative meetings should be consistent with their role and responsibilities in order to protect confidential information.

Since the purpose of the hospital plan is to plan for the required, accurate and relevant data, hospitals must ensure the operation of the system and can be obtained at any time. This could be a joint program of a particular institution, a series of clinics, government hospitals or perhaps international medical organizations. it is usually started with a basic version prepared for promotion. The implementation of the health management system was done in 3 groups on the basis of the type of users: patients, hospital staff and administrators, and third parties such as drug suppliers and insurance companies. The interaction between them conveys function. the benefits gained by the selected user group also have a positive impact on the work of others. Cooperation and communication are the basic requirements here.

PROBLEM STATEMENT:

First of all, the matter with worldwide treatment seems to be precisely the same - making a circle and visiting a doctor - transforming health care into a private, hospital experience for nearly everyone. Patient access to health care lays the inspiration for all patient interactions with the health care sector. Second, As patients, we've got never considered the practices that support health services. within the end patients, frustration and, of course, danger to their health. money spent on lost and damaged property, improper delivery of products or medicines, and damage caused by patients as a result, ends up in significant financial losses to health services. Lack of supply, lost inventory, and some stargazing measures in terms of

diminishing, all play into the very fact of the very fact that hospitals are wasteful service centers without a correct local supply chain management system. Not only the upkeep but also the retrieval of this patient's data, where necessary, is additionally a challenge for hospitals to deal with. Overexposure to data and mismanagement often end in conditions like poor diagnosis, compromise on data security, improper treatment, delay, and inability to stay up with the continuing changes or reversal of the patient's condition, etc.

OBJECTIVE:

Hospitals currently use a hands-on system to manage sensitive information. This method requires a wide range of paperwork, and data stored are distributed across the hospital management infrastructure. Many copies of the same information are available within the hospital and may end up with data inconsistencies in various data stores. All of this information needs to be managed efficiently and prudently so that the institution's resources can be used more effectively with HMS to make hospital or healthcare management more efficient and error-free. It aims to measure data, consolidate data to ensure data integrity and reduce inconsistencies.

SOFTWARE REQUIREMENTS: PHP, JavaScript, MySQL

PROPOSED SYSTEM:

The proposed system will benefit from knowledge technology tools and capabilities to spice up and automate medical information management for all staff and patients alike. The proposed system will improve system functionalities and convey new capabilities to hospital information management controls.
The business requirements are

- Family Medicine:
  i. **Find a patient record**; a patient record is also a form which contains every information about:
     - the patient
     - the patient next of kin information
     - service payment option, and
     - employment information

  ii. **New patient registration**; It creates an avenue to enable the record, the treatment given, the clinic been remarked, the mode of payment, etc to be properly stored and retrieved.

- Human Resource: this could be a list that contains the names of the personnel assigned to manage specific modules. The human resources are of two folds mainly:
  - **Personnel manager**; it's a listing that contains the tiny print about the management Staff of assorted departments.

- **Recruit new personnel**; this is often a form that ensures that newly recruited personnel information is been stored.

- **Schedule:** The schedule describes the appointment directory. It shows all appointment schedules between the period of your time.

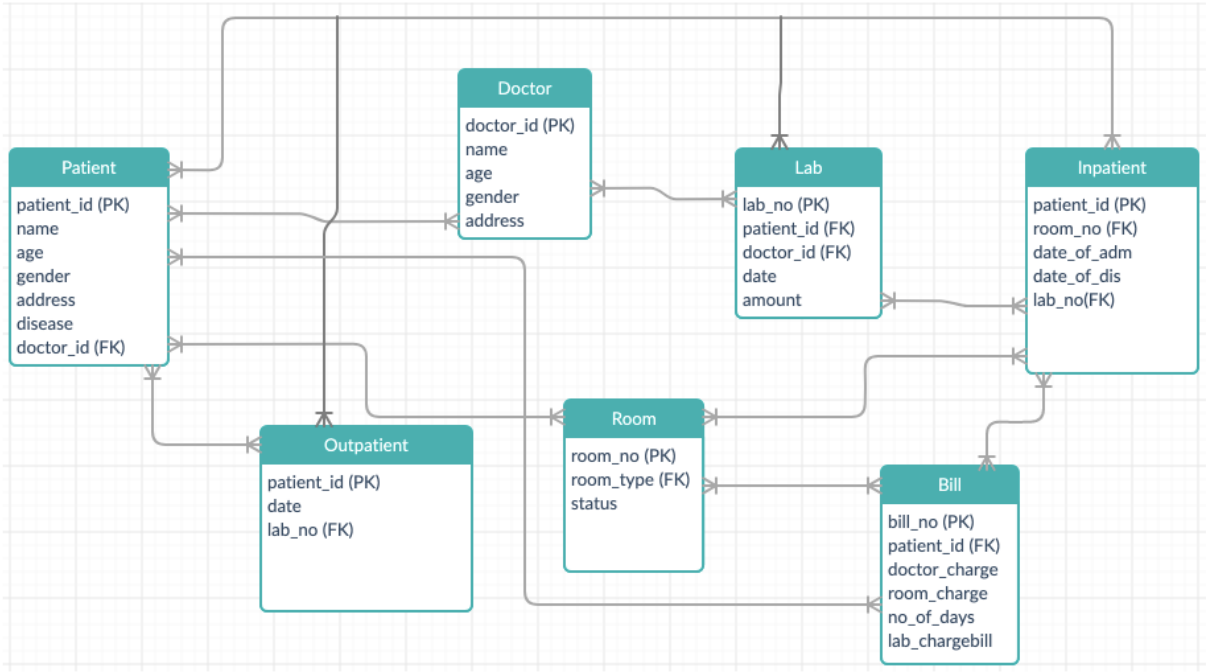
    - **Admission Centres**; These environment comprise of
        - Waiting list
        - Ward, Ward occupancy and bed
        - Nurses list
        - Report and history
    - **Waiting List**; It shows the list of patients to be admitted to numerous wards.
    - **Nurses List;** it is a listing that shows the most points of the nurses' staff and their department.
    - **Report and History**; it's a listing that shows all discharged patients in a very particular ward.

- **Pharmacy**: Pharmacy could also be a module that contains two major features namely: pharmaceutical center and stocks management.
    - **Pending Order;** These give room for the user to view/access the pending orders.
    - **Pharmaceutical Index;** enables the user to view all pharmacy stock items. to look out a stock, entre the barcode and click on find.
    - **Ware House Stock;** this will be an integral element of the stock management designed to seem in the least current warehouse stock. to hunt out a stock: Entre the barcode and click on find.
    - **Stock Diary:** this could be a function of stock management designed to enter the new stock diary.

- **Specialty Clinic**: this may be a module that has information about the various clinics and so the patients been referred there. this may be of two folds;
    - Pending referred patients, and
    - Find a patient

- **Account and Finance**: this will be a modular design to enable one to keep and retrieve all information regarding account and finance. This module has six basic features which include:
    - **Pending Receivables**; this may be an environment that permits you to possess access to pending charge payments.
    - **Expenditure**; It enables users to record new expenditures.
    - **Daily Cash Book**; It enables users to post cashbooks for all departments.
    - **Bank Account**; It enables the user to manage a bank account. It shows all banks and balance details. It also creates a neighbourhood for the addition of a replacement bank account.
    - **Service Fees**; It enables the user to seem in any respect service fees/charges
    - **Report**; It enables the user to seem at financial reports just like the receivable reports, expenses reports, and cashbook reports between calendar months.

ENTITY – RELATIONSHIP DIAGRAM:



RELATIONAL MODEL:

Table 1: tbPatent

Field Name	Description	Type
patent_id (PK)	Patent ID	varchar
name	Patent Name	varchar
age	Patent Age	int
gender	Patent Gender	varchar
address	Patent Address	varchar
disease	Patent Disease	varchar
doctr_id (FK)	Doctr ID	varchar

Table 2: tbDoctor

Field Name	Description	Type
doctr_id (PK)	Doctr ID	varchar
name	Doctr Name	varchar
age	Doctr Age	int
gender	Doctr gender	varchar
address	Doctr Address	varchar

Table 3: tbLab

Field Name	Description	Type
lab_no (PK)	Lab Numbr	varchar
patent_id (FK)	Patent ID	varchar
doctr_id (FK)	Doctr ID	varchar
date	Lab Date	Date/Time
amount	Amount of Lab	int

Table 4: tbInpatent

Field Name	Description	Type
patent_id (PK)	Patent ID	varchar
room_no (FK)	Room Numbr	varchar
date_of_adm	Date of Admisson	Date-Time
date_of_dis	Date of Discharg	Date-Time
lab_no (FK)	Laboratory Numbr	varchar

Table 5: tbOutpatent

Field Name	Description	Type
patent_id (PK)	Patent ID	varchar
date	Date of Outpatent	varchar
lab_no (FK)	Lab Numbr	varchar

Table 6: tbRoam

Field Name	Description	Type
roam_no (PK)	Roam Numbr	varchar
roam_type	Roam Type	varchar
stats	Status Of Roam	varchar

Table 7: tbBil

Field Name	Description	Type
bil_no (PK)	Patent ID	int
patent_id (FK)	Patent Name	varchar
doctr_charg	Patent Age	int
roam_charg	Patent Gender	int
no_of_day	Patent Address	int
lab_charg	Patent Disease	int
bil	Doctr ID	int