

UNIVERSITY OF SAN CARLOS

SCHOOL OF ARTS AND SCIENCES DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES

# Hospital Information Management System

A PROTOTYPE

FINAL PROJECT OUTPUT

IT 2202

Database Systems

By:

Salazar, Mark Eleazer

Manigo, Justin Graig

I. Introduction

University of Cebu Medical Center

**Since**: 2015

**Owner:** Atty. Augusto Go

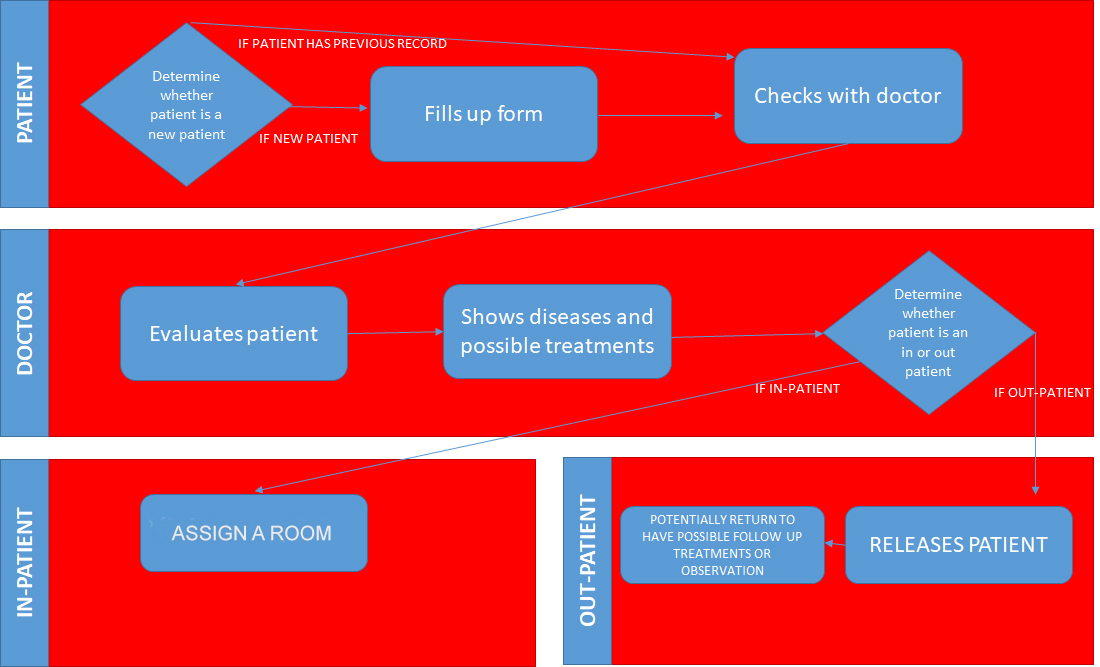
**Branches/Location:**   
  
Ouano Avenue, Subangdaku, Mandaue City 6014

**Industry**: Healthcare Facility / Hospital **Employees:** 5,000

**Company History**

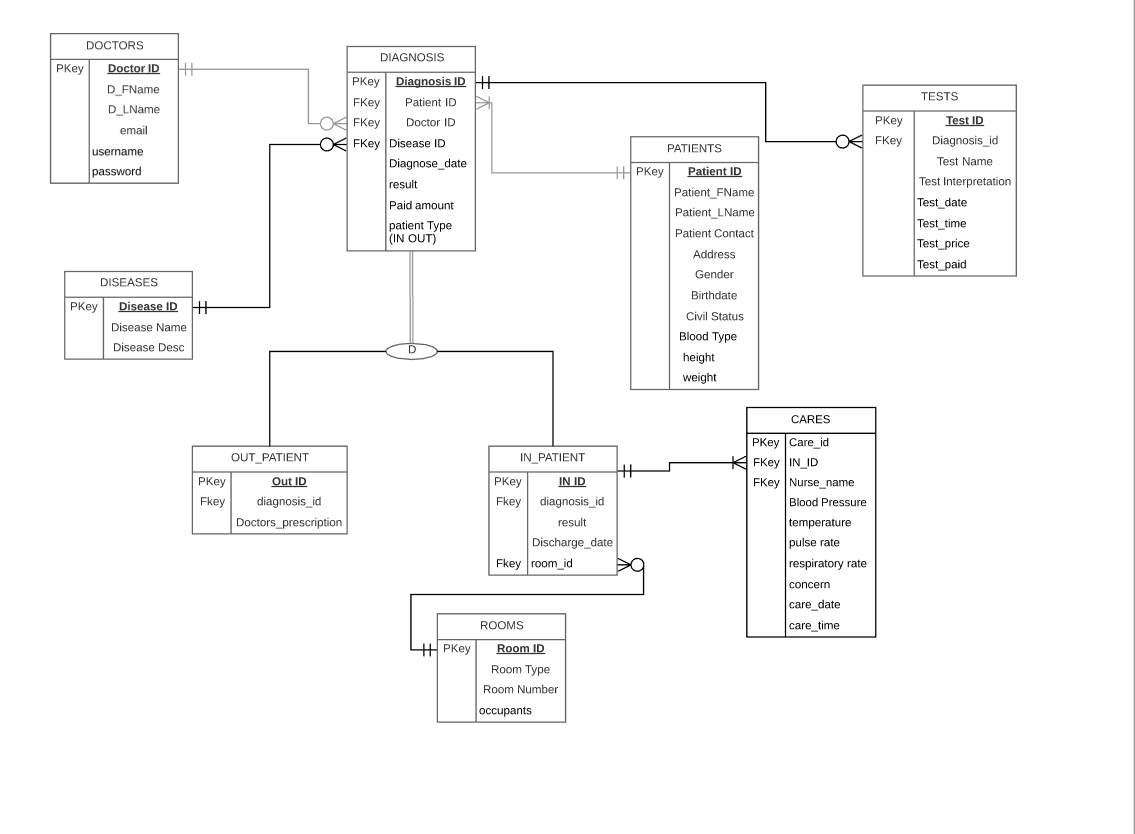
The Company has been established to deliver high quality clinical care and affordable and efficient patient-centered services through its state-of -the-art medical facilities and excellent medical staff. UCMed is envisioned to be a tertiary hospital with 300-be capacity. An Affiliate of the University of Cebu (the largest privately-held educational institution in the country) and the University of Cebu School of Medicine, UCMed aspires to be a training hospital for the students and medical practitioners in the field of Medicine, Nursing and Allied Medical Services.

Business Process



**UCMed Business Process**

UPDATED ENTITY RELATIONSHIP DIAGRAM



MODULES AND ROLES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name:** | **C** | **R** | **U** | **D** | **Done By:** |
| Doctors Registration Module | Y | N | N | N | Justin Manigo |
| Login Module | N | Y | N | N | Justin Manigo |
| View chart of doctors patient visited per month | N | Y | N | N | Mark Salazar |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name:** | **C** | **R** | **U** | **D** | **Done By:** |
| View all patients of specific doctor | N | Y | N | N | Justin Manigo |
| View patients medical record | N | Y | N | N | Mark Salazar |
| Add patients medical record | Y | Y | N | N | Mark salazar |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name:** | **C** | **R** | **U** | **D** | **Done By:** |
| Add New Patient | Y | Y | Y | N | Mark Salazar and Justin Manigo |
| Add Disease | Y | Y | N | N | Mark Salazar and Justin Manigo |
| View chart disease | N | Y | N | N | Mark Salazar and Justin Manigo |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name:** | **C** | **R** | **U** | **D** | **Done By:** |
| Delete Diagnosis | N | N | N | Y | Mark Salazar |
| Update patient info | Y | Y | Y | N | Mark Salazar |
| View In Care Patient Record | Y | Y | N | N | Mark Salazar and Justin Manigo |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Level: Administrator** | **C** | **R** | **U** | **D** | **Module Name:** |
| ADMIN(Doctor) | N | Y | N | N | Profit Per Year |
| Y | N | Y | N |  |
| N | Y | N | N | Patients visited per month |
| N | Y | N | N | Most disease of patient |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Level: Administrator** | **C** | **R** | **U** | **D** | **Module Name:** |
| ADMIN(Doctor) | Y | N | Y | N | Doctors Registration |
| Y | N | Y | N | Patient registration |
| N | Y | N | N | Patients visited per month |
| N | Y | N | N | Most disease of patient |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Level: Administrator** | **C** | **R** | **U** | **D** | **Module Name:** |
| ADMIN(Doctor) | Y | N | Y | N | Add medical record |
| Y | N | Y | N | Patient registration |
| N | Y | N | N | Patients visited per month |
| N | Y | N | N | Most disease of patient |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Level: Administrator** | **C** | **R** | **U** | **D** | **Module Name:** |
| ADMIN(Doctor) | Y | N | Y | N | Doctors Registration |
| Y | N | Y | N | Patient registration |
| N | Y | N | N | Patients visited per month |
| N | Y | N | N | Most disease of patient |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Level: Administrator** | **C** | **R** | **U** | **D** | **Module Name:** |
| ADMIN(Doctor) | N | N | N | Y | Delete Diagnosis |
| Y | Y | N | N | View Test Patient |
| Y | Y | N | N | VIEW In Patient Care |
| N | Y | N | Y | Discharge |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Level: Administrator** | **C** | **R** | **U** | **D** | **Module Name:** |
| ADMIN(Doctor) | N | Y | N | N | All patients of specific doctor |
| Y | N | Y | N | View patients medical record |
| N | Y | N | N | Add patients medical record |
| N | Y | N | N | Edit patient medical record |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Name:** | **C** | **R** | **U** | **D** | **Done By:** |
| Discharge In Patient | N | Y | Y | Y | Mark Salazar |
| View Patient Test | Y | Y | N | N | Mark Salazar |
| View In Care Patient Record | Y | Y | N | N | Mark Salazar and Justin Manigo |

V. SQL Queries

|  |  |  |
| --- | --- | --- |
| "SELECT ddiseases.disease\_name as mostdis, patient\_id as patient FROM diagnosis JOIN diseases ON diseases.disease\_id = diagnosis.disease\_id GROUP BY mostdis" | | |
| **From**: index.php | **Expected Row: many** | **Output**: chart |

|  |  |  |
| --- | --- | --- |
| $sql= "SELECT diseases.disease\_name as mostdis, patient\_id as patient FROM diagnosis JOIN diseases ON diseases.disease\_id = diagnosis.disease\_id GROUP BY mostdis" | | |
| **From**: index.php | **Expected Rows**: many | **Output**: chart |

|  |  |  |
| --- | --- | --- |
| $sql= "SELECT date\_format(d.diagnose\_date,'%M')as month, SUM(paid\_amount) as total FROM diagnosis d GROUP BY month ORDER BY month ASC;" | | |
| **From**: index.php | **Expected Rows**: many | **Output**: chart |

|  |  |  |
| --- | --- | --- |
| $sql="SELECT `doc\_Fname`,`doc\_Lname`, `doctor\_id` FROM doctors WHERE username='$username'"; | | |
| **From**: index.php | **Expected Rows**: many | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $sql="SELECT \* FROM patients JOIN diagnosis ON patients.patient\_id = diagnosis.patient\_id  WHERE diagnosis.doctor\_id = $did GROUP BY diagnosis.patient\_id"; | | |
| **From**: patientz.php | **Expected Rows**: many | **Output**: Datatable |
| $querypatient = "SELECT \* FROM patients WHERE patient\_id = ".$\_GET['pid']; | | |
| **From**: updatepatient.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $queryroom = "SELECT \* FROM rooms WHERE room\_type='$hey'"; | | |
| **From**: updatepatient.php | **Expected Rows**: many | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $querydisease = "SELECT disease\_id, disease\_name FROM diseases"; | | |
| **From**: updatepatient.php | **Expected Rows**: many | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $querypatient = "SELECT patient\_Fname, patient\_Lname, patient\_contact, address, gender, birthdate, civil\_status FROM patients WHERE patient\_id =".$\_GET['pid']; | | |
| **From**: viewpatient.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| "SELECT diagnosis.diagnose\_date,disease\_name,patient\_type,diagnosis.diagnosis\_id  FROM diagnosis  JOIN patients ON diagnosis.patient\_id= patients.patient\_id  JOIN diseases ON diagnosis.disease\_id=diseases.disease\_id  WHERE patients.patient\_id=".$\_GET['pid'];  $resultpre = mysqli\_query($conn, $viewpatient); | | |
| **From**: viewpatient.php | **Expected Rows**: many | **Output**: Datatable |

|  |  |  |
| --- | --- | --- |
| "SELECT ds.disease\_name,d.results, d.patient\_type,d.diagnose\_date,d.paid\_amount,r.room\_type,r.room\_number,ip.discharge\_date,  op.doctors\_prescription  FROM diagnosis d  JOIN patients p ON p.patient\_id=d.patient\_id  JOIN diseases ds ON d.disease\_id=ds.disease\_id  LEFT JOIN out\_patients op ON op.diagnosis\_id=d.diagnosis\_id  LEFT JOIN in\_patients ip ON ip.diagnosis\_id=d.diagnosis\_id  LEFT JOIN rooms r ON r.room\_id = ip.room\_id  WHERE d.diagnosis\_id =".$\_GET['diagid']; | | |
| **From**: updatepatientdiagnosis.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $querypatient = "SELECT ds.disease\_name,d.results, d.patient\_type,d.diagnose\_date,d.paid\_amount,r.room\_type,r.room\_number,ip.discharge\_date,  op.doctors\_prescription  FROM diagnosis d  JOIN patients p ON p.patient\_id=d.patient\_id  JOIN diseases ds ON d.disease\_id=ds.disease\_id  LEFT JOIN out\_patients op ON op.diagnosis\_id=d.diagnosis\_id  LEFT JOIN in\_patients ip ON ip.diagnosis\_id=d.diagnosis\_id  LEFT JOIN rooms r ON r.room\_id = ip.room\_id  WHERE d.diagnosis\_id =".$\_GET['diagid']; | | |
| **From**: viewspecpatientz.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $viewpost = "SELECT \* FROM `test` WHERE diagnosis\_id = ".$\_GET['diagid']; | | |
| **From**: viewspecpatientz.php | **Expected Rows**: many | **Output**: Datatable |

|  |  |  |
| --- | --- | --- |
| $viewpre = "SELECT care\_date,care\_time,nurse\_name,care\_id FROM cares  JOIN in\_patients ON cares.in\_id = in\_patients.in\_id  WHERE in\_patients.diagnosis\_id=".$\_GET['diagid']." ORDER BY care\_date DESC"; | | |
| **From**: viewspecpatientz.php | **Expected Rows**: many | **Output**: Datatable |
| $querypatient = "SELECT \* FROM test WHERE test\_id=".$tid;  $result=mysqli\_query($conn,$querypatient); | | |
| **From**: viewtestrecord.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $sql= "SELECT \* FROM patients  JOIN diagnosis ON patients.patient\_id = diagnosis.patient\_id  JOIN in\_patients ON diagnosis.diagnosis\_id = in\_patients.diagnosis\_id  WHERE diagnosis.doctor\_id = $did AND diagnosis.patient\_type= 'in' AND in\_patients.discharge\_date = $nul  GROUP BY diagnosis.patient\_id"; | | |
| **From**: dischcharge.php | **Expected Rows**: many | **Output**: Datatable |

|  |  |  |
| --- | --- | --- |
| $querypatient = "SELECT patient\_Fname, patient\_Lname, patient\_contact, address, gender, birthdate, civil\_status, patient\_BloodType,patient\_height, patient\_weight,diagnosis.diagnosis\_id FROM diagnosis JOIN patients ON diagnosis.patient\_id = patients.patient\_id WHERE diagnosis.diagnosis\_id = ".$\_GET['did']; | | |
| **From**: dischargeme.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
| --- | --- | --- |
| $querypatient = "SELECT \* FROM patients WHERE patient\_id =".$\_GET['pid']; | | |
| **From**: updatepatientinfo.php | **Expected Rows**: 1 | **Output**: HTML |

|  |  |  |
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| **Presentation and Documentation** | |  |
| **Criteria** | **Weight** | **Score** |
| Mastery and Believability | 20% |  |
| Participation in Team Presentation | 20% |  |
| Content Development | 20% |  |
| Context and Purpose | 40% |  |

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| --- | --- | --- |
| **Database System** |  |  |
| **Criteria** | **Weight** | **Score** |
| Queries | 40% |  |
| Functions /Features | 40% |  |
| Data Presentation | 10% |  |
| Readability | 10% |  |