

HEALTHCARE MANAGEMENT SYSTEM



by

Yigang Jin

**Business Computer Information Systems
Baruch College / CUNY**

OUTLINE

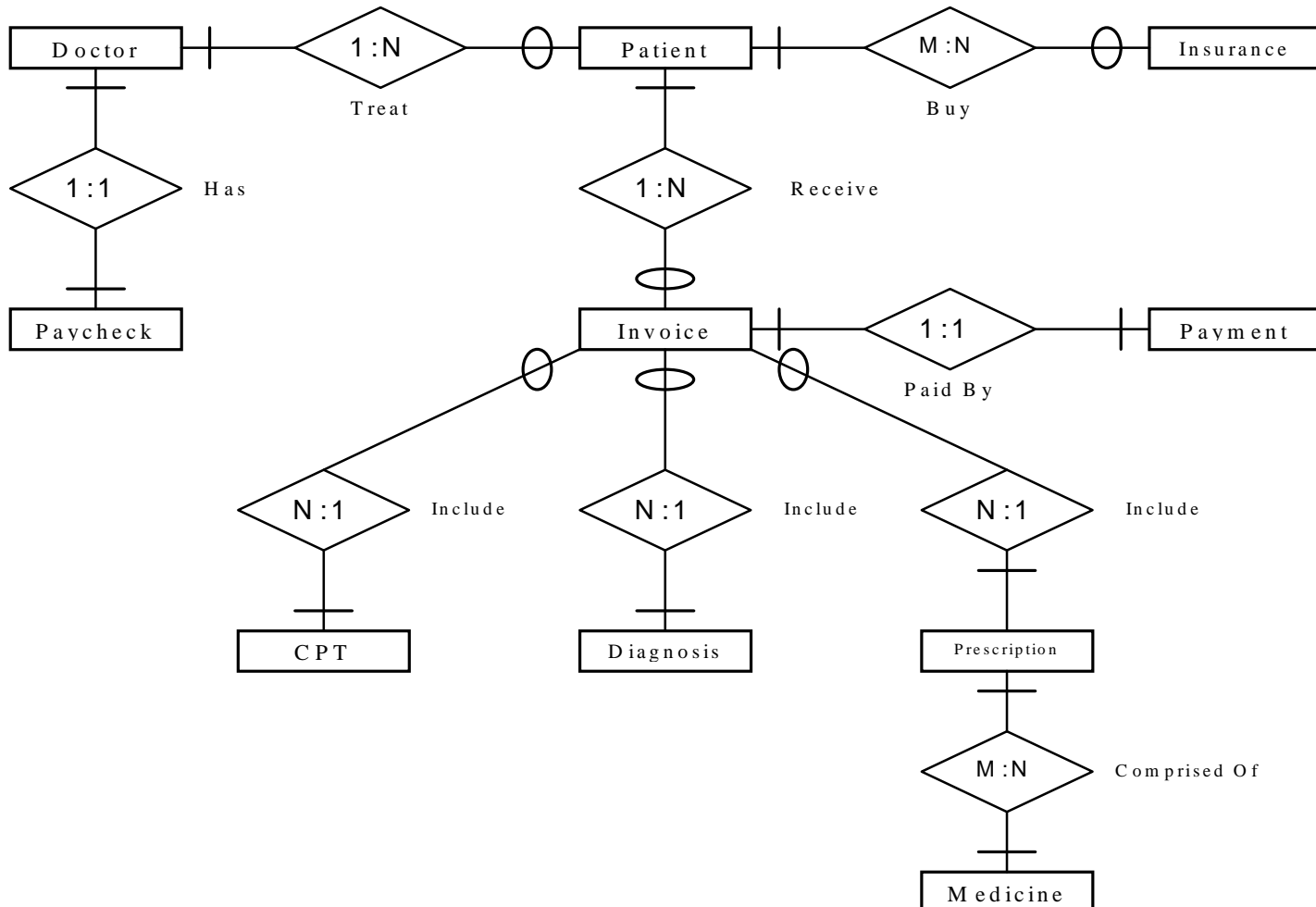


- **INTRODUCTION**
- **E-R DIAGRAM**
- **RELATIONAL MODEL**
- **IMPLEMENTATION**
- **RESULTS**
- **CONCLUSIONS**

Introduction

- Objective – Database Management System (DBMS)
 - Query, Update and Report
- Disadvantage of Former File Systems
 - Separated systems, lack of data sharing, duplicated data, etc.
- Advantage of Proposed DBMS
 - Easy to query and report, efficient data sharing, reliable backup and security, etc.

E-R Diagram



Relational Model

Doctor (*D_Ssn*, *D_Name*, *Gender*, *Age*, *Position*, *Office*, *Phone*, *Address*, *City*, *Zip*)

Paycheck (*D_Ssn*, *Chk_Num*, *Salary*, *Bonus*, *Pay_Date*)

Patient (*D_Ssn*, *P_Ssn*, *P_Name*, *Gender*, *Age*, *Position*, *Phone*, *Address*, *City*, *Zip*)

Insurance (*InsCo_Id*, *InsCo_Name*, *Category*, *Phone*, *Address*, *City*, *Zip*)

PatientInsurance (*P_Ssn*, *InsCo_Id*)

Invoice (*P_Ssn*, *Invoice_Num*, *CPT_Id*, *Diagnosis_Id*, *Prescription_Id*, *Amount*,
Invoice_Date, *Due_Date*)

Payment (*Invoice_Num*, *PayTrans_Num*, *Pay_Method*, *Pay_Status*, *Paid_Date*)

CPT (*CPT_Id*, *Category*, *CPT_Date*)

Diagnosis (*Diagnosis_Id*, *Category*, *Diagnosis_Date*)

Prescription (*Prescription_Id*, *Medicine_Quantity*)

Medicine (*MInventory_Id*, *M_Name*, *Manufacturer*, *Price*, *Quantity*, *Exp_Date*)

Prescription (*Prescription_Id*, *MInventory_Id*)

Implementation



- Microsoft Access
 - Switchboard (Menu)
- Structured Query Language
 - Create tables, forms, and reports
 - Set up relations
- Microsoft Visual Basic
 - Retrieve (Search) information

Results



- System Menus
- Retrieve (Search) Information
- Forms
- Queries
- Reports

Management System Main Menu

Healthcare Management System - [Healthcare Management System]

File Edit View Insert Format Records Tools Window Help

JMTZ Bee Healthcare, Inc.

Management System Menu

- Doctor Interface
- Patient Interface
- Finance Department Interface
- Payroll Department Interface
- Exit System

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System Sub-Menu (Functions)

Healthcare Management System - [Doctor Switchboard]

File Edit View Insert Format Records Tools Window Help

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Management System Menu

- Retrieve Information
- Update Information
- Print Report
- Back to Main Menu

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System Sub-Menu (Retrieve)

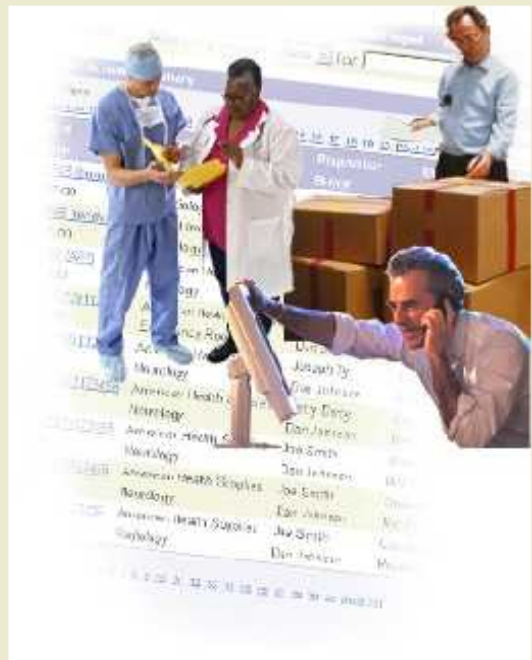
Healthcare Management System - [Doctor Retrieve]

File Edit View Insert Format Records Tools Window Help



Management System Menu

- Retrieve Patient Information
- Retrieve Medicine Information
- Retrieve CPT Information
- Retrieve Diagnosis Information
- Back to Previous Menu
- Back to Main Menu




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System Sub-Menu (Update)

Healthcare Management System - [Doctor Update]

File Edit View Insert Format Records Tools Window Help



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Management System Menu

- Add CPT Information
- Add Diagnosis Information
- Add Medicine Information
- Modify/Delete Patient Information
- Back to Previous Menu
- Back to Main Menu

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System Sub-Menu (Report)

Healthcare Management System - [Doctor Report] File Edit View Insert Format Records Tools Window Help



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Management System Menu

- Print Patient Report
- Print Patient Medical Report
- Print Medicine Inventory Report
- Print CPT Report
- Print Diagnosis Report
- Back to Previous Menu
- Back to Main Menu

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Retrieve (Search) Information

Healthcare Management System

File Edit View Insert Format Records Tools Window Help

Doctor Retrieve



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Management System Menu

Patient_Retrieve : Form

Patient Name: Alice Martin

- Alice Martin
- Carl Johnson
- Dick Gilbert
- Maria Jacobs
- Bess Johnson**
- Tim Anderson
- Mark Regis
- Carol Palmer

Record: 1

Retrieve

Form View

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Forms

The screenshot displays the 'Healthcare Management System' interface. The main window has a menu bar with 'File', 'Edit', 'View', 'Insert', 'Format', 'Records', 'Tools', 'Window', and 'Help'. Below the menu is a 'Doctor Retrieve' section featuring a list of medical supplies and a 'Management' sidebar with options like 'Retrieve Patient Information', 'Retrieve Medicines', 'Retrieve CPT Information', and 'Retrieve Diagnosis'. A 'Patient Form' dialog box is open, showing fields for 'Doctor Ssn', 'Ssn', 'Name', 'Gender', 'Age', 'Position', 'Phone', 'Address', 'City', and 'Zip'. The 'Patient Form' dialog also includes a 'Record' indicator showing '1 of 1 (Filtered)'. The Windows taskbar at the bottom shows the Start button, open folders, and running applications including Microsoft PowerPoint and the Healthcare Management System. The system clock shows 9:48 PM.

Healthcare Management System

File Edit View Insert Format Records Tools Window Help

Doctor Retrieve

JMTZ Bee Healthcare, Inc.

Management

- Retrieve Patient Information
- Retrieve Medicines
- Retrieve CPT Information
- Retrieve Diagnosis

Patient Form

Patient

Doctor Ssn: 999990002

Ssn: 888880007

Name: Alice Martin

Gender: F

Age: 72

Position: Retired

Phone: 212-739-4082

Address: 92-23 53 Av Elm

City: New York

Zip: 11656

Record: 1 of 1 (Filtered)

Form View

FLTR NUM

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Queries

Healthcare Management System

File Edit View Insert Format Records Tools Window Help

Finance Retrieve



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Management System Menu

- Retrieve Patient Information
- Retrieve Invoice Information
- Retrieve Payment Information
- Back to Previous Menu

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Paycheck_Query_Form

Doctor/Payroll

Ssn	999990001
Name	Bill Adams
Position	Pediatricist
Check Number	1008
Salary	\$8,000.00
Bonus	\$2,000.00
Pay Date	11/1/00

Record: 1 of 9

Form View

Reports

Healthcare Management System - [Invoice_Payment_Query_Report]

File Edit View Tools Window Help

Payment Report

Patient Ssn 888880001

Patient Name Carl Johnson

Invoice Number 123005

Transaction Number 990004

Amount	Invoice Date	Due Date	Pay Method	Pay Status	Paid Date
\$91.99	9/4/00	10/4/00	Credit	<input checked="" type="checkbox"/>	9/20/00

Patient Ssn 888880002

Patient Name Tim Anderson

Invoice Number 123010

Transaction Number 990011

Amount	Invoice Date	Due Date	Pay Method	Pay Status	Paid Date
\$92.40	9/9/00	10/9/00	Credit	<input checked="" type="checkbox"/>	9/23/00

Page: 1

Ready

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Conclusions



- The Power of DBMS
- The Possibility of the Proposed Healthcare Management System
- The Future Improvement
- Group/Team Dynamics

ACKNOWLEDGEMENT



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