



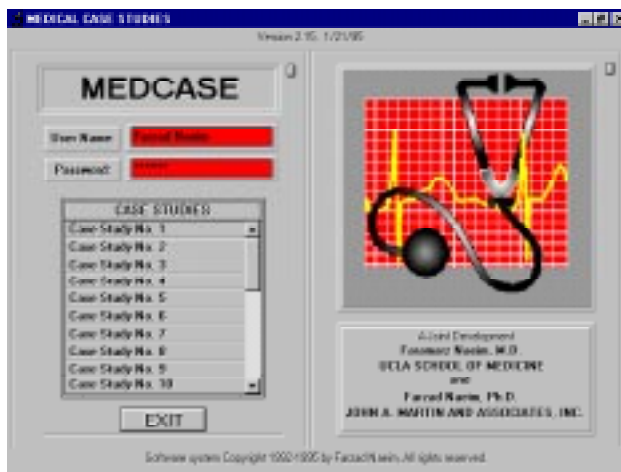
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Multimedia Software Development Series

MEDCASE

A MULTIMEDIA PROBLEM SOLVING CASE STUDY PROGRAM

FOR TEACHING PATHOPHYSIOLOGY OF DISEASES

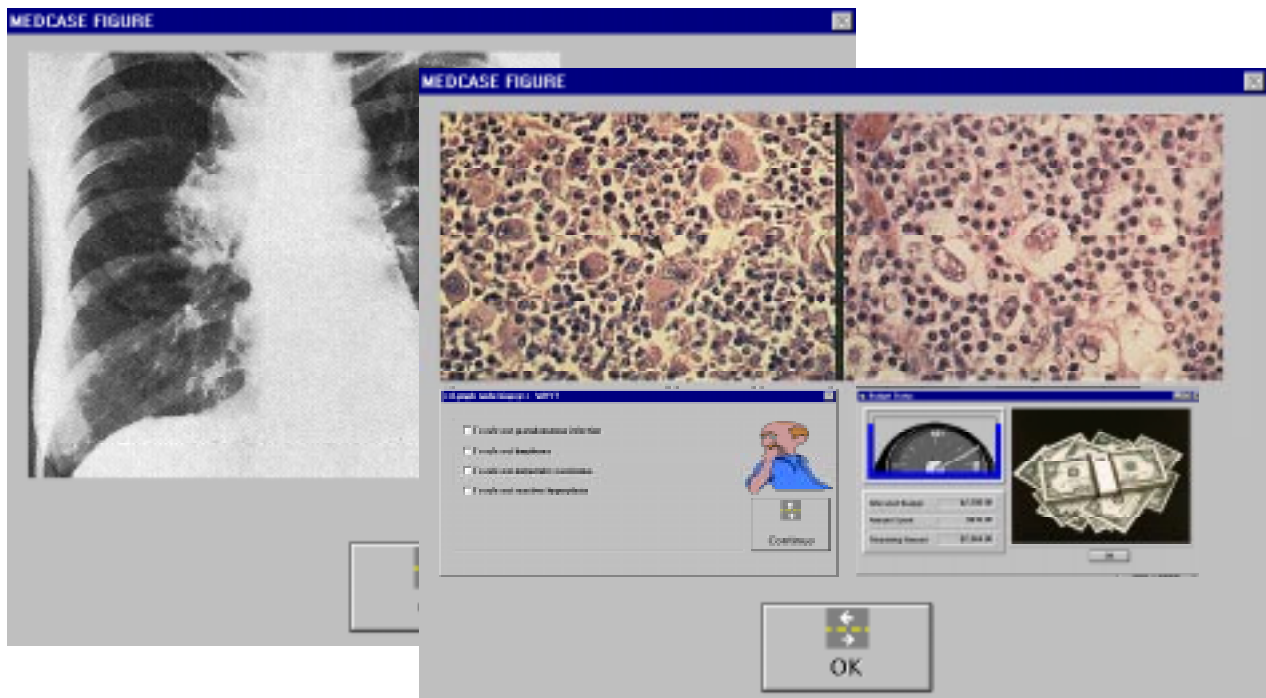


Developed as a joint project of UCLA School of Medicine and our Research and Development Department, MEDCASE has been used in teaching computer laboratories at UCLA since 1992. Over 800 medical students have been trained on this system as a part of their second year education. More than twelve other medical schools, including Harvard, have expressed interest in training their students using this state-of-the-art system.

MEDCASE provides students with case studies of patients who have to be cured within a given budget. A complex variety of medical tests and procedures are available on-line. Students can examine the results of their diagnosis and treatment in the follow-up visits of the patients.

A sophisticated database system tracks every move and decision made by each student. This system can be used to

measure the progress of students, as well as to conduct class case studies. One example of such class case study was conducted in 1993. The purpose of this study was to determine whether budgetary limitations would influence the way the patients were treated.





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MEDCASE (Continued)

MEDCASE [Follow Up] [Summary] [Solution] [Help] [Exit]

A 45 year old caucasian man was brought to an emergency room by a Fire Department ambulance complaining of chest pain which started approximately 2 hours after his dinner while he was sitting on his couch watching TV. The chest pain was sharp and extended to his chin and his back. On physical examination he was tachypneic, pale and restless, with a cold clammy skin. The rest of his physical examination was unremarkable. His temperature was normal, his blood pressure was 105/75 mmHg, his pulse rate was 90/min and regular, and his respiration rate was 31/min. He denied any previous history of chest pain or shortness of breath.

1. Major clinical considerations include:

- Cardiovascular disorders
- Disorders of the digestive system
- Pulmonary disorder
- Neuromuscular disorders

2. What tests would you order immediately?

- Chest X-ray
- Serum CK determination
- CK isoenzyme analysis
- EKG

MEDCASE DIRECTORY OF TESTS

TESTS	CATEGORY
ABO/Rh typing	TRANSFUSION MEDICINE TESTS
<input checked="" type="checkbox"/> Activated partial thromboplastin time (APTT)	HEMATOLOGY AND COAGULATION
<input checked="" type="checkbox"/> Albumin	BLOOD CHEMISTRY
Bilirubin	BLOOD CHEMISTRY
<input checked="" type="checkbox"/> Bleeding time	HEMATOLOGY AND COAGULATION
Blood culture	MICROBIOLOGY
Bone marrow aspirate and biopsy	HEMATOLOGY AND COAGULATION
Bone marrow biopsy	CYTOLOGY AND SURGICAL PATHOLOGY
Bone survey, spine/hip	
Chest fluoroscopy	
Chest tomography	
Chest X-ray, Ap and lateral	
Complete routine analysis	
Coomb's test	
<input checked="" type="checkbox"/> Creatinine	
CT scan, abdomen	
Ct scan, thorax	

Double click on a test entry to get

4. What other information are necessary?

- More detailed history
- Patient's insurance
- Drugs he is taking
- Family background

Follow-up" to proceed.....

MEDCASE HELP

USING MEDCASE SYSTEM

- Index
- Search
- Tutorial
- About

MEDICAL ISSUES

- Directory of Lab Tests
- Glossary of Terms

Return to the Case Study Program