

The School Scenario

You are a systems developer who has been asked to design and build a relational database for a local school.

A school operates a number of microcomputer systems. The decision has been taken to integrate and rationalise record keeping regarding the computers, their spares, optional peripherals and software. There are several potential users of the information.

The Head Teacher

- Requires information on utilisation levels of the systems in order to confirm the effectiveness of the school's purchasing and deployment of resources.

Deputy Head (school finance officer)

- Needs access to a record of items of value in the school for insurance purposes. Software is not insured as it covered by other agreements.

The Head of IT

- Needs access to warranty status in order to progress warranty claims.
- Needs to know where each system and peripheral is physically located within the school.
- Needs to record failure and repair data for all systems, components and peripherals.
- Needs access to Vendor information to obtain spares, support and new equipment.

Subject teachers

- Need to know which (if any) computers have suitable software and peripherals for their teaching needs

Data Available from existing record cards

Microcomputer Record Card					
Make: Evesham Tech		Model: Axis 64 STR			
Serial number: SCR023-03					
Supplier: ...College Computers Ltd					
Purchase price: ...£649 inc VAT			Purchase date: ...21/9/03		
Processor type/speed: AMD Athlon, 2 GHz					
Hard disk size: 100 GB					
BUS types: 4 x PCI, 1 x AGP(4x), 4 x USB2					
<u>Fitted expansion cards</u>					
Type	Make	Supplier	Serial No	Purchased	Price
Graphics	nVidia	PCWORLD	3474236	20/8/04	£306
Sound	Creative	PCWORLD	SC445566	12/6/02	£72.56
Network	Acton	Maplins	Nf3422	15/3/03	£10
Monitor:					
Make: Evesham		Serial No: M384432		Type: Flat screen	
Screen size: 17in		Supplier: College Computers Ltd			
Purchased: 12/8/02		Price: £305.00			
<u>Peripherals</u>					
Make: Epson		Model: Stylus Color 800			
Type: Inkjet Printer		Serial number: P459923			
Supplier: PCWORLD		purchase date: 14/5/04		Price: £145.00	
Make: HP		Model: Scanjet 2400			
Type: Scanner		Serial number: S459923			
Supplier: PCWORLD		purchase date: 14/5/04		Price: £145.00	
Make:		Model:			
Type:		Serial number:			
Supplier:		purchase date:		Price:	
LOCATION: Room C21					

Maintenance Activity Record Card

Item type: Graphics Card

Item serial number: 3474236

Repair date: 2/2/05

Warranty y/n: yes

Nature of fault:

Malfunctioning output port

Software Record Card

Title: StatAn-Pro

Version: v3.2

Supplier: PCWorld

Purchase date: 12/4/03

Price: £200.53

Category: Statistics Analysis

Minimum memory: 128 MB

Special peripherals: None

School subject area(s):

Computing, Maths, Social Science, Psychology

Site license y/n: Yes

Copies on site: 10

Installed on: (enter computer serial number)

SCR023-01, SCR023-02, SCR023-03,
SCR025-01, SCR025-02, SCR025-03,
SCR026-01, SCR027-02, SCR028-03,
SCLib-01

School's specialist on the package (if any): Joe Bloggs

Data Available from other Sources

The school office keeps the paperwork relating to each purchase, which has the suppliers' details, and warranty conditions included.

There are a fixed number of teaching hours in a school year. Each Department Head (one per subject area) presently advises the Head Teacher how many computers they use and for how many hours.