

PLATFORM QUESTIONS

1. IBM MAINFRAME

ES9000 740 MAINFRAME

SOFTWARE MVS/CICS/VTAM

VTAM VIRTUAL TELECOMMUNICATIONS ACCESS METHOD

PERIPHERALS

IBM DASD 3380/3390

TAPE 3480/3420

3174 LOCAL CONTROLLER

3800 PRINTER

HDS DASD 7390

3814 CHANNEL SWITCHING UNIT

TANDEM

SERIES/1

S/1 MIP MC

SYSTEM 88

VISA

CRYPT UNIT 3847

COMMUNICATIONS CONTROLLER 3745

MICROWAVE LINK

MODEMS 56 KB

T1 CABLE

2. CLIENT/SERVER

OBJECTS AND THE WEB ENCOMPASS ALL ASPECTS OF DISTRIBUTED COMPUTING INCLUDING GROUPWARE, TRANSACTIONS, DATABASE, AND SYSTEM MANAGEMENT

OBJECT WEB DISTRIBUTED OBJECTS COMBINED WITH INTERNET

SHRINK WRAPPED MIDDLEWARE AND SERVER PACKAGES

WORKGROUP COMPUTING

CLIENT / SERVER

API APPLICATION PROGRAMMING INTERFACE

ABI APPLICATION BINARY INTERFACE

CONSUMER

DESKTOPS/PALMTOPS/PENTABLETS/

INTELLIGENT APPLIANCES/TVS/PCS/

WORKSTATIONS

PROVIDER

FILE

DATABASES

SQL CALLS

TRANSACTION

GROUPED SQL CALLS

GROUPWARE

LOTUS NOTES EX.

OBJECT SERVERS

SCALABILITY

HORIZONTAL--

ADDING

VERTICAL--

MIGRATING

MIDDLEWARE

REQUESTS TRANSMISSION INTERACTION

COMMUNICATION STACKS/
 DISTRIBUTED DIRECTORIES/
 AUTHORIZATION SERVICES/
 NETWARE
 TCP/IP
 LAN MANAGER

SERVICE SPECIFIC GROUPWARE

OPERATING SYSTEM

CLIENT

GUI GRAPHICAL USER INTERFACE
 OOI OBJECT ORIENTED INTERFACE
 WEB BROWSER

SERVER

SHRINK-WRAPPED PACKAGES

DISTRIBUTED SYSTEM MANAGER

MIDDLEWARE HOUSE DATA REPOSITORIES

TRANSPORT STACKS
 NETWORK OPERATING SYSTEM NOS
 SERVICE SPECIFIC SOFTWARE

SERVER SYSTEM

ACCESS DATA BASE ENGINE

CLIENT SYSTEM

SUBMITS REQUESTS FROM USER

TWO TIER

CLIENT/SERVER

THREE/N TIER

CLIENT/MIDDLEWARE/SERVER

PEOPLE WHO INTEND TO USE THE RESULTS OF THE PROGRAMS SHOULD WRITE THE PROGRAMS THEMSELVES

3. MVS/ESA

MULTIPLE VIRTUAL SYSTEMS/EXTENDED SYSTEMS ARCHITECTURE

Von Neuman architecture

outputs<-----
 crt <-----
 keyboard ----->

SECONDARY STORAGE

PRIMARY STORAGE

PROCESSOR STORAGE I/O

GENERAL PURPOSE REGISTERS
 HIERARCHY OF MEMORIES
 ARITHMETIC LOGICAL UNIT

CONTROL UNIT

COLD START

NO SYSTEM SOFTWARE HAS BEEN LOADED

WARM START

SYSTEM MODULES ARE ALREADY RESIDENT

JES

JOB ENTRY SUBSYSTEM

SCANS FOR SYNTACTICAL CORRECTNESS

JES2

PBX PRIVATE BRANCH EXCHANGE/ESTABLISHES VOICE CIRCUITS
OVER TIE LINES BETWEEN SUERS AND THE TELEPHONE
NETWORK

TIE LINE DEDICATED TELEPHONE CIRCUIT LINKING TWO
POINTS BETWEEN USERS AND THE TELEPHONE NETWORK

RS-232-C INTERFACE BETWEEN COMPUTERS AND MODEMS/
INTERFACE BETWEEN DCE AND DTE

DCE DATA CIRCUIT TERMINATING EQUIPMENT

DTE DATA TERMINAL EQUIPMENT

FX FOREIGN EXCHANGE

WATS WIDE AREA TELEPHONE SERVICE

ACCESS METHODS TO REMOTE USERS

BTAM	BASIC TELECOMMUNICATIONS ACCESS METHOD
VTAM	VIRTUAL TELECOMMUNICATIONS ACCESS METHOD

NCP NETWORK CONTROL PROGRAM (NCP) RUN BY NETWORK
COMMUNICATIONS CONTROLLER TO CONTROL COMMUNICATIONS ON DATA NETWORK

VRU VOICE RESPONSE UNIT
INBOUND CUSTOMER SERVICE CALLS
ANI AUTOMATIC NUMBER IDENTIFICATION
BUILD GENERIC COMMENTS FILE FOR ACTIVATED ACCOUNTS

VIS VOICE INQUIRY SYSTEM
CONSISTS OF TEN PCS THAT RUN ON UNIX
12 TELEPHONE LINES TO EACH VIS BOX AND EACH BOX HAS 12 CHANNELS THAT SIGN ON
TO TORCICS. EACH CHANNEL EMULATES A TERMINAL THAT SIGNS ON TO THE SYSTEM
TO PERFORM AN INQUIRY

7. DAVOX UNISON

ROUTING OF CALLS TO CUSTOMER SERVICE AGENTS

**MOST MODULES IN C OR C++
RECEIVED COMPILED SOURCE (BINARIES) AND ALSO
MODULES IN SCRIPTING LANGUAGES WE CAN VIEW
AND SOMETIMES CHANGE:
C SHELL SCRIPTS
PERL SCRIPTS
AWK SCRIPTS
SYBASE STORED PROCEDURES**

Dbartisan to export data from development sybase tables/use ftp to upload to mainframe

8. UNIX

HARWARE INDEPENDENT MULTITASKING OS AT&T

AIX is IBM's version of UNIX

GENERAL PURPOSE INTERACTIVE MULTI-USER OS

SHELL COMMAND LANGUAGE

EXAMPLES:

```
$ DATE
$ LS          (LIST OF FILES)
```

UNIX TREATS TERMINAL AS A FILE

SCRIPT IS AN EXAMPLE OF A COMMAND FILE

PIPES CONNECTIONS BETWEEN OUTPUTS OF ONE PROGRAM AND
INPUTS OF ANOTHER

FILTERS PROGRAM THAT READS AND TRANSFORMS

HOME DIRECTORY HIERARCHIAL STRUCTURE/ TOP IS ROOT

UNIX KERNAL

THE SHELL CAN BE USED AS A PROGRAMING LANGUAGE ITSELF, THE
UNIX COMMAND BEING CONECTED NOT ONLY WITH PIPES AND FILTERS
BUT WITH HIGH ELVEL PROGRAMING LANGUAGE CONSTRUCTS

UNIX ENCOURAGES PROGRAMMERS TO THINK OF USING SOFTWARE TOOLS AND STANDARD
PROGRAMS LINKED TOGETHER TO PERFORM MORE COMPLEX TASKS

9. C

COLLECTION OF FUNCTIONS/ALLOWS ACCESS TO LOW LEVEL OPERATIONS SUCH AS ERGISTER
SPECIFICATIONS

MAIN

NO I/O/IMPLEMENTED IN RUN-TIME

IF/WHILE/DO/CHAR

OPTION ENTITY, CONSISTS OF ACTION + DATA

OOP object oriented programming involves the construction of
classes

CLASS COLLECTION OF OBJECTS WITH COMMON STRUCTURES
CONSISTING OF PRIOPERTIES AND METHODS

GUI GRAPHICAL USER INTERFACE

DAEMONS PROCESS THAT RESPONDS TO SPECIFIC EVENTS

INHERITIENCE ONE CLASS CONTAINED IN ANOTHER/ATRIBUTES
OF SMALL CLASS TAKING ON THAT OR LARGER
CLASS

ENCAPSILATION/BLACK BOX FUNCTIONALITY

POLYMORPHISM/CAN PERFORM DIFFERENT TASKS

STURCTURED LANGUAGE WITH THE FLAVOR OF HIGH-LEVEL ASSEMBLER

PROBLEMS OF UNEADABILITY/UNMAINTAINBILITY/LACK OF PORTABILITY/LONG LEARNING CURVE

10. C++

OBJECT ORIENTED/STRUCTURED

BORLAND C++
VISUAL C++ **WINDOWS**
 APP WIZARD
 CLASS WIZARD
TURBO C++ **PROVIDES USER INTERFACES AND EVENT DRIVEN ARCHITECTURES**
JAVA **DISTRIBUTED PROGRAMMING LANGUAGE WITH A C++ ORIENTATION**
IBM C SET ++ **OS/2**
OLE **OBJECT LINKING AND EMBEDDING INTERFACES BETWEEN WINDOWS AND PROGRAMS**
DDE **DYNAMIC DATA EXCHANGE**
DLL **DYNAMIC LINK LIBRARIES**