

1. Project Definition:

Project Name: **ERNST & YOUNG LICENSE TRACKING SYSTEM**

PCode : Group 2

Duration: Sept, 1, 05 - Jan 28, 06

Customer: Ernst & Young

Cost : 5.000 €

Team : DASS

Database : Oracle

Other Tools : Macromedia Dreamviewer, ASP.NET

1.1. Introduction:

This project is undertaken in order to trace and support the license acquirement processing of Ernst & Young Company. This project will facilitate the process of getting a new license and following the each component and parties involved in the process such as vendor, version, user etc.

With the help of License Tracking System, the company will reach efficiency in the control of the licenses it holds. Furthermore, this tracking system will enhance the management of maintenance or renewals concerning the licenses. As a result of greater control over the software of the company, better software cost management will be provided thanks to the installment of our “License Tracking System”

Simplified license management and increased control over software costs, the management will get the benefits of Software assurance such as training, deployment services and control in license purchase.

1.2. Schedule:

	September		October		November		December		January		February	
WEEK:	1 st	2 nd	1 st	2 nd	1 st	2 nd	1 st	2 nd	1 st	2 nd	1 st	2 nd
Requirements												
Design												
ER												
Bachman												
Define												
Code												
Test												
Implement												

1.3. Payment:

The entire project will cost to customer 5.000 €. This price is inclusive of 1-year assistance in the case of any questions. Afterwards, the technical support is offered with a charge per occurrence. After 1 year, the acceptance of a maintenance agreement by the customer will provide a free technical support whenever there is a problem.

We get the money in € terms because YTL is ever changing. Therefore we eliminate the risk of fluctuations is the value of YTL by keeping the money in terms of the most stable currency, €.

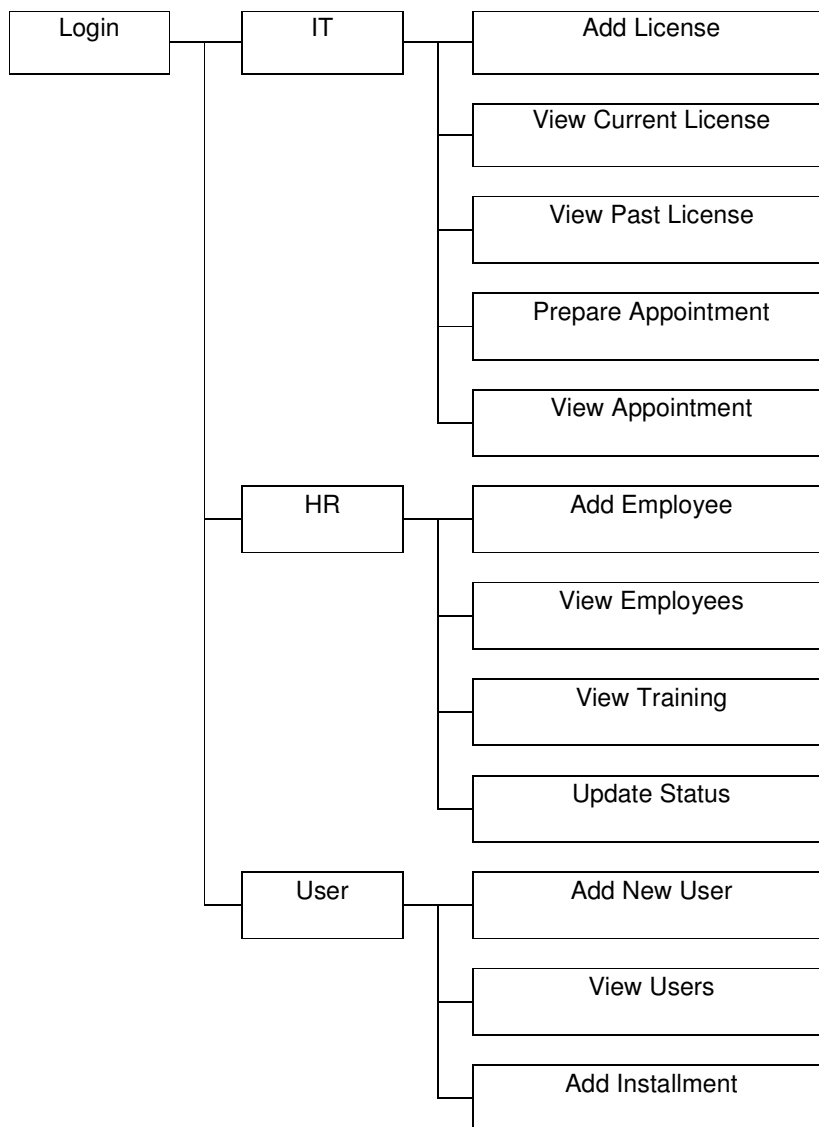
Before starting up the project, we take the first 1500 € in advance. And the remaining can be paid in mostly 2 installments or in advance.

1.4. Legal Aspects:

All the license restrictions and conditions are specified in the terms of agreement. When the customer signed up the related contract, it accepts to comply with the conditions included in the terms of agreement.

If one of the both parties does not comply with these conditions, the necessary legal procedures will be handled by Turkish courts.

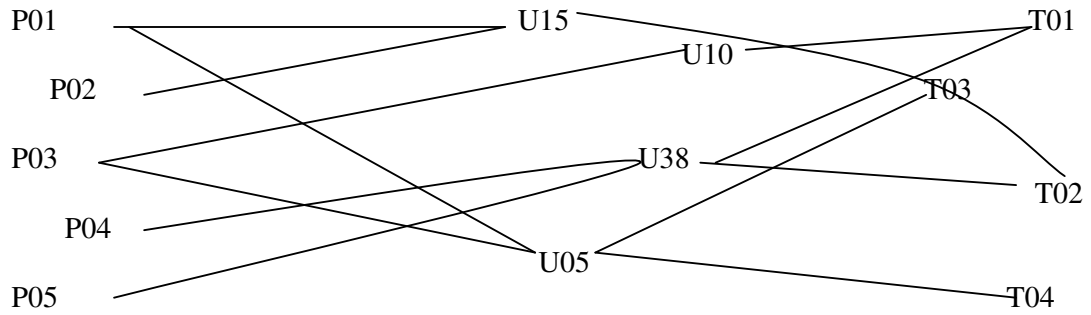
2. Menu Hierarchy & Model Breakdown



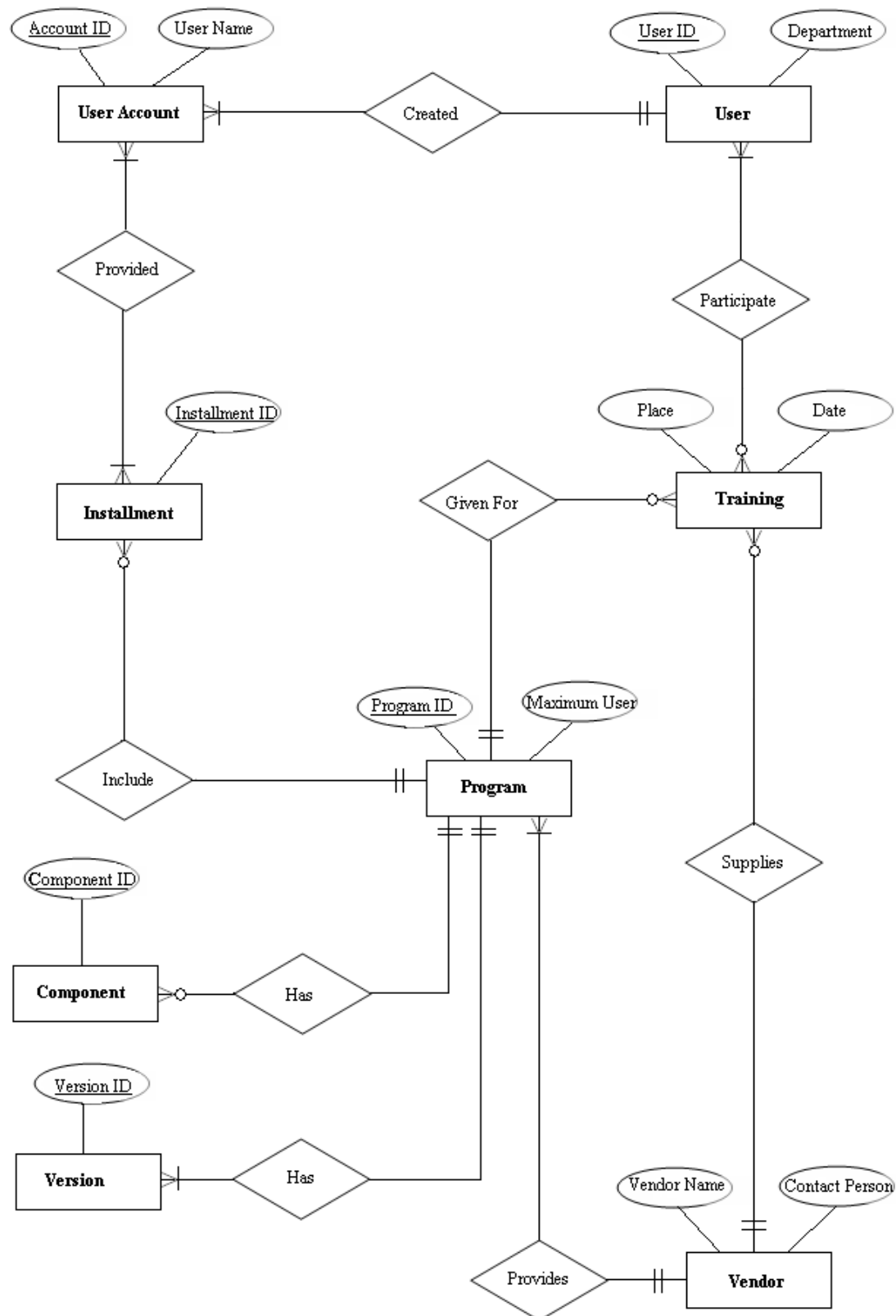
3. Tables:

	Table	Description
1	User	Basic information about users
2	User Account	Unique accounts hold by each user
3	Program	Basic data about the programs the company holds
4	Version	Version of each program
5	Component	Component of each program
6	Installment	Basic information about each installment
7	Vendor	Basic information about each vendor
8	Training	Basic data about each training

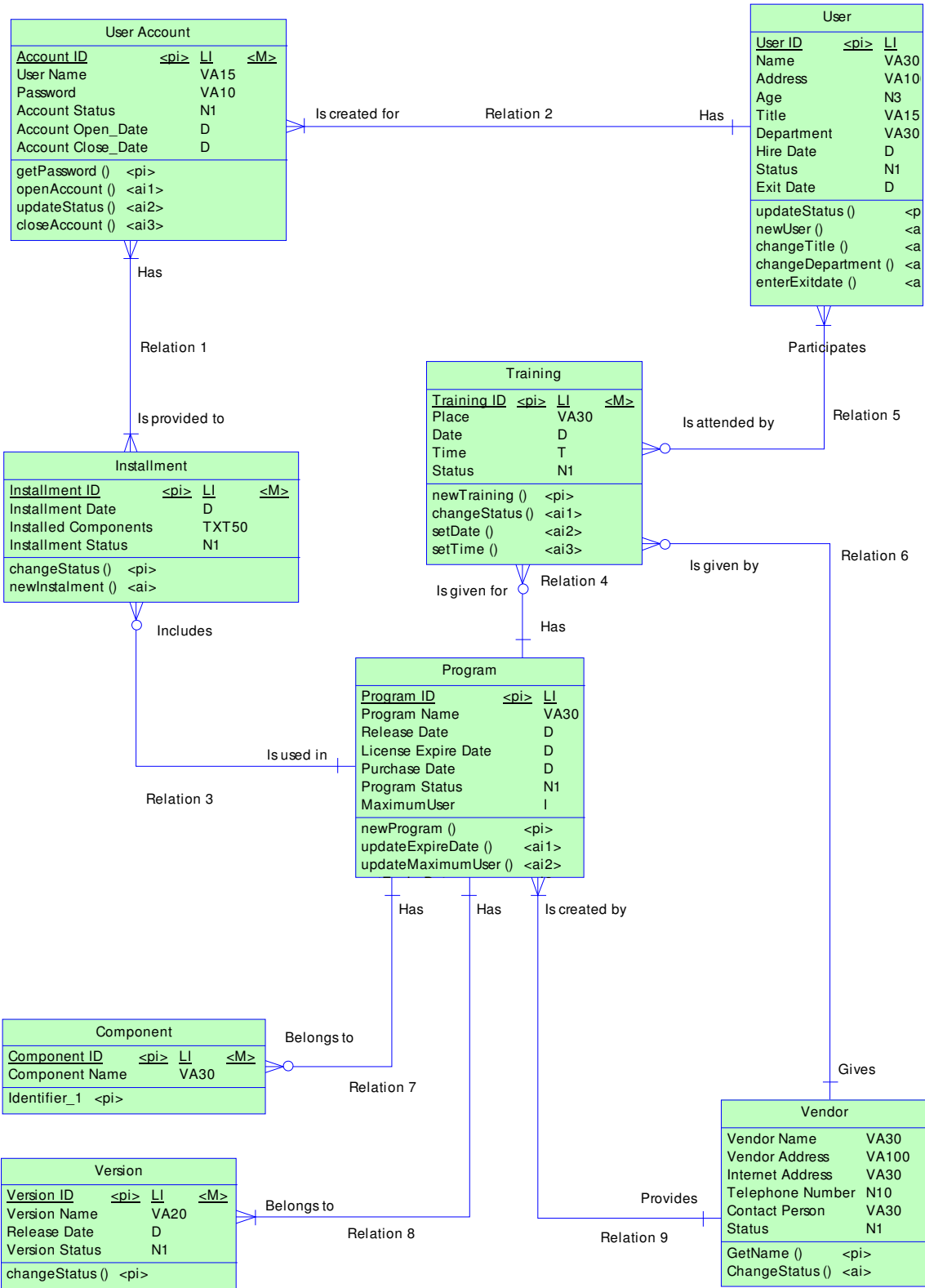
4. Sample of Instances:



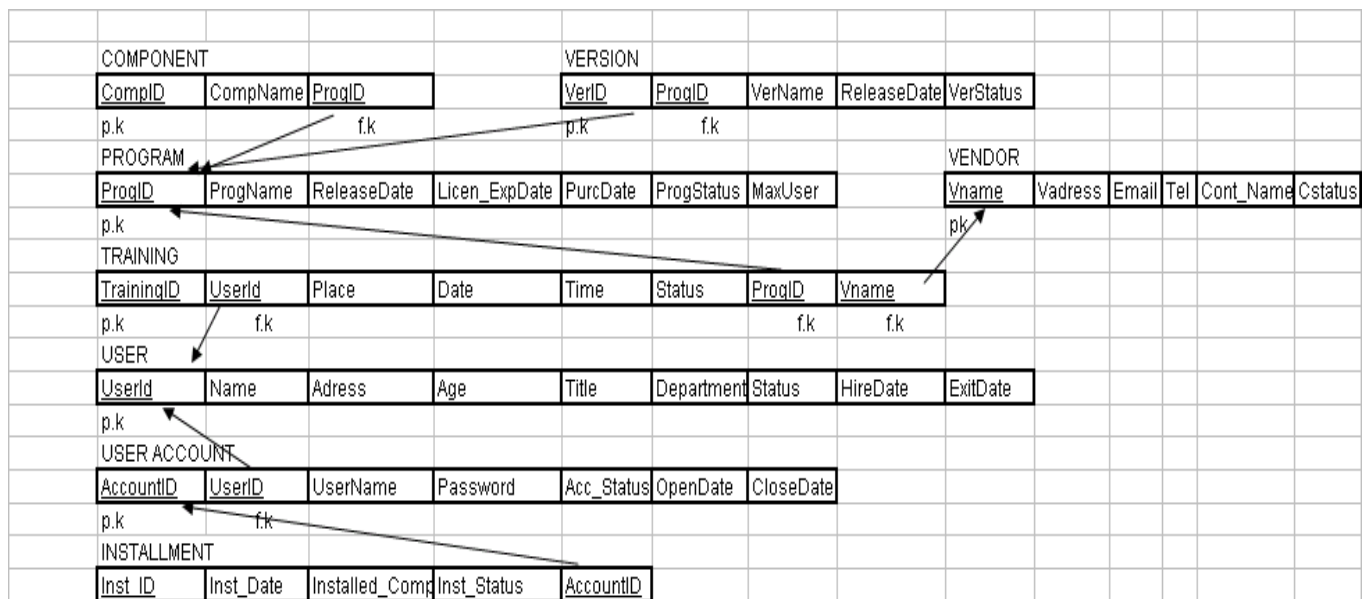
5. ER Diagram:



6. Object Model:



7. Bachman Diagram



8. Static Structure Model & Operation pre/post Functions (Logical Schema)

Table : **USER**

Primary Key : UserID

Column	Type	Length	Description
UserID	LI	4	User Code: NoEDIT, NoDUP
Name	C	30	User Name
Adres	C	10	Address
Age	N	3	Age
Title	C	15	Title of the user: manager, supervisor, etc
Department	C	30	Department of the user
HireDate	D	8	Date user hired: picture: DD / MM / YYYY
Status	N	1	Status of user,MList, UpDate
ExitDate	D	8	Date user leave the job: picture :DD / MM / YYYY

Table : **USERACCOUNT**

Primary Key : AccountID

Column	Type	Length	Description
AccountID	LI	30	Account Code : AUTO, NoEDIT, NoDUP
UserID	LI	30	User Code, flow from USER.UserID
User Name	C	15	User Name flow from USER.UserName
Password	C	10	Unique password of each user
Account Status	N	1	Status of the user account, UpDate
Account_Open_Date	D	8	Date account opened : default today
Account_Close_Date	D	8	Date account closed: not less than OpenDate

Table : **TRAINING**

Primary Key : TrainingID

Column	Type	Length	Description
TrainingID	LI	4	Training Code : AUTO,NoEDIT,NoDUP
UserID	LI	30	User Code , flow from USER.UserID
ProgramID	LI	30	Program Code, flow from PROGRAM.ProgramID
VendorName	C	30	Name of the Vendor, flow from VENDOR.VendorName
Place	C	30	Where training takes place
Date	D	8	Date training undertaken
Time	T	4	Time training undertaken price: HH : MM
Status	N	1	Status of the training program,MList, UpDate

Table : **PROGRAM**

Primary Key : ProgramID

Column	Type	Length	Description
ProgID	LI	30	Program Code ,NoEdit, NoDUP
ProgName	C	8	Name of the program
ReleaseDate	D	8	Date released
License_Expire_Date	D	8	Determined in the contract
PurchaseDate	D	8	Default: the date of today
ProgramStatus	N	1	Status of the program in the system,MList, UpDate
MaximumUser	I		Maximum number of user allowed

Table : **VENDOR**

Primary Key: VendorName

Column	Type	Length	Description
VendorName	C	30	Vendor Code , NoEDIT
VendorAdres	C	100	Address of the vendor
InternetAdres	C	30	Internet address of the vendor
Tel	N	11	Phone picture (999) 999 99 99
ContactPerson	C	30	Contact name of the vendor company
Status	N	1	Program status,MList ,UpDate

Table : **COMPONENT**

Primary Key: ComponentID

Column	Type	Length	Description
ComponentID	LI	30	Component Code,NoEDIT
ProgramID	LI	30	Program Code, flow from Program.ProgramID
ComponentName	C	30	Name of each Component

Table : **VERSION**

Primary Key: VersionID

Column	Type	Length	Description
VersionID	LI	30	Version Code ,NoEDIT, NoDUP
ProgramID	LI	30	Program Code, flow from Program.ProgramID

VersionDate	D	100	Date of version
ReleaseDate	C	30	Date the version released
VersionStatus	N	11	Status of the version,MList, UpDate

Table : **INSTALLMENT**
Primary Key: InstallmentID

Column	Type	Length	Description
InstallmentID	LI	30	Vendor Code ,NoEDIT
InstallmentDate	D	8	Date the program installed
InstalledComponent	TXT	50	Included components
InstallmentStatus	N	1	MList,UpDate

Legend	Explanation
AUTO	Column Value is sequentially generated by the system
NoDUP	No Duplicate, Value in the column should be unique
NoEDIT	Not Editable by user
Flow ...	The column value is copied from a given table.column
Exist ...	The column value should exist in table.column
MLIST	Multiple Item List from where user selects one as input
Default	The column value is determined by the function

9. Dynamic Model & Integrity Controls

Table	Append / Insert	Edit	Delete	Update
User Account	User ID € User .User ID	Account ID : NoEDIT Open Date > Close Date Account Status € ("Open", "Closed")	Not allowed	AccountStatus Open → Close or Close → Open
User	UserID → Social SecurityNo	User ID : No Edit Status € ("Active", "Inactive", "Retired", "Exit") Exit Date > Hire Date	Not allowed	Status UserID : NoUpdate
Training	Training ID → Auto User ID ← User .User ID Vendor ← Vendor .VendorName	Training ID = No Edit Status € ("Not approved", "Will begin", "Continuing", "Finished")	Not allowed	TrainingStatus TrainingID: NoUpdate
Installment	Installment ID → Auto Account ID ← UserAccount .UserID Program ID ← Program .ProgramID	Installment ID : No EDIT Installment Status € Installed, Uninstalled	Not allowed	InstallmentStatus InstallmentID:NoUpdate
Program	Program ID → Auto Vendor ← Vendor .Vendor Name	Program ID : No edit Program Status € ("Available", "Not Available") Expire Date > Realise Date Expire Date > Purchase Date Status("Available", "Not Available")	Not allowed	ProgramStatus ProgramID:NoUpdate
Vendor			Not allowed	Status VendorID:NoUpdate
Component	Component ID ← Auto Program ID ← Program .ProgramID		Not allowed	
Version	Version ID ← Auto Program ID ← Program .ProgramID	Version Status ("Available", "Not Available")	Not allowed	VersionStatus VersionID:NoUpdate

11. User Grants

	Table	IT	HR	Other Departments
1	USER	RO	RAOU	R
2	USERACCOUNT	RO	RAOU	RO
3	PROGRAM	RAOU	R	R
4	TRAINING	RO	RAOU	R
5	VENDOR	ROAU	R	R
6	COMPONENT	ROA	R	R
7	VERSION	ROAU		
8	INSTALLMENT	RAOU	RO	RO

Legend	Explanation
R	Read
A	Append New Row
E	Edit
D	Delete Row
U	Update Row
O	Output

12.

When a new specialist is employed in Audit Department The IT department could easily determines which programs will be installed to the new personnel's computer by looking the old installments.

```
Select ProgramName
From Instalment A
Where InstalmentStatus= "Installed" and UserAccountID in
    ( Select UserAccountID
      From UserAccount B
      Where A.UserAccountID=B.UserAccountID and B.UserID in
          ( Select UserID
            From User
            Where Department="Audit" and Title="Specialist")))
```

Information About Program Usage

<i>Program Name</i>	<i>Department Name</i>	<i>Title</i>	<i>Installment</i>
<i>AWS</i>	<i>Total Instalment:</i>		62
	Audit	Audit Specialist	21
	Finance	Finance Employee	20
	IT	AWS Support	2
	IT	IT Chief	2
	Tax	Tax Specialist	17
<i>Ibm Domino Designer</i>	<i>Total Instalment:</i>		10
	IT	AWS Support	2
	IT	Helpdesk	1
	IT	IT Chief	2
	TSRS	Technical Support	5
<i>Ibm Lotus Notes</i>	<i>Total Instalment:</i>		21
	HR	Co-Manager	2
	HR	Manager	1
	IT	Helpdesk	6
	IT	IT Chief	2
	IT	Manager	1
	TSRS	Manager	1
	TSRS	Technical Support	8