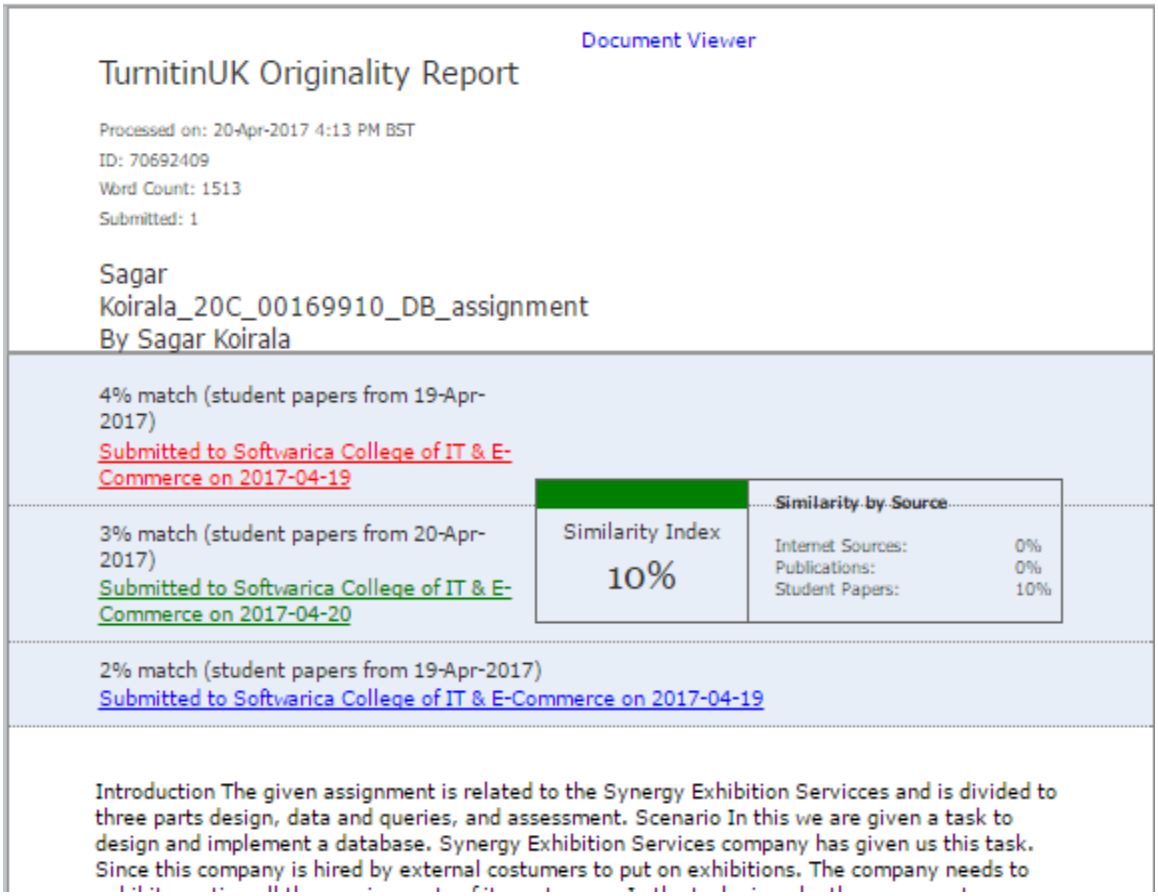
Contents



Document Viewer

TurnitinUK Originality Report

Processed on: 20-Apr-2017 4:13 PM BST
ID: 70692409
Word Count: 1513
Submitted: 1

Sagar
Koirala_20C_00169910_DB_assignment
By Sagar Koirala

4% match (student papers from 19-Apr-2017)
Submitted to Softwarica College of IT & E-Commerce on 2017-04-19

3% match (student papers from 20-Apr-2017)
Submitted to Softwarica College of IT & E-Commerce on 2017-04-20

2% match (student papers from 19-Apr-2017)
Submitted to Softwarica College of IT & E-Commerce on 2017-04-19

Similarity Index
10%

Similarity by Source

Internet Sources:	0%
Publications:	0%
Student Papers:	10%

Introduction The given assignment is related to the Synergy Exhibition Servicces and is divided to three parts design, data and queries, and assessment. Scenario In this we are given a task to design and implement a database. Synergy Exhibition Services company has given us this task. Since this company is hired by external costumers to put on exhibitions. The company needs to

Introduction

The given assignment is related to the Synergy Exhibition Servicces and is divided to three parts design, data and queries, and assessment.

Scenario

In this we are given a task to design and implement a database. Synergy Exhibition Services company has given us this task. Since this company is hired by external costumers to put on exhibitions. The company needs to exhibit meeting all the requirements of its costumers. In the task given by the company to us specified the requirements and in the assinment we are provided with all the related scenario and examples of papers.

The Synergy company exhibits providing stalls and display. The exhibition can be done in different methods like showing slides using PowerPoint, Virtual reality tour, sound and light show.

Here in the assignment we are given datas and tables which are not normalized. So, we need to normalize them and create a good relational table and complete all the problems given.

Entity Relationship diagram

ER diagram is a diagram which shows relation between entities with graphical representation in database.

Entity

Things to be stored in database is entity. It exists as a noun.

Attribute

It is the information of entity like name , age etc.

Normalization

It is the process of reducing data replication.

Type of Normalization

1st Normal Form

- Every information is unique
- Not presence of replicated fields
- A single value is present in each cell

2nd Normal Form

- There is no presence of partial key, all non key depends on all components of the primary key.

3rd Normal Form

- This is non key dependance . Non key depends only on the primary key.

Data Dictionary

Metadata

The data about data is known as metadata. It defines the table , the column , the length of the column and data type.

Type of constraint

Not null

The space cannot be left blank.

Unique

All values in table should be different

PK

The set of column in a table which uniquely identifies rows in table is a primary key.

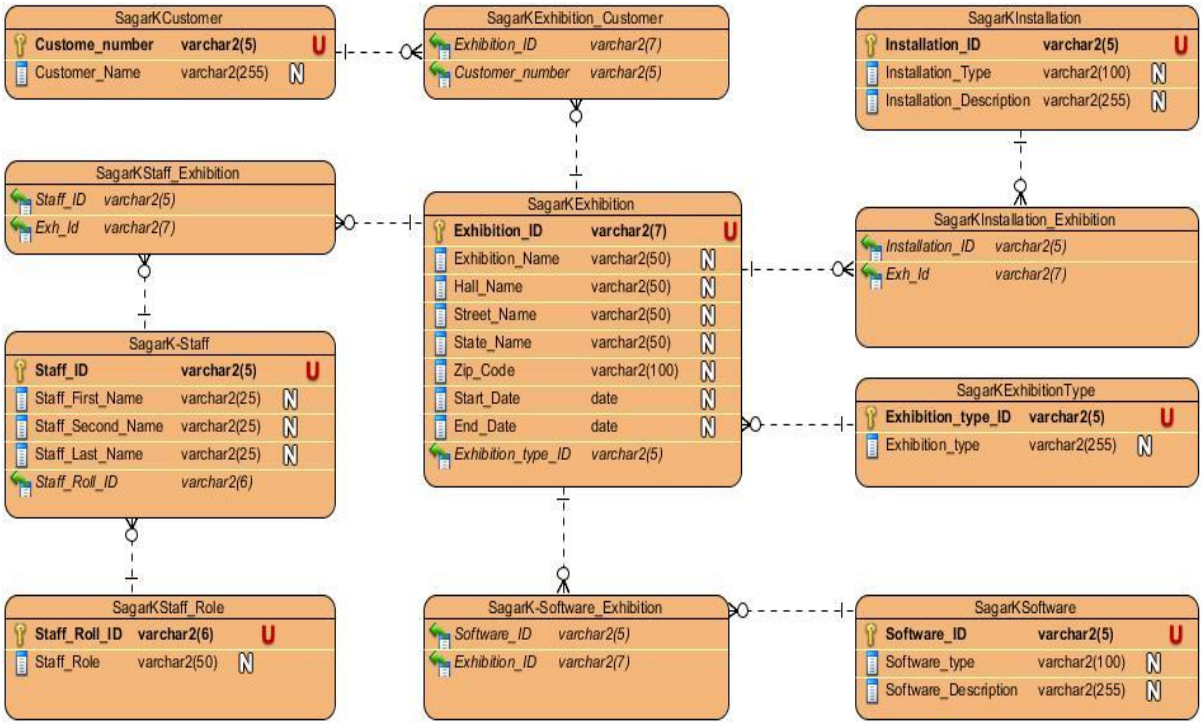
FK

Foreign keys are used in linking table to link two tables in case of many to many relation. The two primary keys of two tables in linking table remains as foreign key. (Campus.nccedu.com, 2017)

Task 1-Design

a. Production of the intity relationship model for the proposed database system for Synergy Exhibition Services.

The ER-modle is the conceptual way of describing database. It is graphical representation of entity and their relationships. It helps to findout how meny tables are to be created in the database as according to the Scenario. From the Scenario of the *Sinergy Exhibition Services company* we can find 10 tables . The ER model is given below:



The relational table given above is normalized and obtained from the data given. It contains 11 tables which are SagarKCustomer, SagarKStaff_Exhibition, SagarK_Staff, SagarKStaff_Role,SagarKExhibiton_Customer, SagarKExhibition, SagarKSoftware_Exhibition, SagarKInstallation, SagarKInstallation_Exhibition, SagarKExhibitionType, SagarKSoftware.

b. Identification of primary and foreign keys for the entity relationship model.

Primary key is a unique identifier in a relational database. In the example of primary key we can take passport number, citizenship number, license number etc. In order to identify the primary key in my relational diagram i first looked in the data of the table, i checked that which uniquely defines the table. For example we can take costumer number in table SagarKCustomer is a primary key because it is the only unique data which defines data uniquely. Another example can be taken of our student id which

doesn't match to each other student in the collage. (Connolly, T. and Begg, C. (2005). Database System. 4th ed. Harlow, England: Pearson Education Limited., 2005)

Foreign Key is the data in a table which is brought from another table while linking between two table is done. Foreign key in a table is also a primary key another table. Now let me tell you that in my relational table there are also such tables which contains foreign keys. Such table is SagarKStaff_Exhibition which is a linking table Staffid and exhibition id are primary keys in staff and exhibition tables but they are as foreign keys in the linking table. Similarly there are many other tables having foreign keys.

A detailed information of primary and foreign key present in the relational model is given below.

Name of tables	Primary key	Foreign key
SagarKCustomer	CustomerNo	
SagarKStaff_Exhibition		ExhibitionID, StafID
SagarK_Staff	StaffID	StaffRoleID
SagarKStaff_Role	StaffRoleID	
SagarKExhibition_Customer		CustomerNo, ExhibitionID
SagarKExhibition	ExhibitionID	ExhibitionTypeID
SagarKSoftware_Exhibition		SoftwareID, ExhibitionID
SagarKInstallation	InstallationID	
SagarKInstallation_Exhibition		InstallationID, ExhibitionID
SagarKExhibitionType	ExhibitionTypeID	
SagarKSoftware	SoftwareID	

Data Intigrity refers to the accuracy of the data. It can be called the data quality. The created tables in the assignment also contain primary and foreign keys SagarKCustomer, SagarKStaff_Exhibition, SagarK_Staff, SagarKStaff_Role,SagarKExhibiton_Customer, SagarKExhibition, SagarKSoftware_Exhibition, SagarKInstallation, SagarKInstallation_Exhibition, SagarKExhibitionType, SagarKSoftware. All these tables contains primary or foreign keys or both.

c. Production of data dictionary for the entity relationship model showing all attributes, with data types and identifying primary keys.

Data dictionary is a tabular representation of data which contains data, datatypes, key and length. Here key is primary key and foreign key. Here are all the data dictionary for the entity relationship model showing all attributes. Herre all the tables SagarKCustomer, SagarKStaff_Exhibition, SagarK_Staff, SagarKStaff_Role,SagarKExhibiton_Customer, SagarKExhibition, SagarKSoftware_Exhibition, SagarKInstallation, SagarKInstallation_Exhibition, SagarKExhibitionType, SagarKSoftware.

i. SagarKCustomer

Name of column	Data types	key	Length
CustomerNo	Varchar2	Primary key	10
CustomerNames	Varchar2		255

ii. SagarKStaff_Exhibition

Name of column	Data types	key	Length
StaffID	Varchar2	Foreign key	10
ExhibitionID	Varchar2	Foreign key	10

iii. SagarK_Staff

Name of column	Data types	key	Length
StaffID	Varchar2	Primary key	10
StaffFirstName	Varchar2		50
StaffSecondName	Varchar2		50
StaffLastName	Varchar2		50
StaffRoleID	Varchar2	Foreign key	10

iv. SagarKStaff_Role

Name of column	Data types	key	Length
StaffRoleID	Varchar2	Primary key	10
StaffRoleName	Varchar2		50

v. SagarKExhibiton_Customer

Name of column	Data types	key	Length
CustomerNo	Varchar2	Foreign key	10
ExhibitionID	Varchar2	Foreign key	10

vi. SagarKExhibition

Name of column	Data types	key	Length
ExhibitionID	Varchar2	Primary key	10
HallName	Varchar2		
StreetName	Varchar2		
ZipCode	Varchar2		
StartDate	date		
EndDate	date		
ExhibitionTypeID	Varchar2	Foreign key	5

vii. SagarKSoftware_Exhibition

Name of column	Data types	key	Length
SoftwareID	Varchar2	Foreign key	10
ExhibitionID	Varchar2	Foreign key	10

viii. SagarKInstallation

Name of column	Data types	key	Length
InstallationID	Varchar2	Primary key	10
InstallationTypeName	Varchar2		100
InstallationDescription	Varchar2		250

ix. SagarKInstallation_Exhibition

Name of column	Data types	key	Length
InstalltionID	Varchar2	Foreign key	10
ExhibitionID	Varchar2	Foreign key	10

x. SagarKExhibitionType

Name of column	Data types	key	Length
ExhibitionTypeID	Varchar2	Primary key	5
ExhibitionTypeName	Varchar2		200

xi. SagarKSoftware

Name of column	Data types	key	Length
SoftwareID	Varchar2	Primary key	10
SoftwareTypeName	Varchar2		100
SoftwareDescription	Varchar2		250

Task 2 - Data Entry and Data Manipulation

a. Creation of all the tables using SQL.

Tables using SQL has been created and shoing all the table scripts and finished tables are created. Tables as according to the relationship model is as given below:

- SagarKExhibition_type table

```
create table SagarKExhibition_Type
(
Exhibition_type_ID varchar2(5)not null,
Exhibition_type varchar2(255),
constraint pk_et primary key (Exhibition_type_ID)
);
desc table SagarKExhibition Type;
```

Script Output | Task completed in 0.054 seconds

```
Table SAGARKEXHIBITION_TYPE created.

Name               Null     Type
------------------ -------- -------------
EXHIBITION_TYPE_ID NOT NULL VARCHAR2(5)
EXHIBITION_TYPE             VARCHAR2(255)
```

- SagarKExhibition_Customer table.

```
create table SagarKExhibition_Customer
(
Exhibition_ID varchar2(7),
Customer_number varchar2(5),
constraint fk_exhid foreign key (Exhibition_ID) references SagarKExhibition,
constraint fk_cusn foreign key (Customer_number) references SagarKCustomer
);
desc table SagarKExhibition_Customer;
```

Script Output | Query Result | Task completed in 0.015 seconds

```
Table SAGARKEXHIBITION_CUSTOMER created.

Name            Null Type
--------------- ---- -----------
EXHIBITION_ID        VARCHAR2(7)
CUSTOMER_NUMBER      VARCHAR2(5)
```

- SagarKExhibition table.

```
create table SagarKExhibition
(
Exhibition_ID varchar2(7) not null,
Exhibition_Name varchar2(255),
Hall_Name varchar2(50),
Street_Name varchar2(50),
State_Name varchar2(50),
Zip_Code varchar2(100),
Start_Date date,
End_Date date,
Exhibition_type_ID varchar2(5),
constraint pk_eid primary key (Exhibition_ID),
constraint fk_eti foreign key (Exhibition_type_ID) references SagarKExhibition_Type
);
desc SagarKExhibition;
```

Script Output x | Query Result x

Task completed in 0.021 seconds

```
----------------- -------- ------------
EXHIBITION_ID     NOT NULL VARCHAR2(7)
EXHIBITION_NAME            VARCHAR2(255)
HALL_NAME                  VARCHAR2(50)
STREET_NAME                VARCHAR2(50)
STATE_NAME                 VARCHAR2(50)
ZIP_CODE                   VARCHAR2(100)
START_DATE                 DATE
END_DATE                   DATE
EXHIBITION_TYPE_ID         VARCHAR2(5)
```

```
Name             Null     Type
---------------- -------- ------------
EXH_ID           NOT NULL VARCHAR2(25)
EXH_NAME                  VARCHAR2(50)
EXH_HALLNAME              VARCHAR2(50)
EXH_STREETNAME            VARCHAR2(50)
EXH_STATE                 VARCHAR2(50)
EXH_ZIPCODE               VARCHAR2(50)
STARTDATE                 DATE
ENDDATE                   DATE
EXH_TYPE_ID               VARCHAR2(25)
```

- SagarKExhibition_Staff table.

```
create table SagarKExhibition_Staff
(
Exhibition_ID varchar2(7),
Staff_ID varchar2(5),
constraint fk_exid foreign key (Exhibition_ID) references SagarKExhibition,
constraint fk_stai foreign key (Staff_ID) references SagarKStaff
);
desc table SagarKExhibition_Staff;
```

Script Output | Query Result

Task completed in 0.015 seconds

```
Table SAGARKEXHIBITION_STAFF created.

Name          Null Type
------------- ---- -----------
EXHIBITION_ID      VARCHAR2(7)
STAFF_ID           VARCHAR2(5)
```

- SgarKInstallation_Exhibition Table

```
create table SagarKInstallation_Exhibition
(
Installation_ID varchar2(5),
Exhibition_ID varchar2(7),
constraint fk_inid foreign key (Installation_ID) references SagarKInstallation,
constraint fk_exhiid foreign key (Exhibition_ID) references SagarKExhibition
);
desc table SagarKInstallation_Exhibition;
```

Script Output | Query Result

Task completed in 0.031 seconds

```
Table SAGARKINSTALLATION_EXHIBITION created.

Name            Null Type
--------------- ---- -----------
INSTALLATION_ID      VARCHAR2(5)
EXHIBITION_ID        VARCHAR2(7)
```

- SagarKInstallation Table .

```
create table SagarKInstallation
(
Installation_ID varchar2(5) not null,
Installation_Type varchar2(100),
Installation_Description varchar2(255),
constraint pk_iid primary key (Installation_ID)
);
desc table SagarKInstallation;
```

Script Output | Query Result | Task completed in 0.031 seconds

```
Table SAGARKINSTALLATION created.

Name                    Null     Type
----------------------- -------- -------------
INSTALLATION_ID         NOT NULL VARCHAR2(5)
INSTALLATION_TYPE                VARCHAR2(100)
INSTALLATION_DESCRIPTION         VARCHAR2(255)
```

- SagarKSoftware Table

```
create table SagarKSoftware
(
Software_ID varchar2(5) not null,
Software_Type varchar2(100),
Software_Description varchar2(255),
constraint pk_sid primary key (Software_ID)
);
desc table SagarKSoftware;
```

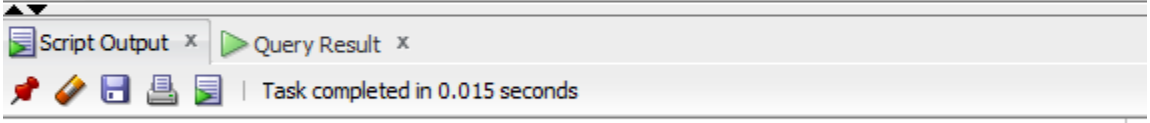
Script Output | Query Result | Task completed in 0.032 seconds

```
Table SAGARKSOFTWARE created.

Name                  Null     Type
--------------------- -------- -------------
SOFTWARE_ID           NOT NULL VARCHAR2(5)
SOFTWARE_TYPE                  VARCHAR2(100)
SOFTWARE_DESCRIPTION           VARCHAR2(255)
```

- SagarKSoftware_Exhibition.

```
create table SagarKSoftware_Exhibition
(
Software_ID varchar2(5),
Exhibition_ID varchar2(7),
constraint fk_soid foreign key (Software_ID) references SagarKSoftware,
constraint fk_exnid foreign key (Exhibition_ID) references SagarKExhibition
);
desc SagarKSoftware_Exhibition;
```

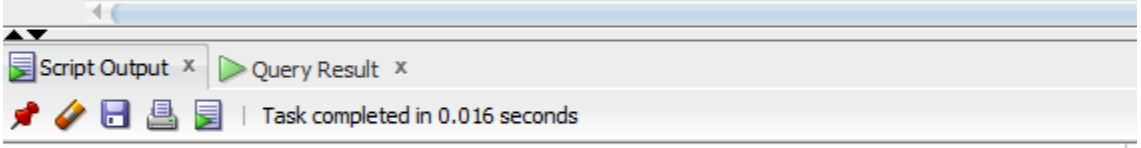



```
Table SAGARKSOFTWARE_EXHIBITION created.

Name          Null Type
------------- ---- -----------
SOFTWARE_ID        VARCHAR2(5)
EXHIBITION_ID      VARCHAR2(7)
```

- SagarKStaff.

```
create table SagarKStaff
(
Staff_ID varchar2(5) not null,
Staff_First_Name varchar2(25),
Staff_Second_Name varchar2(25),
Staff_Last_Name varchar2(25),
Staff_Role_Id varchar2(6),
constraint pk_si primary key (Staff_ID),
constraint fk_stri foreign key (Staff_Role_ID) references SagarKStaff_Role
);
desc table SagarKStaff;
```




```
Table SAGARKSTAFF created.

Name               Null     Type
------------------ -------- ------------
STAFF_ID           NOT NULL VARCHAR2(5)
STAFF_FIRST_NAME            VARCHAR2(25)
STAFF_SECOND_NAME           VARCHAR2(25)
STAFF_LAST_NAME             VARCHAR2(25)
STAFF_ROLE_ID               VARCHAR2(6)
```

- SagarKStaff_Role.

```
create table SagarKStaff_Role
(
Staff_Role_ID varchar2(6) not null,
Staff_Role varchar2(50),
constraint pk_sri primary key (Staff_Role_ID)
);
desc table SagarKStaff_Role;
```

Script Output x | Query Result x

Task completed in 0.022 seconds

```
Table SAGARKSTAFF_ROLE created.

Name          Null     Type
------------- -------- ------------
STAFF_ROLE_ID NOT NULL VARCHAR2(6)
STAFF_ROLE             VARCHAR2(50)
```

- SagarKCustomer

```
create table SagarKCustomer
(
Customer_number varchar2(5) not null,
Customer_Name varchar2(255),
constraint pk_cn primary key (Customer_number)
);
desc table SagarKCustomer;
```

Script Output x | Query Result x

Task completed in 0.015 seconds

```
Table SAGARKCUSTOMER created.

Name            Null     Type
--------------- -------- -------------
CUSTOMER_NUMBER NOT NULL VARCHAR2(5)
CUSTOMER_NAME            VARCHAR2(255)
```

b. Insertion of data on all the exhibitions shown in assignment.

All the data shown in the assignment In the exhibitions are insearted.

```
insert into SagarKExhibition
values ('E111','Ideal Holiday Exhibition','Olympia London','Hammersmith Road','Kesington','London W148Ux','01-JUN-2017','05-JUN-2017','ET01');
insert into SagarKExhibition
values('E115','Stampex','Islinton Arts Factory','2 Parkhusr Rd',null,'London N7 0SF','27-JUN-2017','28-JUN-2017','ET02');
insert into SagarKExhibition
values ('E119','Visit Britian (Yorkshire)','WeetwoodHallLeed Hotel and ConferenceCentre','Otley Rd','','Leeds LS165PS','29-JUL-2017',null,'ET01');
insert into SagarKExhibition
values('E120','Visit Britian(Cornwall)','St Austell Conference Centre','St Austell Business Park',null,'Saint Austell PL254EJ','01-AUG-2017','3-AUG-2017','ET0
insert into SagarKExhibition
values ('E122','Plumbing UK 2017','Olympia London','Hammersmith Road',null,'London W148UX','1-AUG-2017','3-AUG-2017','ET01');
insert into SagarKExhibition
values('E145','New Horizons in Education','ExCel London','One Western Gateway','Royal Victoria Dock','London E161XL','7-AUG-2017',null,'ET03');
select *
from SagarKExhibition;
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.016 seconds

	EXHIBITION_ID	EXHIBITION_NAME	HALL_NAME	STREET_NAME	STATE_NAME	ZIP_CODE	START_DATI
1	E111	Ideal Holiday Exhibition	Olympia London	Hammersmith Road	Kesington	London W148Ux	01-JUN-17
2	E119	Visit Britian (Yorkshire)	WeetwoodHallLeed Hotel and ConferenceCentre	Otley Rd	(null)	Leeds LS165PS	29-JUL-17
3	E120	Visit Britian(Cornwall)	St Austell Conference Centre	St Austell Business Park	(null)	Saint Austell PL254EJ	01-AUG-17
4	E122	Plumbing UK 2017	Olympia London	Hammersmith Road	(null)	London W148UX	01-AUG-17
5	E145	New Horizons in Education	ExCel London	One Western Gateway	Royal Victoria Dock	London E161XL	07-AUG-17

c. Insertion of data for all the costumers and association with exhibitions.

Data insertion for customers as shown below:

```
insert into SagarKExhibition_Customer
values ('E111','C201');
insert into SagarKExhibition_Customer
values ('E115','C112');
insert into SagarKExhibition_Customer
values ('E119','C201');
insert into SagarKExhibition_Customer
values ('E120','C201');
insert into SagarKExhibition_Customer
values ('E122','C300');
insert into SagarKExhibition_Customer
values ('E145','C302');
select *
from SagarKExhibition_Customer;
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.003 seconds

	EXHIBITION_ID	CUSTOMER_NUMBER
1	E111	C201
2	E119	C201
3	E120	C201
4	E122	C300
5	E145	C302

d. Data entry on staff and exhibitions they are working at.

```
insert into SagarKExhibition_Staff
values ('E111','S204');
insert into SagarKExhibition_Staff
values ('E111','S602');
insert into SagarKExhibition_Staff
values ('E111','S405');
insert into SagarKExhibition_Staff
values ('E115','S601');
insert into SagarKExhibition_Staff
values ('E115','S405');
insert into SagarKExhibition_Staff
values ('E122','S333');
insert into SagarKExhibition_Staff
values ('E145','S567');
select *
from SagarKExhibition_Staff;
```

Script Output | Query Result | SQL | All Rows Fetched: 6 in 0.047 seconds

	EXHIBITION_ID	STAFF_ID
1	E111	S102
2	E111	S204
3	E111	S602
4	E111	S405
5	E122	S333
6	E145	S567

e. Query to select all the exhibitions for the Travel Association of Great Britian.

```
select EB.Exhibition_Name, cu.Customer_Name
from SagarKExhibition EB, SagarKCustomer Cu ,SagarKExhibition_Customer EC
where Cu.Customer_Number=EC.Customer_Number and
EB.Exhibition_ID=EC.Exhibition_ID and
Cu.Customer_Name='Travel Association of Great Britian';
```

ript Output | Query Result | SQL | All Rows Fetched: 3 in 0.16 seconds

	EXHIBITION_NAME	CUSTOMER_NAME
1	Ideal Holiday Exhibition	Travel Association of Great Britian
2	Visit Britian (Yorkshire)	Travel Association of Great Britian
3	Visit Britian(Cornwall)	Travel Association of Great Britian

f. Query to select the staff that work in software support.

```
select ST.Staff_First_Name,ST.Staff_Second_Name,ST.Staff_Last_Name, SR.Staff_Role
from SagarKStaff ST, SagarKStaff_Role SR
where ST.Staff_Role_ID=SR.Staff_Role_ID and
SR.Staff_Role='Software Support';
```

Script Output | Query Result

SQL | All Rows Fetched: 2 in 0.016 seconds

	STAFF_FIRST_NAME	STAFF_SECOND_NAME	STAFF_LAST_NAME	STAFF_ROLE
1	Nathan	(null)	Banes	Software Support
2	Sharon	(null)	Smith	Software Support

g. Query to select all the exhibition details for exhibitions at Olympia.

```
select E.Exhibition_ID ,S.Software_Type, S.Software_Description
from SagarkExhibition E, SagarKSoftware S, SagarKSoftware_Exhibition SE
where E.Exhibition_ID=SE.Exhibition_ID and
S.Software_ID=SE.Software_ID and
E.Hall_Name='Olympia London';
```

Script Output | Query Result

SQL | All Rows Fetched: 2 in 0 seconds

	EXHIBITION_ID	SOFTWARE_TYPE	SOFTWARE_DESCRIPTION
1	E111	Interactive Search Application	PHP front end/ HTML website with back end MySQL database. Data containing details of holiday destination in Britai
2	E111	Slide Show	Power Point

h. Query to count all trade exhibitions.

```
select count(Exhibition_type) as Exhibition_type_
from SagarKExhibition E, SagarKExhibition_type ET
where E.Exhibition_type_ID=ET.Exhibition_type_ID and
ET.Exhibition_type='Trade Exhibition';
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0 seconds

	EXHIBITION_TYPE_
1	4

i. Query to show the staff working at stamp exhibition.

```
select S.Staff_First_Name,S.Staff_Second_Name,S.Staff_Last_Name,ET.Exhibition_Type
from SagarKExhibition E, SagarKStaff S,SagarKExhibition_Staff ES, SagarKExhibition_Type ET
where E.Exhibition_ID=ES.Exhibition_ID and
S.Staff_ID=ES.Staff_ID and
ET.Exhibition_type_ID=E.Exhibition_type_ID and
ET.Exhibition_Type='Stamp Exhibition';
```

ript Output | Query Result

SQL | All Rows Fetched: 2 in 0.016 seconds

	STAFFFIRSTNAME	STAFFSECONDNAME	STAFFLASTNAME	EXHIBITIONTYPENMAE
1	Sahib	Badri	Atiyeh	Stamp Exhibition
2	Pauline	(null)	West	Stamp Exhibition

j. Item table update so that Sharon Smith has changed jobs to Software Project Manager.

```
insert into SagarkStaff_Role
values('R230','Software Project Manager');
select * from SagarkStaff_Role;
```

ript Output | Query Result

SQL | All Rows Fetched: 6 in 0 seconds

	STAFF_ROLE_ID	STAFF_ROLE
1	SR1	Stand Fitter
2	SR2	Software Support
3	SR3	Exhibition Assistant
4	SR4	Project Manager
5	SR5	Installation Designer
6	R230	Software Project Manager

The updated table is as shown below:

```
update SagarKStaff set staff_Role_ID='R230'
where Staff_Role_ID='SR2';
select * from SagarKStaff
where Staff_First_Name='Sharon';
```

ript Output | Query Result

SQL | All Rows Fetched: 1 in 0.005 seconds

	STAFF_ID	STAFF_FIRST_NAME	STAFF_SECOND_NAME	STAFF_LAST_NAME	STAFF_ROLE_ID
1	S204	Sharon	(null)	Smith	R230

k. Staff table update so that Pauline West is now known as Pauline Yardley.

```
update SagarKStaff set Staff_Last_Name='Yardley'
where Staff_First_Name='Pauline' and Staff_Last_Name='West';
select Staff_First_Name, Staff_Last_Name
from SagarKStaff
where Staff_First_Name='Pauline';
```

ript Output | Query Result

SQL | All Rows Fetched: 1 in 0 seconds

	STAFF_FIRST_NAME	STAFF_LAST_NAME
1	Pauline	Yardley

l. Lesson title Update of the exhibition 'Stampex' to 'Stampex 2017'.

```
update SagarKExhibition set Exhibition_Name='Stampex 2017'
where Exhibition_Name='Stampex';
select Exhibition_Name,Exhibition_ID
from SagarKExhibition
where Exhibition_ID='E115';
select * from SagarKExhibition;
```

ript Output | Query Result

SQL | All Rows Fetched: 5 in 0 seconds

	EXHIBITION_ID	EXHIBITION_NAME	HALL_NAME	STREET_NAME	STATE_NAME	ZIP_CODE	START_DA
1	E111	Ideal Holiday Exhibition	Olympia London	Hammersmith Road	Kesington	London W148Ux	01-JUN-17
2	E119	Visit Britian (Yorkshire)	WeetwoodHallLeed Hotel and ConferenceCentre	Otley Rd	(null)	Leeds LS165PS	29-JUL-17
3	E120	Visit Britian(Cornwall)	St Austell Conference Centre	St Austell Business Park	(null)	Saint Austell PL254EJ	01-AUG-17
4	E122	Plumbing UK 2017	Olympia London	Hammersmith Road	(null)	London W148UX	01-AUG-17
5	E145	New Horizons in Education	ExCel London	One Western Gateway	Royal Victoria Dock	London E161XL	07-AUG-17

m. Update of any exhibitions that involve Sandy Niles so that now they have Diana West assigned to them.

```
update SagarKExhibition_Staff set Staff_ID='S431'
where Staff_ID='S602';
select E.Exhibition_Name,S.Staff_ID,S.Staff_First_Name, S.Staff_Last_Name
from SagarKExhibition E, SagarKStaff S,SagarKExhibition_Staff ES
where E.Exhibition_ID=ES.Exhibition_ID and
S.Staff_ID=ES.Staff_ID and
S.Staff_First_Name='Diana' and S.Staff_Last_Name='West';
```

ript Output | Query Result

SQL | All Rows Fetched: 1 in 0 seconds

	EXHIBITION_NAME	STAFF_ID	STAFF_FIRST_NAME	STAFF_LAST_NAME
1	Ideal Holiday Exhibition	S431	Diana	West

n. Delete Staff record for Sandy Niles.

```
delete from SagarKStaff
where Staff_First_Name='Sandy';
select * from SagarKStaff;
```

ript Output x | Query Result x | Query Result 1 x

SQL | All Rows Fetched: 9 in 0 seconds

	STAFF_ID	STAFF_FIRST_NAME	STAFF_SECOND_NAME	STAFF_LAST_NAME	STAFF_ROLE_ID
1	S102	Larry	(null)	Howard	SR1
2	S105	Nathan	(null)	Banes	R230
3	S204	Sharon	(null)	Smith	R230
4	S333	Fatin	(null)	Koury	SR1
5	S405	Sahib	Badri	Atiyeh	SR3
6	S431	Diana	(null)	West	SR3
7	S567	Ellen	(null)	Levelby	SR4
8	S601	Pauline	(null)	Yardley	SR5
9	S602	Sandy	(null)	Niles	SR1

Task 3 - Assessment

- Understanding of requirements. (Business directoty.com, 2017)

  Synergy exhibition services given me a task and provided me a scenario. All the documents requird are also given as per the requiremant of the costumer. We were required to normalize all the table given and make a relational table. After the normalization i managed to create 11 tables relating each other some connecting talbles also falls under these tables. My first requirement to create tables was a oracle SQL developer to create all the tables. All the datas were also insearted using SQL developer tool. While creating table some of the tables need to create primary key and add primary key id, which were all not given in the assignment. While creating the relational tables I used visual paradism. The name of tables created are SagarKCustomer, SagarKStaff_Exhibition, SagarK_Staff, SagarKStaff_Role,SagarKExhibiton_Customer, SagarKExhibition, SagarKSoftware_Exhibition, SagarKInstallation, SagarKInstallation_Exhibition, SagarKExhibitionType, SagarKSoftware.

- Initial design meet requiremants.

  In order to meet all the requirements firstly i normalized the Exhibition summary sheet into 1 nurmal form to the 3 normal form. Hense totally normalized tables were obtained. Again Staff Record Sheet table was also normalized to 3 normal form and totally normalized table was obtained. Again last but not least tablw Staff Exhibition Record table was also Normalized to 3 normal form. Hence 11 tables were obtained after creating relational table. Thus created tables are SagarKCustomer, SagarKStaff_Exhibition, SagarK_Staff, SagarKStaff_Role,SagarKExhibiton_Customer, SagarKExhibition, SagarKSoftware_Exhibition, SagarKInstallation, SagarKInstallation_Exhibition, SagarKExhibitionType, SagarKSoftware.

- Assessmant to show how requirements were meet.
  All the requiremet were meet when all the tables were combined after creating relational diagram of all the table. Thus formed 11 tables took towards the success. Rest of the task was based in the command done in SQL developer. All table creation, data Inseartion and all the related tasks were done and shown in the task 2. In this way 11 tables were created SagarKCustomer, SagarKStaff_Exhibition, SagarK_Staff, SagarKStaff_Role,SagarKExhibiton_Customer, SagarKExhibition, SagarKSoftware_Exhibition, SagarKInstallation, SagarKInstallation_Exhibition, SagarKExhibitionType, SagarKSoftware.

Conclusion

The overall task was completed using all the knoledge of database. In task 1 creation of relatinal model was done and the identification of primary key foreign key all tasks were done. In the task 2 we were asked to show our knowledge related to database. We were asked to create table, inseart data, alter table, Update, select etc were done in the task 2. I think the synergy exhibition company now will be able to do the project given by its costumer.

References

(n.d.).

Business directoty.com. (2017). *Business directoty.com*. Retrieved from Good one to know: http://www.businessdictionary.com/definition/data-integrity.html [Accessed 5 Jan. 2017].

Campus.nccedu.com. (2017, 04 4). *Campus.nccedu.com*. Retrieved from Campus.nccedu.com: http://campus.nccedu.com/dotlrn/clubs/students/level4diplomaincomputing/one-community?page_num=0 [Accessed 1 Jan. 2017].

Connolly, T. and Begg, C. (2005). Database System. 4th ed. Harlow, England: Pearson Education Limited. (2005). *Database System*. Retrieved from Database System: England: Pearson Education Limited.