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CC6001NA Advance Database System Development

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I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

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1. Introduction

For the very first coursework assignment which is an individual assessment weighted 40% of the marks for the module. It is designed mainly to assess students' practical problem-solving skills and critical thinking/evaluation on the design and development of database systems. It requires an analyse, design and implement a web-based database application based on a given business case study. I have been asked to provide a software solution as well as appropriate documentation detailing the design and implementation of the system. Further Discussion has been made in order to which should summarise your experience in undertaking this coursework with Mention of 5 tools/techniques learnt during course work. All output including diagrams, tables, forms, SQL scripts clearly labelled and presented.

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2. Normalization

2.1. Normalization of Figure 1

2.1.1. Assumptions

The following are the assumption of figure 1

- Destination has its Destination id.
- Destination-id and Destination are repeating groups.

The following normalization of Package Record:

Package ID	Package Name	Destination	Total No of	Difficulty
			Days	
LK25A	ABC	Annapurna	7	Moderate
		Base Camp		
UI32A	Ghandruk	Ghandruk,	4	Moderate
		Pokhara		
NB34G	Everest Short	Lukla,	4	Hard
	Trek	Khumjung		

Table 1Table of Package Record

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UNF

Package (package-id, package name, total no of days, difficulty, {destination-id, destination})

1NF

- Removing Repeating Group

Tables

Package-1(package-id, package name, total no of days, difficulty)

PackageDestination-1(package-id, destination-id, destination)

2NF

- Removing Partial Dependency

```
package-id ->
package-id, destination->
destination->
```

Tables

Package2(package-id, package name, total no of days, difficulty)

PackageDestination2(package-id, destination-id)

Destination2(destination-id, destination)

3NF

- Removing Transitive Dependency

Since there is not transitive dependency. It is in 3NF.

Package3(package-id, package name, total no of days, difficulty)

PackageDestination3(package-id, destination-id)

Destination3(destination-id, destination)

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2.2. Normalization of Figure 2

2.2.1. Assumption

The following are the assumptions for the normalization of figure 2:

- Every Tour Package will have its own package id.
- Every package has number days to travel. So the day and package id are depending to each other.
- In every package it will have many activities which is identified by activities id.
 So the activity id is depending on package id and day.
- Travel Mode depends on activities.

UNF

Tracking-Record (package-id, package-name, start-date, end-date, tour-guide {day, travel-details {activities-id, activities, travel-mode, status}, difficulty-mode})

1NF

Removing Repeating Group

TrackingRecord1(package-id, package-name, start-date, end-date, tour-guide)

PackageDays1(package-id, day, travel-details, difficulty-mode)

PackageActivity1(package-id, day, activity-id, activities, travel-mode, status)

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2NF

Removing Partial Dependency

package-id ->

package-id, day -> travel-details, difficulty-mode

day->

activity_id-> activities

package-id, day, activity-id -> activities, travel-mode, status

Tracking-Record2(package-id, package-name, start-date, end-date, tour-guide)

PackageDays2(package-id, day, travel-details, difficulty-mode)

PackageActivity2(package-id, day, activity-id, travel-mode, status)

Activity2(activity-id, activities)

3NF

No Transitive Dependency

Tracking-Record3(package-id, package-name, start-date, end-date, tour-guide)

PackageDays3(package-id, day, travel-details, difficulty-mode)

PackageActivity3(package-id, day, activity-id, travel-mode, status)

Activity3(activity-id, activities)

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3. ERD Model

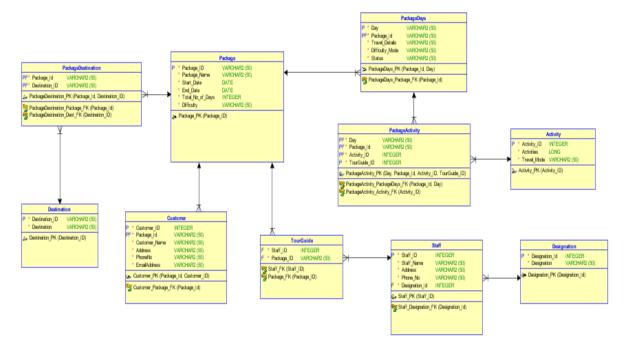


Figure 1 Figure of ERD Model

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4. Data Dictionary

Column_Name	Mandatory	DataType_Kind	Logical_Type_Name i	Table_Name -	PK_Flag	FK_Flag	Native_Type 🗷 T	_Size 👱
Activities	Y	Logical Type	Long Char	Activity	100	8	LONG	- 3
Activity_ID	Y	Logical Type	Integer	Activity	P	10	INTEGER	- 8
Activity_ID	Y	Logical Type	Integer	PackageActivity	P	F	INTEGER	- 3
Address	Y	Logical Type	VARCHAR	Customer			VARCHAR2	50
Address	Y	Logical Type	VARCHAR	Staff	il	8	VARCHAR2	50
Customer_ID	Υ	Logical Type	Integer	Customer	P	88	INTEGER	250
Customer_Name	Y	Logical Type	VARCHAR	Customer		3	VARCHAR2	50
Day	Y	Logical Type	VARCHAR	PackageActivity	P	F	VARCHAR2	50
Day	Y	Logical Type	VARCHAR	PackageDays	P	8	VARCHAR2	50
Designation	Υ	Logical Type	VARCHAR	Designation	Caro	88	VARCHAR2	50
Designation_Id	Y	Logical Type	Integer	Designation	P	8	INTEGER	- 3
Designation_Id	Y	Logical Type	Integer	Staff		F	INTEGER	
Destination	Y	Logical Type	VARCHAR	Destination	i	8	VARCHAR2	50
Destination_ID	Υ	Logical Type	VARCHAR	Destination	P	88	VARCHAR2	50
Destination_ID	Y	Logical Type	VARCHAR	PackageDestination	P	F	VARCHAR2	50
Difficulty	Y	Logical Type	VARCHAR	Package			VARCHAR2	50
Difficulty_Mode	Y	Logical Type	VARCHAR	PackageDays		8	VARCHAR2	50
EmailAddress	Υ	Logical Type	VARCHAR	Customer	8	88	VARCHAR2	50
End_Date	Y	Logical Type	Date	Package		8	DATE	- 3
Package_ID	Y	Logical Type	VARCHAR	Package	P		VARCHAR2	50
Package_ID	Y	Logical Type	VARCHAR	TourGuide	P	F	VARCHAR2	50
Package_ld	Υ	Logical Type	VARCHAR	Customer	P	E	VARCHAR2	50
Package_ld	Y	Logical Type	VARCHAR	PackageActivity	P	F	VARCHAR2	50
Package_Id	Y	Logical Type	VARCHAR	PackageDestination	P	F	VARCHAR2	50
Package_ld	Y	Logical Type	VARCHAR	PackageDays	P	F	VARCHAR2	50
Package_Name	Υ	Logical Type	VARCHAR	Package		18	VARCHAR2	50
PhoneNo	Y	Logical Type	VARCHAR	Customer		3	VARCHAR2	50
Phone_No	Y	Logical Type	VARCHAR	Staff			VARCHAR2	50
Staff_ID	Y	Logical Type	Integer	TourGuide	P	F	INTEGER	67
Staff_ID	Υ	Logical Type	Integer	Staff	P	18	INTEGER	450
Staff_Name	Y	Logical Type	VARCHAR	Staff		3	VARCHAR2	50
Start_Date	Y	Logical Type	Date	Package			DATE	
Status	Y	Logical Type	VARCHAR	PackageDays		8	VARCHAR2	50
Total_No_of_Days	Υ	Logical Type	Integer	Package	i Čeco	00	INTEGER	77
TourGuide_ID	Y	Logical Type	Integer	PackageActivity	P	8	INTEGER	- 3
Travel_Details	Y	Logical Type	VARCHAR	PackageDays			VARCHAR2	50
Travel_Mode	Y	Logical Type	VARCHAR	Activity		(6)	VARCHAR2	50

Figure 2 Data Dictionary of the System

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5. Generation of Database

```
5.1. Create Statements:
CREATE TABLE Activity
 (
  Activity_ID INTEGER NOT NULL,
  Activities LONG NOT NULL,
  Travel_Mode VARCHAR2 (50) NOT NULL
);
ALTER TABLE Activity ADD CONSTRAINT Activity_PK PRIMARY KEY ( Activity_ID
);
CREATE TABLE Customer
 (
  Customer_ID INTEGER NOT NULL,
  Package_Id VARCHAR2 (50) NOT NULL,
  Customer Name VARCHAR2 (50) NOT NULL,
  Address
            VARCHAR2 (50) NOT NULL,
  PhoneNo
             VARCHAR2 (50) NOT NULL,
  EmailAddress VARCHAR2 (50) NOT NULL
 );
ALTER TABLE Customer ADD CONSTRAINT Customer_PK PRIMARY KEY (
Package_Id, Customer_ID);
```

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```
CREATE TABLE Designation
  Designation_Id INTEGER NOT NULL,
  Designation VARCHAR2 (50) NOT NULL
);
ALTER TABLE Designation ADD CONSTRAINT Designation_PK PRIMARY KEY (
Designation_Id);
CREATE TABLE Destination
 (
  Destination_ID VARCHAR2 (50) NOT NULL,
 Destination VARCHAR2 (50) NOT NULL
);
ALTER TABLE Destination ADD CONSTRAINT Destination_PK PRIMARY KEY (
Destination_ID);
CREATE TABLE PACKAGE
 (
  Package_ID
              VARCHAR2 (50) NOT NULL,
  Package Name
                 VARCHAR2 (50) NOT NULL,
  Start_Date
              DATE NOT NULL,
  End_Date
              DATE NOT NULL,
 Total_No_of_Days INTEGER NOT NULL,
  Difficulty
          VARCHAR2 (50) NOT NULL
);
ALTER TABLE
PACKAGE ADD CONSTRAINT Package_PK PRIMARY KEY(
  Package ID);
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```

```
CREATE TABLE PackageActivity
 (
           VARCHAR2 (50) NOT NULL,
  DAY
  Package_Id VARCHAR2 (50) NOT NULL,
 Activity_ID INTEGER NOT NULL,
 TourGuide_ID INTEGER NOT NULL
);
ALTER TABLE PackageActivity ADD CONSTRAINT PackageActivity_PK PRIMARY
KEY ( DAY, Package_Id, Activity_ID, TourGuide_ID );
CREATE TABLE PackageDays
 (
  DAY
            VARCHAR2 (50) NOT NULL,
  Package_Id
              VARCHAR2 (50) NOT NULL,
 Travel_Details VARCHAR2 (50) NOT NULL,
  Difficulty_Mode VARCHAR2 (50) NOT NULL,
  Status
            VARCHAR2 (50) NOT NULL
);
ALTER TABLE PackageDays ADD CONSTRAINT PackageDays_PK PRIMARY
KEY (Package Id, DAY);
```

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```
CREATE TABLE PackageDestination
  Package_Id VARCHAR2 (50) NOT NULL,
  Destination_ID VARCHAR2 (50) NOT NULL
);
ALTER TABLE PackageDestination ADD CONSTRAINT PackageDestination_PK
PRIMARY KEY ( Package_Id, Destination_ID );
CREATE TABLE Staff
 (
  Staff_ID
            INTEGER NOT NULL,
  Staff Name VARCHAR2 (50) NOT NULL,
  Address
            VARCHAR2 (50) NOT NULL,
  Phone No
              VARCHAR2 (50) NOT NULL,
  Designation_Id INTEGER NOT NULL
);
ALTER TABLE Staff ADD CONSTRAINT Staff_PK PRIMARY KEY ( Staff_ID );
CREATE TABLE TourGuide
 (
  Staff_ID INTEGER NOT NULL,
 Package_ID VARCHAR2 (50) NOT NULL
);
ALTER TABLE TourGuide ADD CONSTRAINT TourGuide PK PRIMARY KEY (
Staff_ID, Package_ID);
```

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ALTER TABLE Customer ADD CONSTRAINT Customer Package FK FOREIGN KEY (Package_Id) REFERENCES PACKAGE(Package ID); ALTER TABLE PackageActivity ADD CONSTRAINT PackageActivity_Activity_FK FOREIGN KEY (Activity_ID) REFERENCES Activity (Activity_ID); ALTER TABLE PackageActivity ADD CONSTRAINT PackageActivity_PackageDays_FK FOREIGN KEY (Package_Id, DAY) REFERENCES PackageDays (Package_Id, DAY); ALTER TABLE PackageDays ADD CONSTRAINT PackageDays_Package_FK FOREIGN KEY (Package_Id) REFERENCES PACKAGE(Package_ID); ALTER TABLE PackageDestination ADD CONSTRAINT Package Destination Dest FK FOREIGN KEY (Destination ID) REFERENCES Destination (Destination ID); ALTER TABLE PackageDestination ADD CONSTRAINT Package Destination Package FK FOREIGN KEY (Package Id) REFERENCES PACKAGE(Package_ID); ALTER TABLE TourGuide ADD CONSTRAINT Package FK FOREIGN KEY (Package_ID) REFERENCES PACKAGE(Package_ID); ALTER TABLE Staff ADD CONSTRAINT Staff Designation FK FOREIGN KEY (Designation_Id) REFERENCES Designation (Designation_Id) ; ALTER TABLE TourGuide ADD CONSTRAINT Staff_FK FOREIGN KEY (Staff_ID) REFERENCES Staff (Staff_ID);

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5.2. Insert Statements:

```
#Designation
INSERT INTO Designation VALUES (1, 'Tour Guide');
INSERT INTO Designation VALUES (2, 'Travel Agent');
INSERT INTO Designation VALUES (3, 'Receptionist');
INSERT INTO Designation VALUES (4, 'Accountant');
```

INSERT INTO Designation VALUES (5, 'IT Director');

#Staff

INSERT INTO Staff VALUES (1, 'Ananta Tamang', 'Kathmandu', '9851025639',1);

INSERT INTO Staff VALUES (2, 'Biraj Maharjan', 'Kathmandu', '984108597', 1);

INSERT INTO Staff VALUES (3, 'Alan Neupane', 'Hetauda', '9851025639',1);

INSERT INTO Staff VALUES (4, 'Santosh Shahukhala', 'Lalitpur', '9851037096',1);

INSERT INTO Staff VALUES (5, 'Kamal Shrestha', 'Kathmandu', '9841025369',2);

INSERT INTO Staff VALUES (6, 'Rejin Subba', 'Kathmandu', '9849078956',2);

INSERT INTO Staff VALUES (7, 'Abhishek Rijal', 'Nuwakot', '9849078596',3);

INSERT INTO Staff VALUES (8, 'Rupesh KC', 'Nuwakot', '9802578569',3);

INSERT INTO Staff VALUES (9, 'Sunil Bal', 'Lalitpur', '9841258963',4);

INSERT INTO Staff VALUES (10, 'Bikesh Kuthu', 'Bhaktapur', '9843609875',4);

INSERT INTO Staff VALUES (11, 'Dinesh Rajbanshi', 'Lalitpur', '9836789545',5);

INSERT INTO Staff VALUES (12, 'Bishal Shrestha', 'Kathmandu', '9851084957',5);

#Package

INSERT INTO Package VALUES ('PK1','Pokhara', '10-Jan-2020', '15-Jan-2020', 5,'Easy');

INSERT INTO Package VALUES ('PK2', 'Mt.Everst', '12-Jan-2020', '25-Jan-2020', 13, 'Hard');

INSERT INTO Package VALUES ('PK3', 'ABC', '1-Feb-2020', '7-Feb-2020', 7, 'Moderate');

INSERT INTO Package VALUES ('PK4', 'Ghandruk', '10-Feb-2020', '14-Feb-2020', 4, 'Moderate');

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INSERT INTO Package VALUES ('PK5', 'Lumbini', '20-Feb-2020', '24-Feb-2020', 5, 'Easy');

#Destination

INSERT INTO destination VALUES (1, 'Pokhara');

INSERT INTO destination VALUES (2, 'Mt.Everest');

INSERT INTO destination VALUES (3, 'ABC');

INSERT INTO destination VALUES (4,'Ghandruk');

INSERT INTO destination VALUES (5,'Lumbini');

#Customer

INSERT INTO Customer VALUES (1, 'PK1', 'Arun Man Joshi', 'Tripureshwor', '9851055037', 'joshiarunman@gmail.com');

INSERT INTO Customer VALUES (2, 'PK1', 'Sanjib Shilpakar', 'Mangal Bazar', '9851037368', 'sanjibsports@gmail.com');

INSERT INTO Customer VALUES (3, 'PK2', 'Meghraj KC', 'Bhanimandal', '9851028178', 'kcmegraj@gmail.com');

INSERT INTO Customer VALUES (4, 'PK2', 'Mangal Maharjan', 'Gwarko', '9841468250', 'mangalm@gmail.com');

INSERT INTO Customer VALUES (5, 'PK3', 'Ram Shrestha Boss', 'Bhaisipati', '9851859674', 'ram.bossgmail.com');

INSERT INTO Customer VALUES (6, 'PK3', 'Mukesh Nakarmi', 'Sundhara', '9851859674', 'mukeshnakarmi01@gmail.com');

INSERT INTO Customer VALUES (7, 'PK4', 'Krishna Awale', 'Thecho', '9851055063', 'awalekrishna@gmail.com');

INSERT INTO Customer VALUES (8, 'PK4', 'Utsav Shakya', 'Kupondole', '9843608596', 'utsavs@gmail.com');

INSERT INTO Customer VALUES (9, 'PK5', 'Mikchhen Tamang', 'Hattiban', '9841589677', 'tamangmikchen@gmail.com');

INSERT INTO Customer VALUES (10,'PK5', 'Bikram Lama', 'Chayasal', '9841859674', 'lamabikram@gmail.com');

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```
#Tour Guide
INSERT INTO TourGuide VALUES (1, 'PK1');
INSERT INTO TourGuide VALUES (2, 'PK2');
INSERT INTO TourGuide VALUES (3, 'PK3'):
INSERT INTO TourGuide VALUES (4, 'PK4');
INSERT INTO TourGuide VALUES (1, 'PK5');
#PackageDestination
INSERT INTO Package Destination VALUES ('PK1', 1);
INSERT INTO PackageDestination VALUES ('PK2', 2);
INSERT INTO PackageDestination VALUES ('PK3', 3);
INSERT INTO PackageDestination VALUES ('PK4', 4);
INSERT INTO PackageDestination VALUES ('PK5', 5):
#Activity
INSERT INTO Activity VALUES (1, 'Driving to Destination from Kathmandu', 'Bus');
INSERT INTO Activity VALUES (2, 'Fully day Sightseeing in Pokhara and enjoy
boating in Phewa Lake', 'Bus/Walk/Boating');
INSERT INTO Activity VALUES (3, 'Visit Tal Barahi Temple and market visit',
'Bus/Walk');
INSERT INTO Activity VALUES (4, 'Driving back to Kathmandu', 'Bus');
INSERT INTO Activity VALUES (5, 'Fly Kathmandu to Lukla. Trek to Phadking',
'Flight/Walk');
INSERT INTO Activity VALUES (6, 'Trek from Phadking to Namche Bazaar', 'Walk');
INSERT INTO Activity VALUES (7,'Acclimatization day in Namche Bazaar', 'Walk');
INSERT INTO Activity VALUES (8, Trek from Namche Bazaar to Tengboche',
'Walk');
INSERT INTO Activity VALUES (9, 'Trek from Tengboche to Periche', 'Walk');
INSERT INTO Activity VALUES (10, 'Acclimitization Day. Potentially Trek from
Pheriche to Dingboche', 'Walk');
INSERT INTO Activity VALUES (11, 'Trek from Pheriche to Lobuche', 'Walk');
```

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INSERT INTO Activity VALUES (12, 'Hike from Lobuche to Gorak Shep', 'Walk');

INSERT INTO Activity VALUES (13, 'Gorak Shep to Kala Patthar, then onto Dingboche', 'Walk');

INSERT INTO Activity VALUES (14, 'Hike back to Namche Bazaar from Dingbocheg', 'Walk');

INSERT INTO Activity VALUES (15, 'Hike from Namche Bazaar to Lukla', 'Walk');

INSERT INTO Activity VALUES (16, 'Fly back from Lukla to Kathmandu', 'Flight/Walk');

INSERT INTO Activity VALUES (17, 'Drive to Nayapul and trek to Ghandruk', 'Bus/Walk');

INSERT INTO Activity VALUES (18, 'Trek from Ghandruk to Sinuwa', 'Walk');

INSERT INTO Activity VALUES (19, 'Trek from Sinuwa to Deurali', 'Walk');

INSERT INTO Activity VALUES (20, 'Trek from Deurali to Annapurna', 'Walk');

INSERT INTO Activity VALUES (21, 'Trek from Annapurna Base Camp to Bamboo', 'Walk');

INSERT INTO Activity VALUES (22, 'Trek from Bamboo to Jhinu Hot Spring', 'Walk');

INSERT INTO Activity VALUES (23, 'Trek from Jhinu Hot Spring to Nayapul and Drive to Pokhara', 'Walk/Bus');

INSERT INTO Activity VALUES (24, 'Trek to Ghandruk, plore the Ghandruk Village', 'Bus/Walk');

INSERT INTO Activity VALUES (25,'View the beautiful sunrise and Himalayas. Trek Down to Pokhara', 'Bus/Walk');

INSERT INTO Activity VALUES (26, 'Drive from Kathmandu to Lumbini', 'Bus');

INSERT INTO Activity VALUES (27, 'Lumbini Garden for worship', 'Walk');

INSERT INTO Activity VALUES (28, 'Drive to Tilaurakot (Kapilvastu) covering major shrines such as: Gotihawa, Niglihawa and Kundan', 'Bus/Walk');

INSERT INTO Activity VALUES (29, 'Drive from Lumbini to Kathmandu', 'Bus');

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#PackageDays

INSERT INTO PackageDays VALUES ('Day1', 'PK1', 'Kathmandu to Pokhara', 'Moderate', 'Complete');

INSERT INTO PackageDays VALUES ('Day2', 'PK1', 'Stay in Pokhara', 'Easy', 'Complete');

INSERT INTO PackageDays VALUES ('Day3', 'PK1', 'Stay in Pokhara', 'Easy', 'Complete');

INSERT INTO PackageDays VALUES ('Day4', 'PK1', 'Pokhara to Kathmandu', 'Moderate', 'Complete');

INSERT INTO PackageDays VALUES ('Day1', 'PK2', 'Kathmandu to Lukla', 'Easy', 'Complete');

INSERT INTO PackageDays VALUES ('Day2', 'PK2', 'Phadking to Namche Bazar', 'Moderate',

'Complete');

INSERT INTO PackageDays VALUES ('Day3', 'PK2', 'Staying in Namche Bazar', 'Easy',

'Complete');

INSERT INTO PackageDays VALUES ('Day4', 'PK2', 'Namche to Tengboche', 'Hard',

'Complete');

INSERT INTO PackageDays VALUES ('Day5', 'PK2', 'Tengboche to Dingboche', 'Hard',

'Complete');;

INSERT INTO PackageDays VALUES ('Day6', 'PK2', 'Dingboche to Pheriche', 'Hard',

'Complete');

INSERT INTO PackageDays VALUES ('Day7', 'PK2', 'Pheriche to Lobuche', 'Hard',

'Complete');

INSERT INTO PackageDays VALUES ('Day8', 'PK2', 'Lobuche to Gorak Shep', 'Hard',

'Complete');

INSERT INTO PackageDays VALUES ('Day9', 'PK2', 'Gorak Shep to Kala Patthar, then onto Dingboche', 'Hard',

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'Complete');

INSERT INTO PackageDays VALUES ('Day10', 'PK2', 'Dingboche to NamcheBazar', 'Hard',

'Complete');

INSERT INTO PackageDays VALUES ('Day11', 'PK2', 'NamcheBazar to Lukla', 'Hard',

'Complete');

INSERT INTO PackageDays VALUES ('Day12', 'PK2', 'Lukla to Kathmandu', 'Moderate',

'Complete');

INSERT INTO PackageDays VALUES ('Day1', 'PK3', 'Kathmandu to Pokhara', 'Easy', 'Remaining');

INSERT INTO PackageDays VALUES ('Day2', 'PK3', 'Pokhara to Nayapul', 'Moderate', 'Remaining');

INSERT INTO PackageDays VALUES ('Day3', 'PK3', 'Nayapul to Ghandruk', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day4', 'PK3', 'Ghandruk to Sinuwa', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day5', 'PK3', 'Sinuwa to Deurali', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day6', 'PK3', 'Deurali to Annapurna Base Camp', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day7', 'PK3', 'Annapurna Base Camp to Bamboo', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day8', 'PK3', 'Bamboo to Jhinu Hot Spring', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day9', 'PK3', 'Jhinu Hot Spring to Nayapul', 'Hard', 'Remaining');

INSERT INTO PackageDays VALUES ('Day10', 'PK3', 'Nayapul to Pokhara', 'Moderate', 'Remaining');

INSERT INTO PackageDays VALUES ('Day11', 'PK3', 'Pokhara to Kathmandu', 'Easy', 'Remaining');

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```
INSERT INTO PackageDays VALUES ('Day1', 'PK4', 'Kathmandu to Pokhara',
'Easy', 'Remaining');
INSERT INTO PackageDays VALUES ('Day2', 'PK4', 'Explore in Ghandruk',
'Moderate', 'Remaining');
INSERT INTO PackageDays VALUES ('Day3', 'PK4', 'Ghandruk to Pokhara',
'Moderate', 'Remaining'):
INSERT INTO PackageDays VALUES ('Day4', 'PK4', 'Pokhara to Kathmandu',
'Easy', 'Remaining');
INSERT INTO PackageDays VALUES ('Day1', 'PK5', 'Kathmandu to Lumbini', 'Easy',
'Remaining');
INSERT INTO PackageDays VALUES ('Day2', 'PK5', 'Lumbini to Bhairahawa',
'Easy', 'Remaining');
INSERT INTO PackageDays VALUES ('Day3', 'PK5', 'Bhairahawa to Tilaurakot',
'Moderate', 'Remaining');
INSERT INTO PackageDays VALUES ('Day4', 'PK5', 'Bhairahawa to Kathmandu',
'Moderate', 'Remaining');
#PackageActivity
INSERT INTO PackageActivity VALUES ('Day1', 'PK1', 1, 1);
INSERT INTO PackageActivity VALUES ('Day2', 'PK1', 2, 1);
INSERT INTO PackageActivity VALUES ('Day3', 'PK1', 3, 1);
INSERT INTO PackageActivity VALUES ('Day4', 'PK1', 4, 1);
INSERT INTO Package Activity VALUES ('Day1', 'PK2', 5, 2);
INSERT INTO PackageActivity VALUES ('Day2', 'PK2', 6, 2);
INSERT INTO PackageActivity VALUES ('Day3', 'PK2', 7, 2);
INSERT INTO PackageActivity VALUES ('Day4', 'PK2', 8, 2);
INSERT INTO PackageActivity VALUES ('Day5', 'PK2', 9, 2);
INSERT INTO PackageActivity VALUES ('Day6', 'PK2', 10, 2);
INSERT INTO PackageActivity VALUES ('Day7', 'PK2', 11, 2);
INSERT INTO PackageActivity VALUES ('Day8', 'PK2', 12, 2);
INSERT INTO PackageActivity VALUES ('Day9', 'PK2', 13, 2);
```

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```
INSERT INTO PackageActivity VALUES ('Day10', 'PK2', 14, 2);
INSERT INTO PackageActivity VALUES ('Day11', 'PK2', 15, 2);
INSERT INTO PackageActivity VALUES ('Day12', 'PK2', 16, 2);
INSERT INTO PackageActivity VALUES ('Day1', 'PK3', 1, 3);
INSERT INTO PackageActivity VALUES ('Day2', 'PK3', 17, 3);
INSERT INTO PackageActivity VALUES ('Day3', 'PK3', 18, 3);
INSERT INTO PackageActivity VALUES ('Day4', 'PK3', 19, 3);
INSERT INTO PackageActivity VALUES ('Day5', 'PK3', 20, 3);
INSERT INTO PackageActivity VALUES ('Day6', 'PK3', 21, 3);
INSERT INTO PackageActivity VALUES ('Day7', 'PK3', 22,3);
INSERT INTO PackageActivity VALUES ('Day8', 'PK3', 23, 3);
INSERT INTO PackageActivity VALUES ('Day9', 'PK3', 4, 3):
INSERT INTO PackageActivity VALUES ('Day1', 'PK4', 1, 4);
INSERT INTO PackageActivity VALUES ('Day2', 'PK4', 24, 4);
INSERT INTO PackageActivity VALUES ('Day3', 'PK4', 25, 4);
INSERT INTO PackageActivity VALUES ('Day4', 'PK4', 4, 4);
INSERT INTO PackageActivity VALUES ('Day1', 'PK5', 26, 1);
INSERT INTO PackageActivity VALUES ('Day2', 'PK5', 27,1);
INSERT INTO PackageActivity VALUES ('Day3', 'PK5', 28, 1);
INSERT INTO PackageActivity VALUES ('Day4', 'PK5', 29, 1):
```

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5.3. Select Statements:

SELECT * FROM "STAFF"

SELECT * FROM "DESIGNATION"

SELECT * FROM "CUSTOMER"

SELECT * FROM "PACKAGE"

SELECT * FROM "TOURGUIDE"

SELECT customer_id, customer_name, address, phoneno, emailaddress, p.package_name FROM Customer

JOIN Package p ON Customer.package_id = p.package_id

SELECT staff_id, staff_name, address, phone_no, d.designation FROM staff

JOIN designation d

ON staff.designation_id = d.designation_id

SELECT pa.package_id, p.package_name, a.activities, pd.travel_details, a.travel_mode FROM PackageActivity pa

JOIN package p ON pa.package_id = p.package_id

JOIN activity a ON pa.activity_id = a.activity_id

JOIN packagedays pd ON pa.day = pd.day

ORDER BY pa.package_id

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6. Implementation of Web-Based Database Application

6.1. Basic Web forms

6.1.1. Dashboard (dashboard.aspx)

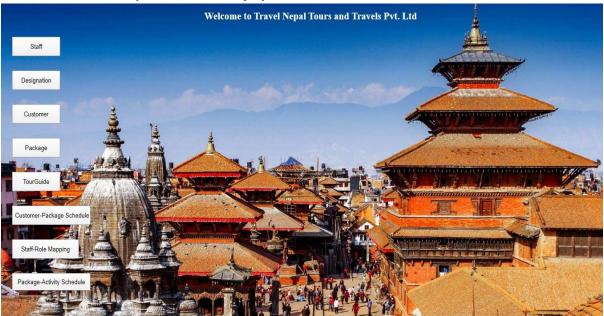


Figure 3 Screenshot of Dashboard

6.1.2. Staff Details

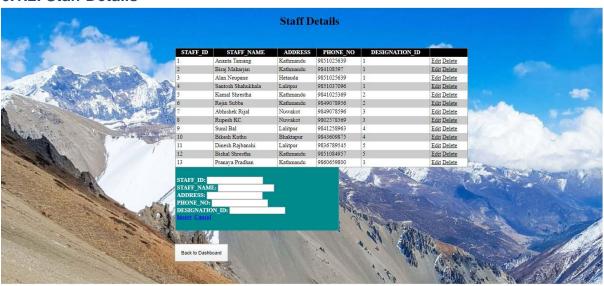


Figure 4 Screenshot of Staff Details Form

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6.1.3. Designation Details

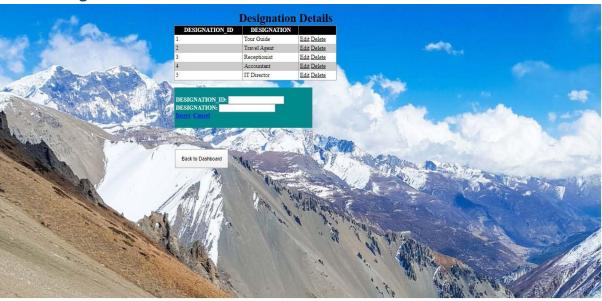


Figure 5 Screenshot of Designation Details Form

6.1.4. Customer Details

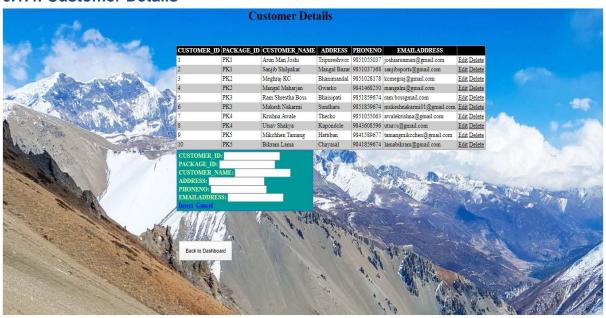


Figure 6 Screenshot of Customer Details Form

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6.1.5. Package Details

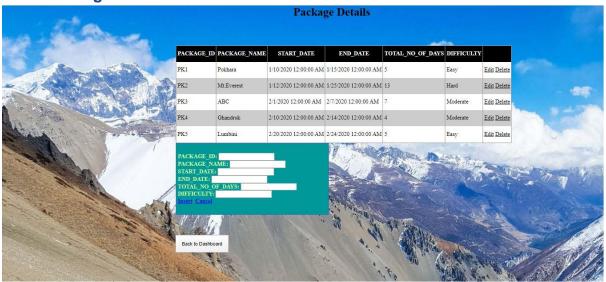


Figure 7 Screenshot of Package Details Form

6.1.6. Tour Guide Details

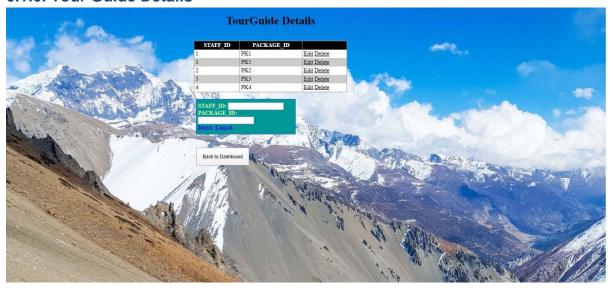


Figure 8 Screenshot of Tour Guide Form

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6.2. Customer-Package Schedule Form

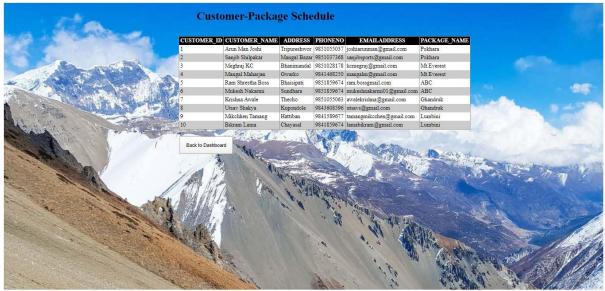


Figure 9 Customer-Package Schedule Form

6.3. Staff-Role Schedule Form



Figure 10 Staff-Role Schedule Form

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6.4. Package-Activity Schedule Form



Figure 11 Package-Activity Schedule Form

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7. Testing

7.1. Staff Details

7.1.1. Inserting data in Staff Details

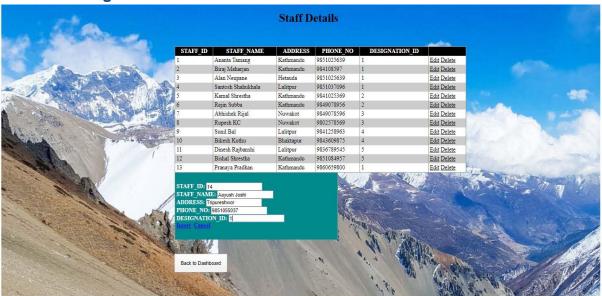


Figure 12 Inserting Data in Customer Text Field



Figure 13 Data Filled in Customer Form Text Field

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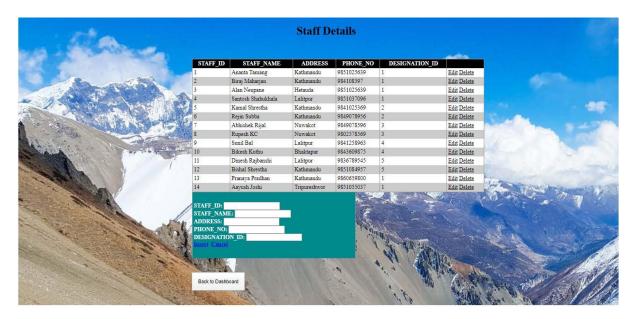


Figure 14 Grid View After Inserting New Data in Customer Form

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7.1.2. Updating the Data of Grid View

STAFF_ID	STAFF_NAME	ADDRESS	PHONE_NO	DESIGNATION_ID	
1	Ananta Tamang	Kathmandu	9851025639	1	Edit Delete
2	Biraj Maharjan	Kathmandu	984108597	1	Edit Delete
3	Alan Neupane	Hetauda	9851025639	1	Edit Delete
4	Santosh Shahukhala	Lalitpur	9851037096	1	Edit Delete
5	Kamal Shrestha	Kathmandu	9841025369	2	Edit Delete
6	Rejin Subba	Kathmandu	9849078956	2	Edit Delete
7	Abhishek Rijal	Nuwakot	9849078596	3	Edit Delete
8	Rupesh KC	Nuwakot	9802578569	3	Edit Delete
9	Sunil Bal	Lalitpur	9841258963	4	Edit Delete
10	Bikesh Kuthu	Bhaktapur	9843609875	4	Edit Delete
11	Dinesh Rajbanshi	Lalitpur	9836789545	5	Edit Delete
12	Bishal Shrestha	Kathmandu	9851084957	5	Edit Delete
13	Pranaya Pradhan	Kathmandu	9860659800	1	Edit Delete
14	Aayush Joshi	Tripureshwor	9851055037	1	Edit Delete

Figure 15 Grid View of Staff Form before Updating the data

STAFF_ID	STAFF_NAME	ADDRESS	PHONE_NO	DESIGNATION_ID	
1	Ananta Tamang	Kathmandu	9851025639	1	Edit Delete
2	Biraj Maharjan	Kathmandu	984108597	1	Edit Delete
3	Alan Neupane	Hetauda	9851025639	1	Edit Delete
4	Santosh Shahukhala	Lalitpur	9851037096	1	Edit Delete
5	Kamal Shrestha	Kathmandu	9841025369	2	Edit Delete
6	Rejin Subba	Kathmandu	9849078956	2	Edit Delete
7	Abhishek Rijal	Nuwakot	9849078596	3	Edit Delete
8	Rupesh KC	Nuwakot	9802578569	3	Edit Delete
9	Sunil Bal	Lalitpur	9841258963	4	Edit Delete
10	Bikesh Kuthu	Bhaktapur	9843609875	4	Edit Delete
11	Dinesh Rajbanshi	Lalitpur	9836789545	5	Edit Delete
12	Bishal Shrestha	Kathmandu	9851084957	5	Edit Delete
13	Pranaya Pradhan	Kathmandu	9860659800	1	Edit Delete
14	Aayush Joshi	MangalBazar	9851055037	5	Update Cancel

Figure 16 Updating Data in Staff Form

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STAFF_ID	STAFF_NAME	ADDRESS	PHONE_NO	DESIGNATION_ID	
1	Ananta Tamang	Kathmandu	9851025639	1	Edit Delete
2	Biraj Maharjan	Kathmandu	984108597	1	Edit Delete
3	Alan Neupane	Hetauda	9851025639	1	Edit Delete
4	Santosh Shahukhala	Lalitpur	9851037096	1	Edit Delete
5	Kamal Shrestha	Kathmandu	9841025369	2	Edit Delete
6	Rejin Subba	Kathmandu	9849078956	2	Edit Delete
7	Abhishek Rijal	Nuwakot	9849078596	3	Edit Delete
8	Rupesh KC	Nuwakot	9802578569	3	Edit Delete
9	Sunil Bal	Lalitpur	9841258963	4	Edit Delete
10	Bikesh Kuthu	Bhaktapur	9843609875	4	Edit Delete
11	Dinesh Rajbanshi	Lalitpur	9836789545	5	Edit Delete
12	Bishal Shrestha	Kathmandu	9851084957	5	Edit Delete
13	Pranaya Pradhan	Kathmandu	9860659800	1	Edit Delete
14	Aayush Joshi	MangalBazar	9851055037	5	Edit Delete

Figure 17 Grid View After Updating the data in Staff Form

7.1.3. Deleting the Data of Grid View

STAFF_ID	STAFF_NAME	ADDRESS	PHONE_NO	DESIGNATION_ID	
1	Ananta Tamang	Kathmandu	9851025639	1	Edit Delete
2	Biraj Maharjan	Kathmandu	984108597	1	Edit Delete
3	Alan Neupane	Hetauda	9851025639	1	Edit Delete
4	Santosh Shahukhala	Lalitpur	9851037096	1	Edit Delete
5	Kamal Shrestha	Kathmandu	9841025369	2	Edit Delete
6	Rejin Subba	Kathmandu	9849078956	2	Edit Delete
7	Abhishek Rijal	Nuwakot	9849078596	3	Edit Delete
8	Rupesh KC	Nuwakot	9802578569	3	Edit Delete
9	Sunil Bal	Lalitpur	9841258963	4	Edit Delete
10	Bikesh Kuthu	Bhaktapur	9843609875	4	Edit Delete
11	Dinesh Rajbanshi	Lalitpur	9836789545	5	Edit Delete
12	Bishal Shrestha	Kathmandu	9851084957	5	Edit Delete
13	Pranaya Pradhan	Kathmandu	9860659800	1	Edit Delete
14	Aayush Joshi	MangalBazar	9851055037	5	Edit Delete

Figure 18 Clicking the Delete button

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STAFF_ID	STAFF_NAME	ADDRESS	PHONE_NO	DESIGNATION_ID	
1	Ananta Tamang	Kathmandu	9851025639	1	Edit Delete
2	Biraj Maharjan	Kathmandu	984108597	1	Edit Delete
3	Alan Neupane	Hetauda	9851025639	1	Edit Delete
4	Santosh Shahukhala	Lalitpur	9851037096	1	Edit Delete
5	Kamal Shrestha	Kathmandu	9841025369	2	Edit Delete
6	Rejin Subba	Kathmandu	9849078956	2	Edit Delete
7	Abhishek Rijal	Nuwakot	9849078596	3	Edit Delete
8	Rupesh KC	Nuwakot	9802578569	3	Edit Delete
9	Sunil Bal	Lalitpur	9841258963	4	Edit Delete
10	Bikesh Kuthu	Bhaktapur	9843609875	4	Edit Delete
11	Dinesh Rajbanshi	Lalitpur	9836789545	5	Edit Delete
12	Bishal Shrestha	Kathmandu	9851084957	5	Edit Delete
13	Pranaya Pradhan	Kathmandu	9860659800	1	Edit Delete

Figure 19 Grid View After Deleting the Data

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7.2. Designation Form

7.2.1. Inserting Data in Designation Form

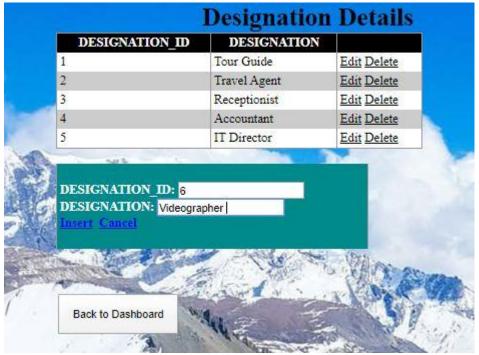


Figure 20 Entering the value in Text Field of Designation Form

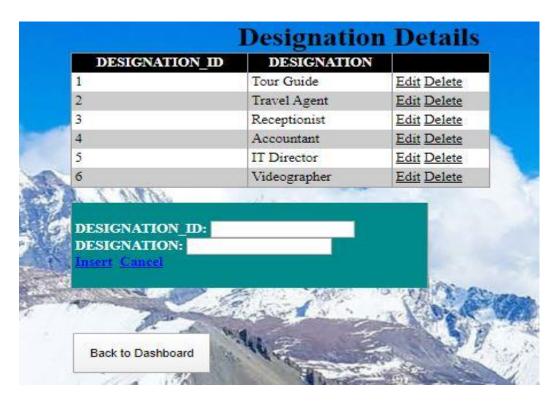


Figure 21 Grid View of Designation Form After Inserting the Data

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7.2.2. Updating the Data in Designation Form

	Designation	Details
DESIGNATION_ID	DESIGNATION	
1	Tour Guide	Edit Delete
2	Travel Agent	Edit Delete
3	Receptionist	Edit Delete
4	Accountant	Edit Delete
5	IT Director	Edit Delete
5	Videographer	Edit Delete

Figure 22 Clicking the Edit Button in Designation Form

	Designation Details				
DESIGNATION_ID	DESIGNATION				
1	Tour Guide	Edit Delete			
2	Travel Agent	Edit Delete			
3	Receptionist	Edit Delete			
4	Accountant	Edit Delete			
5	IT Director	Edit Delete			
6	Photographer	Update Cancel			

Figure 23 Updating the Data in Designation Form

	Designation	Details
DESIGNATION_ID	DESIGNATION	
1	Tour Guide	Edit Delete
2	Travel Agent	Edit Delete
3	Receptionist	Edit Delete
4	Accountant	Edit Delete
5	IT Director	Edit Delete
6	Photographer	Edit Delete

Figure 24 Grid View After Updating the Data

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7.2.3. Deleting the Data in Designation Form

DESIGNATION_ID	DESIGNATION	
	Tour Guide	Edit Delete
	Travel Agent	Edit Delete
	Receptionist	Edit Delete
	Accountant	Edit Delete
	IT Director	Edit Delete
5	Photographer	Edit Delete

Figure 25 Clicking the Delete Button in Designation Form



Figure 26 Grid View After Deleting the data in Designation Form

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7.3. Customer Form

7.3.1. Inserting Data in Customer Form

CUSTOMER_ID	PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikechen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasal	9841859674	lamabikram@gmail.com	Edit Delete
CUSTOMER_ID: PACKAGE_ID: CUSTOMER_NADDRESS: Dhap PHONENO: 984 EMAILADDRES Insert Cancel	PK1 AME: Pabitra Shri akhel 1256396				No.	

Figure 27 Entering the Data in Text Field of Customer Form

CUSTOMER_ID	PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikechen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasal	9841859674	lamabikram@gmail.com	Edit Delete
11	PK1	Pabitra Shrestha	Dhapakhel	9841256396	pshrestha@gmail.com	Edit Delete

Figure 28 Grid View After Adding New Data in Customer Form

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7.3.2. Updating the Data in Customer Form

CUSTOMER_ID	PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikcchen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasal	9841859674	lamabikram@gmail.com	Edit Delete
11	PK1	Pabitra Shrestha	Dhapakhel	9841256396	pshrestha@gmail.com	Edit Delete

Figure 29 Clicking the Edit Button in Customer Form

CUSTOMER	ID PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	į.
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikechen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasal	9841859674	lamabikram@gmail.com	Edit Delete
11	PK1	Pabitra Krishna Shrestha	Sundhara	9841256396	pshrestha@gmail.com	Update Cance

Figure 30 Updating the Data in Grid View of Customer Form

CUSTOMER_ID	PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikechen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasal	9841859674	lamabikram@gmail.com	Edit Delete
11	PK1	Pabitra Krishna Shrestha	Sundhara	9841256396	pshrestha@gmail.com	Edit Delete

Figure 31 Grid View After Updating the Data in Customer Form

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7.3.3. Deleting the in Customer Form

CUSTOMER_ID	PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikcchen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasal	9841859674	lamabikram@gmail.com	Edit Delete
11	PK1	Pabitra Krishna Shrestha	Sundhara	9841256396	pshrestha@gmail.com	Edit Delete

Figure 32 Clicking the Delete Button in Customer Form

CUSTOMER_ID	PACKAGE_ID	CUSTOMER_NAME	ADDRESS	PHONENO	EMAILADDRESS	
1	PK1	Arun Man Joshi	Tripureshwor	9851055037	joshiarunman@gmail.com	Edit Delete
2	PK1	Sanjib Shilpakar	Mangal Bazar	9851037368	sanjibsports@gmail.com	Edit Delete
3	PK2	Meghraj KC	Bhanimandal	9851028178	kcmegraj@gmail.com	Edit Delete
4	PK2	Mangal Maharjan	Gwarko	9841468250	mangalm@gmail.com	Edit Delete
5	PK3	Ram Shrestha Boss	Bhaisipati	9851859674	ram.bossgmail.com	Edit Delete
6	PK3	Mukesh Nakarmi	Sundhara	9851859674	mukeshnakarmi01@gmail.com	Edit Delete
7	PK4	Krishna Awale	Thecho	9851055063	awalekrishna@gmail.com	Edit Delete
8	PK4	Utsav Shakya	Kupondole	9843608596	utsavs@gmail.com	Edit Delete
9	PK5	Mikchhen Tamang	Hattiban	9841589677	tamangmikcchen@gmail.com	Edit Delete
10	PK5	Bikram Lama	Chayasa1	9841859674	lamabikram@gmail.com	Edit Delete

Figure 33 Grid View After Deleting the Data in Customer Form

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7.4. Package Form

7.4.1. Inserting Data in Package Form

PACKAGE_ID	PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delet
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete
PACKAGE_ID PACKAGE_NA START_DATE: END_DATE: 2 TOTAL_NO_O DIFFICULTY: Insert_Cancel	ME: ILam 2/22/2020 726/2020 F_DAYS: 5			In.		

Figure 34 Entering the Data in Text Field of Package Form

PACKAGE_ID	PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delete
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete
PK6	ILam	2/22/2020 12:00:00 AM	2/26/2020 12:00:00 AM	5	Moderate	Edit Delete

Figure 35 Grid View After Inserting New Data in Package Form

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7.4.2. Updating the Data in Package Form

PACKAGE_I	D PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delete
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete
PK6	ILam	2/22/2020 12:00:00 AM	2/26/2020 12:00:00 AM	5	Moderate	Edit Delete

Figure 36 Clicking on Edit Button

PACKAGE_ID	PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delete
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete
PK6	Jhapa	2/22/2020 12:00:00 AM	2/26/2020 12:00:00 AM	5	Moderate	Update Cancel

Figure 37 Updating the Data in Grid View of Package Form

PACKAGE_I	D PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delete
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete
PK6	Jhapa	2/22/2020 12:00:00 AM	2/26/2020 12:00:00 AM	5	Moderate	Edit Delete

Figure 38 Grid View After Updating the Data in Package Form

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7.4.3. Deleting the Package Form

PACKAGE_ID	PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delete
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete
PK6	Jhapa	2/22/2020 12:00:00 AM	2/26/2020 12:00:00 AM	5	Moderate	Edit Delete

Figure 39 Clicking on Delete Button

PACKAGE_ID	PACKAGE_NAME	START_DATE	END_DATE	TOTAL_NO_OF_DAYS	DIFFICULTY	6
PK1	Pokhara	1/10/2020 12:00:00 AM	1/15/2020 12:00:00 AM	5	Easy	Edit Delete
PK2	Mt.Everest	1/12/2020 12:00:00 AM	1/25/2020 12:00:00 AM	13	Hard	Edit Delete
PK3	ABC	2/1/2020 12:00:00 AM	2/7/2020 12:00:00 AM	7	Moderate	Edit Delete
PK4	Ghandruk	2/10/2020 12:00:00 AM	2/14/2020 12:00:00 AM	4	Moderate	Edit Delete
PK5	Lumbini	2/20/2020 12:00:00 AM	2/24/2020 12:00:00 AM	5	Easy	Edit Delete

Figure 40 Grid View After Deleting the Data in Package Form

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7.5. Tour Guide Form

7.5.1. Inserting Data in Tour Guide Form

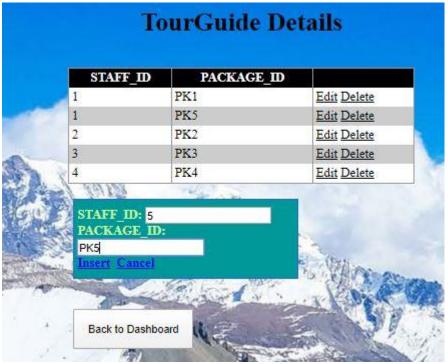


Figure 41 Entering the data in Text Field of TourGuide Forms

STAFF_ID	PACKAGE_ID	
1	PK1	Edit Delete
1	PK5	Edit Delete
2	PK2	Edit Delete
3	PK3	Edit Delete
4	PK4	Edit Delete
5	PK5	Edit Delete

Figure 42 Grid View After Adding Data in TourGuide Form

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7.5.2. Updating the Data in TourGuide Form

STAFF_ID	PACKAGE_ID	
1	PK1	Edit Delete
1	PK5	Edit Delete
2	PK2	Edit Delete
3	PK3	Edit Delete
4	PK4	Edit Delete
5	PK5	Edit Delete

Figure 43 Clicking on Edit Button

STAFF_ID	PACKAGE_ID	
1	PK1	Edit Delete
1	PK5	Edit Delete
2	PK2	Edit Delete
3	PK3	Edit Delete
4	PK4	Edit Delete
5	PK4	Edit Delete

Figure 44 Grid View After Updating the Data on TourGuide Form

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7.5.3. Deleting the in Tour Guide Form

STAFF_ID	PACKAGE_ID	
1	PK1	Edit Delete
1	PK5	Edit Delete
2	PK2	Edit Delete
3	PK3	Edit Delete
4	PK4	Edit Delete
5	PK4	Edit Delete

Figure 45 Clicking on Delete Button

STAFF_ID	PACKAGE_ID	
1	PK1	Edit Delete
1	PK5	Edit Delete
2	PK2	Edit Delete
3	PK3	Edit Delete
4	PK4	Edit Delete

Figure 46 Grid View After Deleting the Data in TourGuide Form

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8. Further Discussion

First ever coursework has given me a platform to work on a number of tools and techniques relating to database and web application development. I have now learnt to use oracle data modeller, SQL developer and Visual studio for asp.net. This coursework has helped me enhance my skills in database and ways to connect it with asp.net and give my application a new look. As this coursework is based on a real time scenario hence it has helped me think critically on ways to solve the errors encountered and also development a working application. While developing this application I faced a number of problems but after working on the project and searching for the solution I got to know why the error was caused. This prevented me from making minor errors. I have worked constantly for this project, which has made to complete this project with precision and produce a complete application that is made in the ASP.NET along with the implementation of database. During this coursework I learn new technique on how we can we prepare an ERD and generate DDL file from there and import it to the SQL Developer. In the SQL Developer we can write the guery to insert new data into the table we have created and this can be easily connect to all our web pages through an easily step. In this project I also learn to work on asp.net that was quite a new topic for me. But after working on it and going through tutorials i was able to complete the task assigned at the end.

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