DOCUMENT PROIECT INTEGRATOR 2 – BAZE DE DATE – APLICATIA DRUMETII

Am realizat o aplicatie in ORACLE- APEX care permite gestiunea unei asociatii de turism montan.

Am creat toate tabelele, le-am atribuit chei primare si straine si am realizat diagrama Entity Relationship.

TABEL CLIENTI:

Column Name	Data Type	Nullable	Default	Primary Key
ID_CLIENT	NUMBER(4,0)	No	-	1
NUME_CLIENT	VARCHAR2(50)	No	-	-
TELEFON_CLIENT	VARCHAR2(10)	No	-	-
EMAIL_CLIENT	VARCHAR2(50)	No	-	-

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
SYS_C0031100	Check	"ID_CLIENT" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:44:37 AM	-	-
SYS_C0031101	Check	"NUME_CLIENT" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:44:37 AM	-	-
SYS_C0031102	Check	"TELEFON_CLIENT" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:44:37 AM	-	-
SYS_C0031103	Check	"EMAIL_CLIENT" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:44:37 AM	-	-
DM_CLIENTI_PK	Primary	-	-	ID_CLIENT	-	ENABLED	02/02/2025 09:44:37 AM	DM_CLIENTI_PK	-

TABEL COMENZI:

Column Name	Data Type	Nullable	Default	Primary Key
ID_COMANDA	NUMBER(4,0)	No	-	1
ID_CLIENT	NUMBER(4,0)	No	-	-
ID_TRASEU	NUMBER(4,0)	No	-	-
ID_GHID	NUMBER(4,0)	No	-	-

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
DM_GHID_FK	Foreign	-	DM_GHID_FK (IAP103_026.DM_GHIZI)	ID_GHID	NO ACTION	ENABLED	02/02/2025 09:50:01 AM	-	-
DM_CLIENT_FK	Foreign	-	DM_CLIENT_FK (IAP103_026.DM_CLIENTI)	ID_CLIENT	NO ACTION	ENABLED	02/02/2025 09:50:01 AM	-	-
SYS_C0031113	Check	"ID_COMANDA" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:50:00 AM	-	-
SYS_C0031114	Check	"ID_CLIENT" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:50:00 AM	-	-
SYS_C0031115	Check	"ID_TRASEU" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:50:00 AM	-	-
SYS_C0031116	Check	"ID_GHID" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:50:00 AM	-	-
DM_COMENZI_PK	Primary	-	-	ID_COMANDA	-	ENABLED	02/02/2025 09:50:00 AM	DM_COMENZI_PK	-
DM_TRASEU_CON	Foreign	-	DM_TRASEU_CON (IAP103_026.DM_TRASEU)	ID_TRASEU	NO ACTION	ENABLED	02/02/2025 12:30:32 PM	-	-

TABEL DIFICULTATE:

Column Name	Data Type	Nullable	Default	Primary Key
ID_DIFICULTATE	NUMBER(4,0)	No	-	1
DIFICULTATE_TRASEU	VARCHAR2(20)	No	-	-

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
SYS_C0031121	Check	"ID_DIFICULTATE" IS NOT NULL	-	-	-	ENABLED	02/02/2025 10:08:51 AM	-	-
SYS_C0031122	Check	"DIFICULTATE_TRASEU" IS NOT NULL	-	-	-	ENABLED	02/02/2025 10:08:51 AM	-	-
DM_DIFICULTATE_PK	Primary	-	-	ID_DIFICULTATE	-	ENABLED	02/02/2025 10:08:51 AM	DM_DIFICULTATE_PK	-

TABEL GHIZI:

Column Name	Data Type	Nullable	Default	Primary Key
ID_GHID	NUMBER(4,0)	No	-	1
NUME_GHID	VARCHAR2(50)	No	-	-
EXPERIENTA_GHID	VARCHAR2(20)	Yes	-	-

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
DM_GHIZI_PK	Primary	-	-	ID_GHID	-	ENABLED	02/02/2025 09:46:07 AM	DM_GHIZI_PK	-
SYS_C0031105	Check	"ID_GHID" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:46:07 AM	-	-
SYS_C0031106	Check	"NUME_GHID" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:46:07 AM	-	-

TABEL TRASEU:

Column Name	Data Type	Nullable	Default	Primary Key
ID_TRASEU	NUMBER(4,0)	No	-	1
LOCATIE_TRASEU	VARCHAR2(50)	No	-	-
DATA_TRASEU	DATE	No	-	-
ID_DIFICULTATE	VARCHAR2(30)	No	-	-

Constraint	Type	Search Condition	Related Constraint	Columns	Delete Rule	Status	Last Change	Index	Invalid
DM_TRASEE_PK	Primary	-	-	ID_TRASEU	-	ENABLED	02/02/2025 09:47:59 AM	DM_TRASEE_PK	-
SYS_C0031108	Check	"ID_TRASEU" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:47:59 AM	-	-
SYS_C0031109	Check	"LOCATIE_TRASEU" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:47:59 AM	-	-
SYS_C0031110	Check	"DATA_TRASEU" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:47:59 AM	-	-
SYS_C0031111	Check	"ID_DIFICULTATE" IS NOT NULL	-	-	-	ENABLED	02/02/2025 09:47:59 AM	-	-

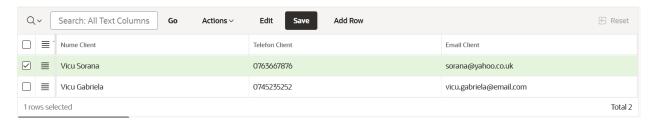Am creat liste de valori pentru a realiza o listă ordonată cu traseele/dificultatile.

Am realizat un formular in care utilizatorul poate adauga clientii din aplicatie:

Am realizat butoane care duc la pagina cu lista clientilor sau ofera optiunea de a renunta la actiune.

Clientii se pot gestiona cu un formular de tip Interactive Grid:

Acolo unde numarul maxim de locuri pe fiecare traseu este 10, la adaugarea unui nou client, pentru un traseu unde s-a atins limita, acesta nu mai apare in listele de selectare, pentru introducerea unei noi comenzi:
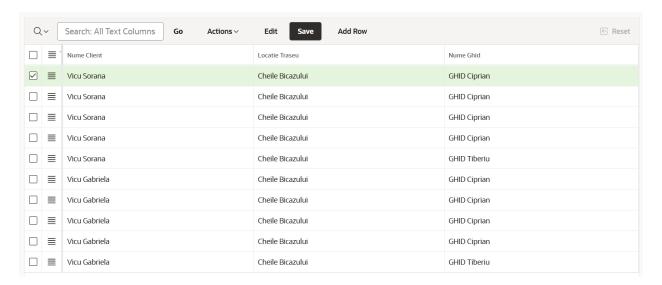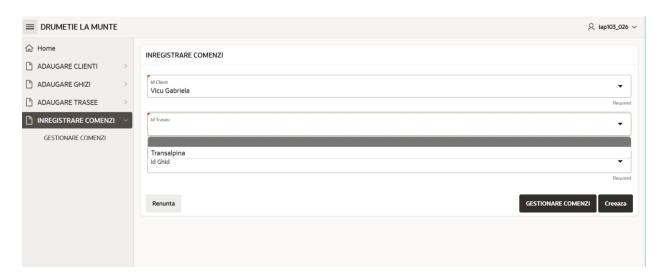

Fig.1. 10 locuri ocupate
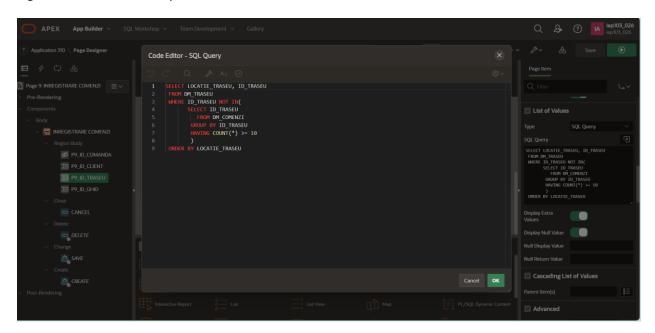
Fig.2. Doar un traseu mai poate fi ales

Fig.3: Codul SQL care a permis acest lucru

In concluzie, aplicatia permite adaugarea clientilor in baza de date; alocarea clientilor pe diverse trasee; evidenta traseelor, ghizilor si clientilor; inregistrarea unei comenzi; gestionarea drumetiilor pe zile/trasee/client.

Link catre prezentarea video: https://youtu.be/BYG4duqZdGA