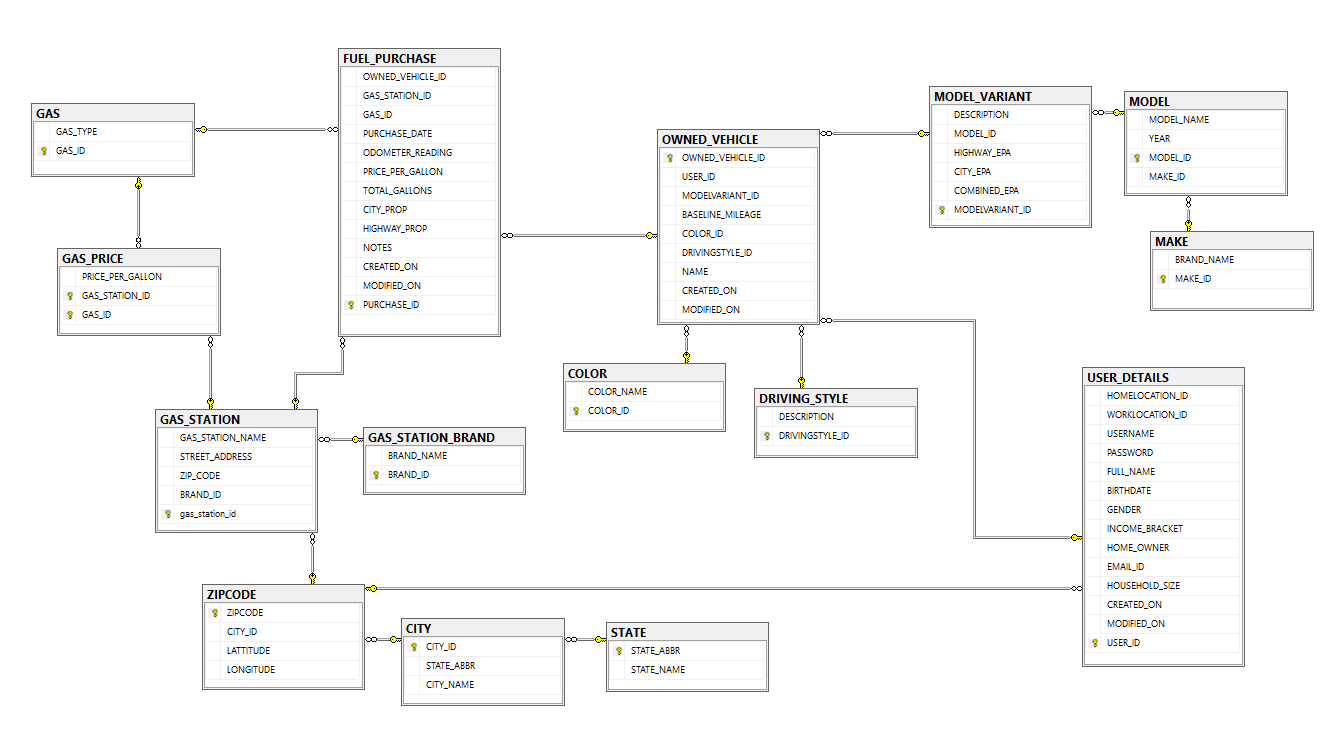
**Draft version of TrackMPG data model:**

**E-R Diagram for TrackMPG:**



**DATA DICTIONARY:**

USER\_DETAILS table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Description |
| USER\_ID | Primary key | INTEGER  IDENTITY (auto-generated)  NOT NULL | Unique identifier representing a user instance |
| USERNAME |  | varchar(30) | User name of the customer |
| PASSWORD |  | varchar(30) | Password of the customer. |
| FULL\_NAME |  | varchar(30) | User’s Full name. |
| BIRTHDATE |  | datetime | User’s Birthdate |
| GENDER |  | varchar(20) | User’s Gender |
| INCOME\_BRACKET |  | varchar(20) | User’s Income bracket |
| HOME\_OWNER |  | varchar(10) | Whether a User own’s a home |
| EMAIL\_ID |  | varchar(50) | User’s Email ID |
| HOUSEHOLD\_SIZE |  | int | User’s House hold size |
| CREATED\_ON |  | datetime | Defualt value: today’s date in the format  ‘yyyy-mm-dd hh:mm:ss’ |
| MODIFIED\_ON |  | datetime | Defualt value: today’s date in the format  ‘yyyy-mm-dd hh:mm:ss’ |
| HOMELOCATION\_ID | Foreign Key  (References ZIPCODE table) | char(5) | The 5-digit Zipcode of user’s home location |
| WORKLOCATION\_ID | Foreign Key  (References ZIPCODE table) | char(5) | The 5-digit Zipcode of user’s work location |

ZIPCODE table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| ZIPCODE | Primary key | char(5)  NOT NULL | List of the 5-digit Zip codes in the US. |
| CITY\_ID | Foreign Key  (References CITY table) | varchar(10) | Unique identifier referring to city name in CITY table |
| LATTITUDE |  | float | Lattitude of the zipcode |
| LONGITUDE |  | Float | Longitude of the zipcode |

CITY table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| CITY\_ID | Primary key | varchar(20) NOT NULL | Unique identifier for a city. |
| STATE\_ABBR | Foreign key (references STATE table) | char(2)  NOT NULL | State abbreviation where city is located. |
| CITY\_NAME |  | varchar(10) | Name of the city |

STATE table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| STATE\_ABBR | Primary key | char(2)  NOT NULL | State abbreviation in the US |
| STATE\_NAME |  | varchar(20)  NOT NULL | State names of respective abbreviation |

COLOR table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| COLOR\_ID | Primary Key | INT  NOT NULL | The unique numerical identifier for all colors of cars. |
| COLOR\_NAME |  | varchar(20)  NOT NULL | Name of the color |

DRIVING STYLE table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| DRIVINGSTYLE\_ID | Primary key | INT  NOT NULL | Unique numerical identifier for driving style |
| DESCRIPTION |  | DATE | Description for driving style |

GAS table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| GAS\_ID | Primary key | INT  NOT NULL | Unique numerical identifier for GAS |
| GAS\_TYPE |  | varchar(20)  NOT NULL | Gas type |

GAS\_PRICE table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| GAS\_ID | Primary key  Foreign Key  (References GAS table) | INT  NOT NULL | Unique numerical identifier for GAS |
| GAS\_STATION\_ID | Primary key  Foreign Key  (References GAS\_STATION table) | INT  NOT NULL | numerical identifier for Gas station |
| PRICE\_PER\_GALLON |  | FLOAT NOT NULL | Price of the gas per unit gallon |

GAS\_STATION table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| GAS\_STATION\_ID | Primary key | INT  NOT NULL | numerical identifier for Gas station. |
| BRAND\_ID | Foreign Key  (References GAS\_STATION\_BRAND table) | INT  NOT NULL | numerical identifier for gas station brand. |
| ZIP\_CODE | Foreign Key  (References ZIP\_CODE table) | char(5)  NOT NULL | The 5-digit Zipcode of gas station location. |
| STREET\_ADDRESS |  | varchar(100) | Street address of gas station |
| GAS\_STATION\_NAME |  | varchar(50) | Name of the gas station |

GAS\_STATION\_BRAND table:

|  |  |  |  |
| --- | --- | --- | --- |
| Column name | Key specifications | Datatype | Long description |
| BRAND\_ID | Primary Key | INT  NOT NULL | numerical identifier for gas station brand. |
| BRAND\_NAME |  | varchar(50) | Brand name of gas station. |

**TRANSACTION REQUIREMENTS:**

**1. USER REGISTRATION:**

/\* User registration\*/

SELECT DISTINCT GENDER FROM USER\_DETAILS;

SELECT STATE\_ABBR FROM STATE;

SELECT CITY\_NAME FROM CITY WHERE STATE\_ABBR='AZ';

SELECT ZIPCODE FROM ZIPCODE Z INNER JOIN CITY C ON C.CITY\_ID=Z.CITY\_ID WHERE CITY\_NAME='Tempe'

SELECT DISTINCT INCOME\_BRACKET FROM USER\_DETAILS

SELECT DISTINCT HOME\_OWNER FROM USER\_DETAILS

/\* Register a new user\*/

IF NOT EXISTS (SELECT USERNAME FROM USER\_DETAILS where USERNAME ='Steve')

INSERT INTO USER\_DETAILS (FULL\_NAME, USERNAME, BIRTHDATE, PASSWORD, GENDER,

EMAIL\_ID, HOMELOCATION\_ID, WORKLOCATION\_ID, INCOME\_BRACKET, HOME\_OWNER, HOUSEHOLD\_SIZE)

VALUES('Steve Essi','Steve',NULL,'CoronaVirus@2020','Male','sessi@uark.edu','85281',

NULL,'Upper Income','Yes',4);



/\* User authentication\*/

SELECT CONCAT('Welcome ',FULL\_NAME) AS 'USER LOGIN' FROM USER\_DETAILS WHERE USERNAME='franklaughern' and PASSWORD='fuel623'



/\* Manage User profile\*/

DECLARE @state CHAR(2);

DECLARE @city VARCHAR(20);

SELECT @city=CITY\_NAME,@state=STATE\_ABBR FROM CITY c,ZIPCODE z,USER\_DETAILS u

WHERE c.CITY\_ID=z.CITY\_ID AND z.ZIPCODE=u.HOMELOCATION\_ID AND USERNAME='franklaughern'

--Displaying the data

SELECT FULL\_NAME,BIRTHDATE,GENDER,EMAIL\_ID,@state AS 'STATE' ,@city AS 'CITY'

,INCOME\_BRACKET,HOME\_OWNER,HOUSEHOLD\_SIZE

FROM USER\_DETAILS WHERE USERNAME='franklaughern'



--Updating the record

UPDATE USER\_DETAILS

SET HOME\_OWNER='No'

WHERE USERNAME='franklaughern'



**2.VEHICLES OWNED:**

/\* Add vehicles owned \*/

SELECT DISTINCT BRAND\_NAME FROM MAKE;

SELECT DISTINCT MODEL\_NAME FROM MODEL m

INNER JOIN MAKE mk ON m.MAKE\_ID=mk.MAKE\_ID WHERE BRAND\_NAME= 'GMC';

SELECT DISTINCT [YEAR] FROM MODEL WHERE MODEL\_NAME='G15/25 Rally 2WD'

SELECT DISTINCT DESCRIPTION AS 'MODEL\_VARIANT\_NAME' FROM MODEL\_VARIANT mv

INNER JOIN MODEL md ON mv.MODEL\_ID=md.MODEL\_ID WHERE MODEL\_NAME='G15/25 Rally 2WD' AND [YEAR]='1985';

SELECT DISTINCT COLOR\_NAME FROM COLOR;

SELECT DISTINCT DESCRIPTION AS 'DRIVING\_STYLE' FROM DRIVING\_STYLE;

/\* Adding a new car \*/

DECLARE @model\_variant\_id INT;

DECLARE @color\_id INT;

DECLARE @driving\_style\_id INT;

DECLARE @user\_id INT;

SELECT @model\_variant\_id=MODELVARIANT\_ID FROM MODEL\_VARIANT WHERE [DESCRIPTION]='SD';

SELECT @color\_id=COLOR\_ID FROM COLOR WHERE COLOR\_NAME='Bronze';

SELECT @driving\_style\_id=DRIVINGSTYLE\_ID FROM DRIVING\_STYLE WHERE DESCRIPTION='Automatic (AM-S8)';

SELECT @user\_id = [USER\_ID] FROM USER\_DETAILS WHERE USERNAME='franklaughern';

INSERT INTO OWNED\_VEHICLE([USER\_ID],MODELVARIANT\_ID,BASELINE\_MILEAGE,COLOR\_ID,DRIVINGSTYLE\_ID,[NAME])

VALUES(@user\_id,@model\_variant\_id,0,@color\_id,@driving\_style\_id,NULL);



/\* Display vehicles owned \*/

SELECT o.OWNED\_VEHICLE\_ID,BRAND\_NAME, md.MODEL\_NAME,md.YEAR,mv.[DESCRIPTION]

FROM MAKE m

INNER JOIN MODEL md ON m.MAKE\_ID=md.MAKE\_ID

INNER JOIN MODEL\_VARIANT mv ON md.MODEL\_ID=mv.MODEL\_ID

INNER JOIN OWNED\_VEHICLE O ON MV.MODELVARIANT\_ID=O.MODELVARIANT\_ID

INNER JOIN USER\_DETAILS u ON O.[USER\_ID]=U.[USER\_ID]

WHERE USERNAME='franklaughern'

/\* Edit vehicles owned \*/

SELECT m.BRAND\_NAME, md.MODEL\_NAME,mv.[DESCRIPTION], c.COLOR\_NAME, d.DESCRIPTION, o.BASELINE\_MILEAGE,o.NAME

FROM MAKE m

INNER JOIN MODEL md ON m.MAKE\_ID=md.MAKE\_ID

INNER JOIN MODEL\_VARIANT mv ON md.MODEL\_ID=mv.MODEL\_ID

INNER JOIN OWNED\_VEHICLE O ON MV.MODELVARIANT\_ID=O.MODELVARIANT\_ID

INNER JOIN USER\_DETAILS u ON O.[USER\_ID]=U.[USER\_ID]

INNER JOIN COLOR c ON o.COLOR\_ID=c.COLOR\_ID

INNER JOIN DRIVING\_STYLE d ON o.DRIVINGSTYLE\_ID=d.DRIVINGSTYLE\_ID

WHERE OWNED\_VEHICLE\_ID=200

--changing the color

DECLARE @color\_id INT;

SELECT @color\_id=COLOR\_ID FROM COLOR WHERE COLOR\_NAME='Rose';

UPDATE OWNED\_VEHICLE

SET COLOR\_ID=@color\_id

WHERE OWNED\_VEHICLE\_ID=200



/\* Delete vehicles owned \*/

DELETE FROM OWNED\_VEHICLE WHERE OWNED\_VEHICLE\_ID=200

**3. FUEL PURCHASE**

--DISPLAY VEHICLES FOR USER TO RECORD FUEL PURCHASE

SELECT o.OWNED\_VEHICLE\_ID,BRAND\_NAME, md.MODEL\_NAME,md.YEAR,mv.[DESCRIPTION]

FROM MAKE m

INNER JOIN MODEL md ON m.MAKE\_ID=md.MAKE\_ID

INNER JOIN MODEL\_VARIANT mv ON md.MODEL\_ID=mv.MODEL\_ID

INNER JOIN OWNED\_VEHICLE O ON MV.MODELVARIANT\_ID=O.MODELVARIANT\_ID

INNER JOIN USER\_DETAILS u ON O.[USER\_ID]=U.[USER\_ID]

WHERE USERNAME='franklaughern'

SELECT GAS\_TYPE FROM GAS

-- ADD A FUEL PURCHASE

DECLARE @GAS\_STATION\_ID INT;

DECLARE @GAS\_ID INT;

SELECT @GAS\_ID=GAS\_ID FROM GAS WHERE GAS\_TYPE='Gasoline'

SELECT @GAS\_STATION\_ID=GAS\_STATION\_ID FROM GAS\_STATION GS, ZIPCODE Z, CITY C WHERE GS.ZIP\_CODE=Z.ZIPCODE

AND Z.CITY\_ID=C.CITY\_ID AND C.STATE\_ABBR='AL' AND C.CITY\_NAME='Sumiton' AND GS.STREET\_ADDRESS='447 North Plumb Branch Dr.'

INSERT INTO FUEL\_PURCHASE(OWNED\_VEHICLE\_ID,GAS\_STATION\_ID,GAS\_ID,PURCHASE\_DATE,

ODOMETER\_READING,PRICE\_PER\_GALLON,TOTAL\_GALLONS,HIGHWAY\_PROP,CITY\_PROP)

VALUES(200,@GAS\_STATION\_ID,@GAS\_ID, '2018-12-26 00:00:00.000',

10950,2.27,10,37,63);



/\* Search for lowest price gasoline \*/

SELECT DISTINCT STATE\_ABBR FROM STATE

SELECT DISTINCT CITY\_NAME FROM CITY

SELECT DISTINCT ZIPCODE FROM ZIPCODE

SELECT DISTINCT GAS\_TYPE FROM GAS

DECLARE @gas\_id INT

SELECT @gas\_id=GAS\_ID FROM GAS WHERE GAS\_TYPE='Gasoline'

/\* Track by state \*/

SELECT TOP 1 r.GAS\_STATION\_NAME,MIN(PRICE\_PER\_GALLON) AS 'Lowest price' FROM GAS\_PRICE gp

INNER JOIN

(SELECT DISTINCT GAS\_STATION\_ID, GAS\_STATION\_NAME FROM GAS\_STATION gs

INNER JOIN

(SELECT DISTINCT ZIPCODE

FROM CITY c

INNER JOIN ZIPCODE z ON c.CITY\_ID=z.CITY\_ID

WHERE c.STATE\_ABBR='AK') t

ON gs.ZIP\_CODE=t.ZIPCODE) r

ON gp.GAS\_STATION\_ID=R.GAS\_STATION\_ID

WHERE gp.GAS\_ID=@gas\_id

GROUP BY r.GAS\_STATION\_NAME

ORDER BY MIN(PRICE\_PER\_GALLON) ASC



/\*Track by city \*/

SELECT TOP 1 r.GAS\_STATION\_NAME,MIN(PRICE\_PER\_GALLON) AS 'Lowest price' FROM GAS\_PRICE gp

INNER JOIN

(SELECT DISTINCT GAS\_STATION\_NAME, GAS\_STATION\_ID FROM GAS\_STATION gs

INNER JOIN

(SELECT DISTINCT ZIPCODE

FROM CITY c

INNER JOIN ZIPCODE z ON c.CITY\_ID=z.CITY\_ID

WHERE c.CITY\_NAME='Anchorage') t

ON gs.ZIP\_CODE=t.ZIPCODE) r

ON gp.GAS\_STATION\_ID=R.GAS\_STATION\_ID

WHERE gp.GAS\_ID=@gas\_id

GROUP BY r.GAS\_STATION\_NAME

ORDER BY MIN(PRICE\_PER\_GALLON) ASC



/\* Track by zip code \*/

SELECT TOP 1 r.GAS\_STATION\_NAME,MIN(PRICE\_PER\_GALLON) AS 'Lowest price' FROM GAS\_PRICE gp

INNER JOIN

(SELECT DISTINCT GAS\_STATION\_ID,GAS\_STATION\_NAME FROM GAS\_STATION gs

WHERE ZIP\_CODE='99599') r

ON gp.GAS\_STATION\_ID=r.GAS\_STATION\_ID

WHERE gp.GAS\_ID=@gas\_id

GROUP BY r.GAS\_STATION\_NAME

ORDER BY MIN(PRICE\_PER\_GALLON) ASC



**REPORTING REQUIREMENTS:**

**FUEL PURCHASE HISTORY:**

/\* view history of fuel purchase records\*/

SELECT CONCAT(M.BRAND\_NAME,' ',MM.MODEL\_NAME,' ',MM.YEAR) AS 'Vehicle',G.GAS\_TYPE,convert(varchar, F.PURCHASE\_DATE, 1) AS DATE,

F.ODOMETER\_READING,ROUND(F.PRICE\_PER\_GALLON,2) AS 'Price per gallon',

F.TOTAL\_GALLONS FROM FUEL\_PURCHASE F, OWNED\_VEHICLE O,USER\_DETAILS U, GAS G, MODEL\_VARIANT MV, MODEL MM, MAKE M

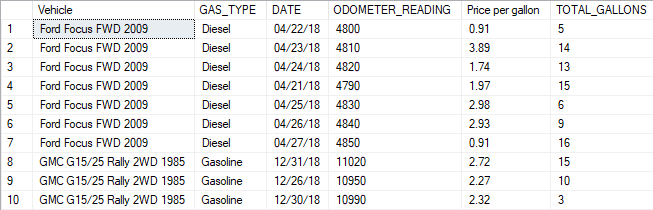
WHERE F.OWNED\_VEHICLE\_ID=O.OWNED\_VEHICLE\_ID AND O.MODELVARIANT\_ID=MV.MODELVARIANT\_ID AND MV.MODEL\_ID=MM.MODEL\_ID AND

MM.MAKE\_ID=M.MAKE\_ID AND

F.GAS\_ID=G.GAS\_ID AND O.USER\_ID=U.USER\_ID

AND U.USER\_ID='135'

ORDER BY Vehicle ASC



/\*report to view their own fuel purchase summaries by automobile, by month or year\*/

-- DISPLAY VEHICLES OWNED BY USER TO SELECT A CAR

SELECT BRAND\_NAME, md.MODEL\_NAME,md.YEAR,mv.[DESCRIPTION] AS VARIANT

FROM MAKE m

INNER JOIN MODEL md ON m.MAKE\_ID=md.MAKE\_ID

INNER JOIN MODEL\_VARIANT mv ON md.MODEL\_ID=mv.MODEL\_ID

INNER JOIN OWNED\_VEHICLE O ON MV.MODELVARIANT\_ID=O.MODELVARIANT\_ID

INNER JOIN USER\_DETAILS u ON O.[USER\_ID]=U.[USER\_ID]

WHERE USERNAME='franklaughern'



--BY YEAR FOR THE VEHICLE SELECTED

SELECT YEAR(f.PURCHASE\_DATE) AS YEAR ,MAX(F.ODOMETER\_READING) AS "TRIP READING",

SUM(F.TOTAL\_GALLONS) AS "TOTAL GALLONS", ROUND(SUM(F.TOTAL\_GALLONS\*F.PRICE\_PER\_GALLON),2) AS "TOTAL AMOUNT SPENT"

FROM FUEL\_PURCHASE F, OWNED\_VEHICLE O, GAS G

WHERE F.OWNED\_VEHICLE\_ID=O.OWNED\_VEHICLE\_ID AND

F.GAS\_ID=G.GAS\_ID AND

O.OWNED\_VEHICLE\_ID='200' GROUP BY YEAR(f.PURCHASE\_DATE)



--BY MONTH FOR THE VEHICLE SELECTED

SELECT FORMAT(F.PURCHASE\_DATE,'MMM') AS MONTH ,MAX(F.ODOMETER\_READING) AS "TRIP READING",

SUM(F.TOTAL\_GALLONS) AS "TOTAL GALLONS", ROUND(SUM(F.TOTAL\_GALLONS\*F.PRICE\_PER\_GALLON),2) AS "TOTAL AMOUNT SPENT"

FROM FUEL\_PURCHASE F, OWNED\_VEHICLE O

WHERE F.OWNED\_VEHICLE\_ID=O.OWNED\_VEHICLE\_ID AND

O.OWNED\_VEHICLE\_ID='200' GROUP BY FORMAT(F.PURCHASE\_DATE,'MMM')



**AVERAGE MPG AND PURCHASE DATA COMPARISON:**

/\* Average MPG \*/

SELECT DISTINCT BRAND\_NAME FROM MAKE;

SELECT DISTINCT MODEL\_NAME FROM MODEL m

INNER JOIN MAKE mk ON m.MAKE\_ID=mk.MAKE\_ID WHERE BRAND\_NAME= 'GMC';

SELECT DISTINCT [YEAR] FROM MODEL WHERE MODEL\_NAME='G15/25 Rally 2WD'

SELECT DISTINCT DESCRIPTION AS 'MODEL\_VARIANT\_NAME' FROM MODEL\_VARIANT mv

INNER JOIN MODEL md ON mv.MODEL\_ID=md.MODEL\_ID WHERE MODEL\_NAME='G15/25 Rally 2WD'

AND [YEAR]='1985';

DECLARE @model\_variant\_id INT

SELECT @model\_variant\_id=MODELVARIANT\_ID FROM MODEL\_VARIANT WHERE [DESCRIPTION]='SA';

WITH ODODIFFERENCE AS

(

SELECT ROW\_NUMBER() OVER (ORDER BY r.PURCHASE\_DATE) AS 'ROW\_NUMBER',r.PURCHASE\_DATE,r.ODOMETER\_READING, r.TOTAL\_GALLONS

FROM

(SELECT fp.PURCHASE\_DATE,fp.ODOMETER\_READING,fp.TOTAL\_GALLONS FROM FUEL\_PURCHASE fp

INNER JOIN

(SELECT DISTINCT OWNED\_VEHICLE\_ID FROM OWNED\_VEHICLE

WHERE MODELVARIANT\_ID=@model\_variant\_id) t

ON fp.OWNED\_VEHICLE\_ID=t.OWNED\_VEHICLE\_ID) r

)

SELECT ROUND(AVG(a.MILES\_DRIVEN/a.TOTAL\_GALLONS),2) AS 'Average MPG' FROM

(SELECT Cur.PURCHASE\_DATE, Cur.ODOMETER\_READING, ISNULL((Cur.ODOMETER\_READING-Prv.ODOMETER\_READING),Cur.ODOMETER\_READING)

AS 'MILES\_DRIVEN', Cur.TOTAL\_GALLONS

FROM ODODIFFERENCE Cur

LEFT OUTER JOIN ODODIFFERENCE Prv

On Cur.ROW\_NUMBER=Prv.ROW\_NUMBER+1) a



/\* Compare data \*/

--Selected Vehicle’ data

WITH ODODIFFERENCE AS

(

SELECT ROW\_NUMBER() OVER (ORDER BY r.PURCHASE\_DATE) AS 'ROW\_NUMBER',r.PURCHASE\_DATE,r.ODOMETER\_READING, r.TOTAL\_GALLONS,r.PRICE\_PER\_GALLON,r.CITY\_PROP,r.HIGHWAY\_PROP

FROM

(SELECT fp.PURCHASE\_DATE,fp.ODOMETER\_READING,fp.TOTAL\_GALLONS,fp.PRICE\_PER\_GALLON,fp.CITY\_PROP,fp.HIGHWAY\_PROP FROM FUEL\_PURCHASE fp

WHERE OWNED\_VEHICLE\_ID=200) r

)

SELECT ISNULL(ROUND(AVG(a.MILES\_DRIVEN/a.TOTAL\_GALLONS),2),0) AS 'Your Vehicle Average MPG',

ISNULL(ROUND(SUM(TOTAL\_GALLONS\*PRICE\_PER\_GALLON),2),0) AS 'Total Amount Spent',ISNULL(ROUND(AVG(CITY\_PROP),2),0) AS 'Avg City Proportion',

ISNULL(ROUND(AVG(HIGHWAY\_PROP),2),0) AS 'Avg Highway Proportion'

FROM

(SELECT Cur.PURCHASE\_DATE, Cur.ODOMETER\_READING, ISNULL((Cur.ODOMETER\_READING-Prv.ODOMETER\_READING),Cur.ODOMETER\_READING)

AS 'MILES\_DRIVEN', Cur.TOTAL\_GALLONS,Cur.PRICE\_PER\_GALLON,Cur.CITY\_PROP,Cur.HIGHWAY\_PROP

FROM ODODIFFERENCE Cur

LEFT OUTER JOIN ODODIFFERENCE Prv

On Cur.ROW\_NUMBER=Prv.ROW\_NUMBER+1) a

--Other Users data

WITH ODODIFFERENCE AS

(

SELECT ROW\_NUMBER() OVER (ORDER BY r.PURCHASE\_DATE) AS 'ROW\_NUMBER',r.PURCHASE\_DATE,r.ODOMETER\_READING, r.TOTAL\_GALLONS,r.PRICE\_PER\_GALLON,r.CITY\_PROP,r.HIGHWAY\_PROP

FROM

(SELECT fp.PURCHASE\_DATE,fp.ODOMETER\_READING,fp.TOTAL\_GALLONS,fp.PRICE\_PER\_GALLON,fp.CITY\_PROP,fp.HIGHWAY\_PROP FROM FUEL\_PURCHASE fp

INNER JOIN

(SELECT OWNED\_VEHICLE\_ID FROM OWNED\_VEHICLE WHERE MODELVARIANT\_ID=(SELECT MODELVARIANT\_ID

FROM OWNED\_VEHICLE WHERE OWNED\_VEHICLE\_ID=200) AND OWNED\_VEHICLE\_ID!=200) t

ON fp.OWNED\_VEHICLE\_ID=t.OWNED\_VEHICLE\_ID) r

)

SELECT ISNULL(ROUND(AVG(a.MILES\_DRIVEN/a.TOTAL\_GALLONS),2),0) AS 'Users Average MPG',

ISNULL(ROUND(SUM(TOTAL\_GALLONS\*PRICE\_PER\_GALLON),2),0) AS 'Total Amount Spent',ISNULL(ROUND(AVG(CITY\_PROP),2),0) AS 'Avg City Proportion',

ISNULL(ROUND(AVG(HIGHWAY\_PROP),2),0) AS 'Avg Highway Proportion'

FROM

(SELECT Cur.PURCHASE\_DATE, Cur.ODOMETER\_READING, ISNULL((Cur.ODOMETER\_READING-Prv.ODOMETER\_READING),Cur.ODOMETER\_READING)

AS 'MILES\_DRIVEN', Cur.TOTAL\_GALLONS,Cur.PRICE\_PER\_GALLON,Cur.CITY\_PROP,Cur.HIGHWAY\_PROP

FROM ODODIFFERENCE Cur

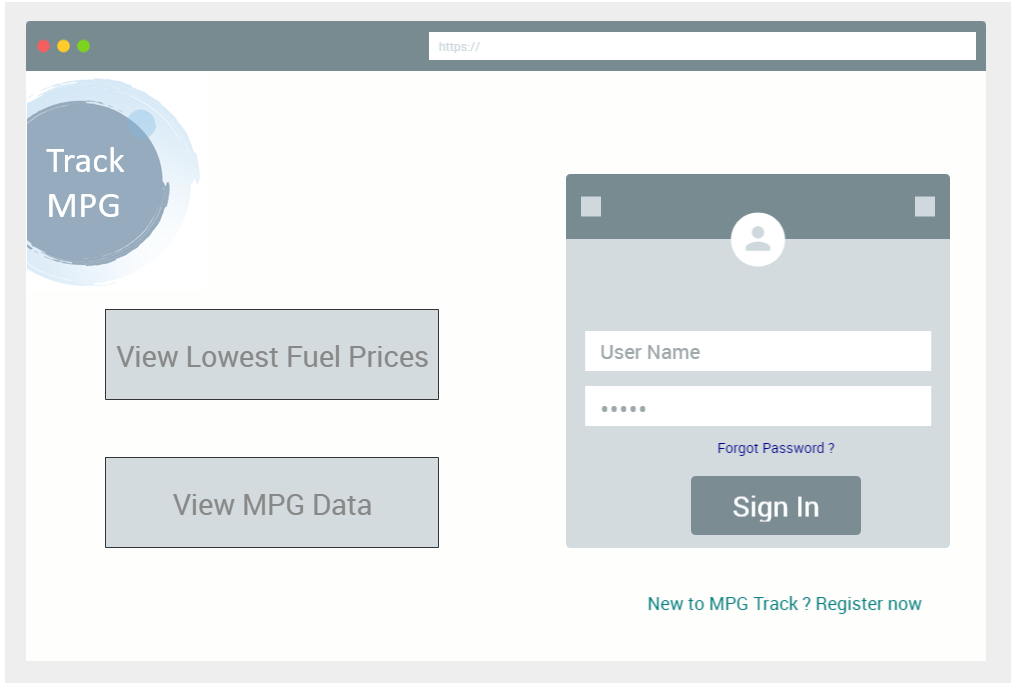
LEFT OUTER JOIN ODODIFFERENCE Prv

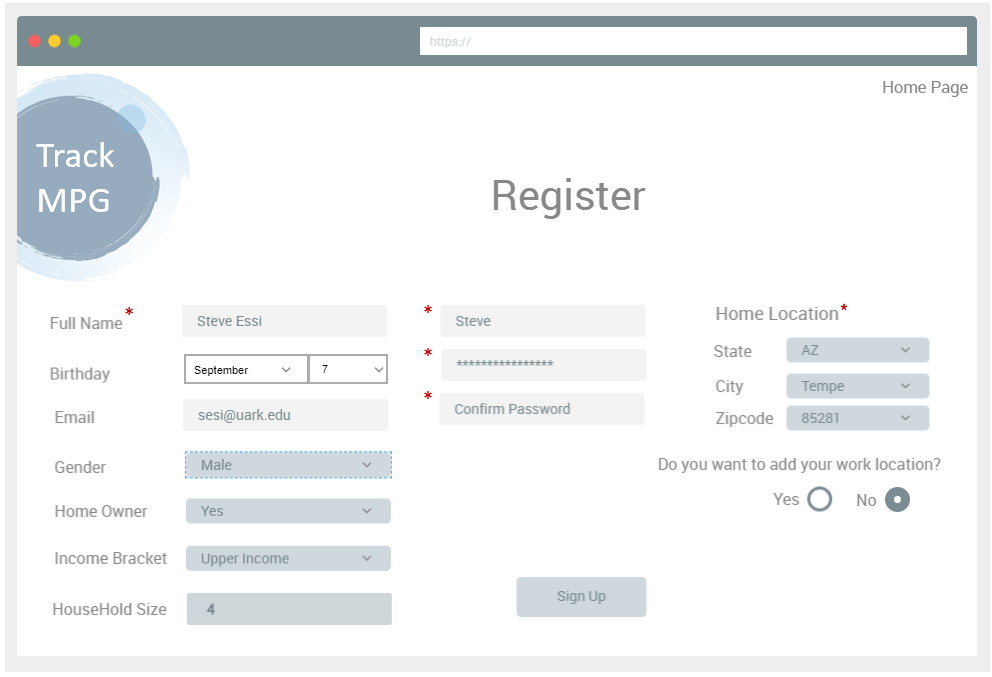
On Cur.ROW\_NUMBER=Prv.ROW\_NUMBER+1) a



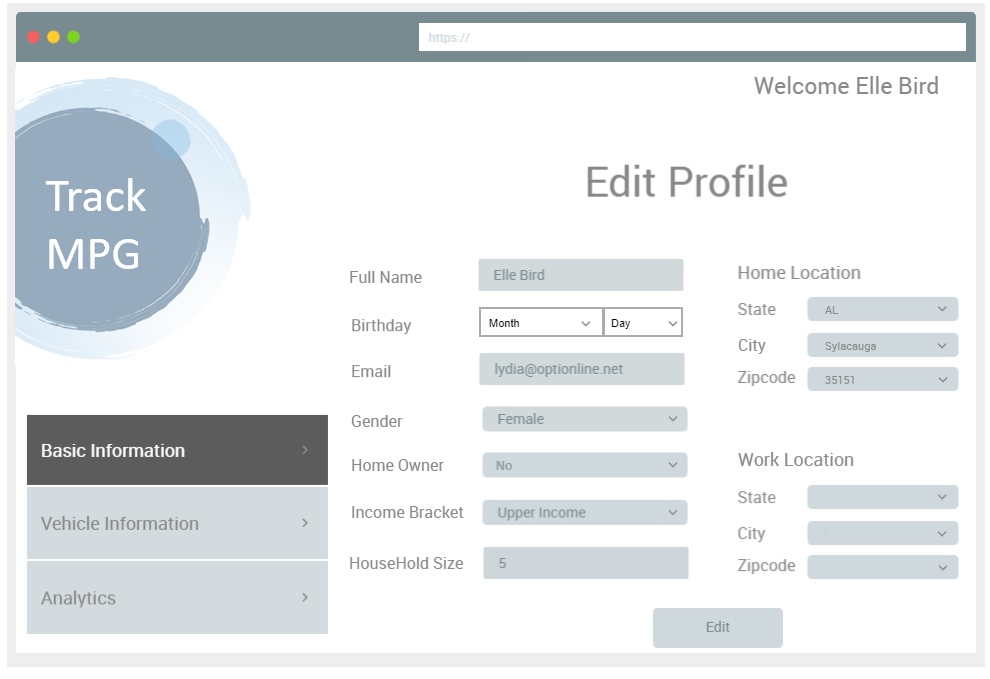


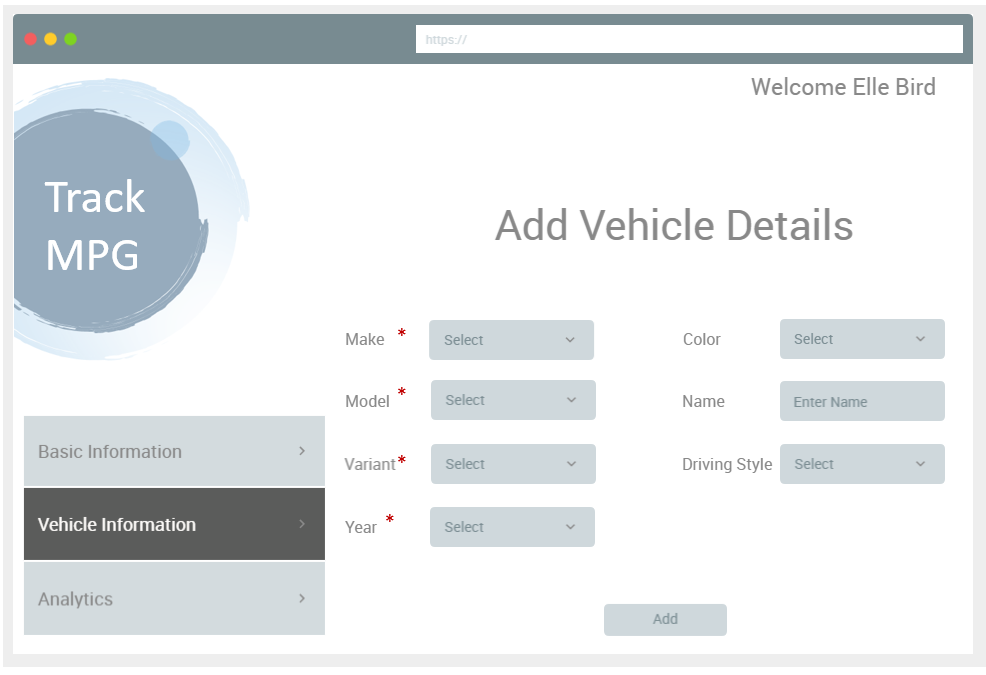
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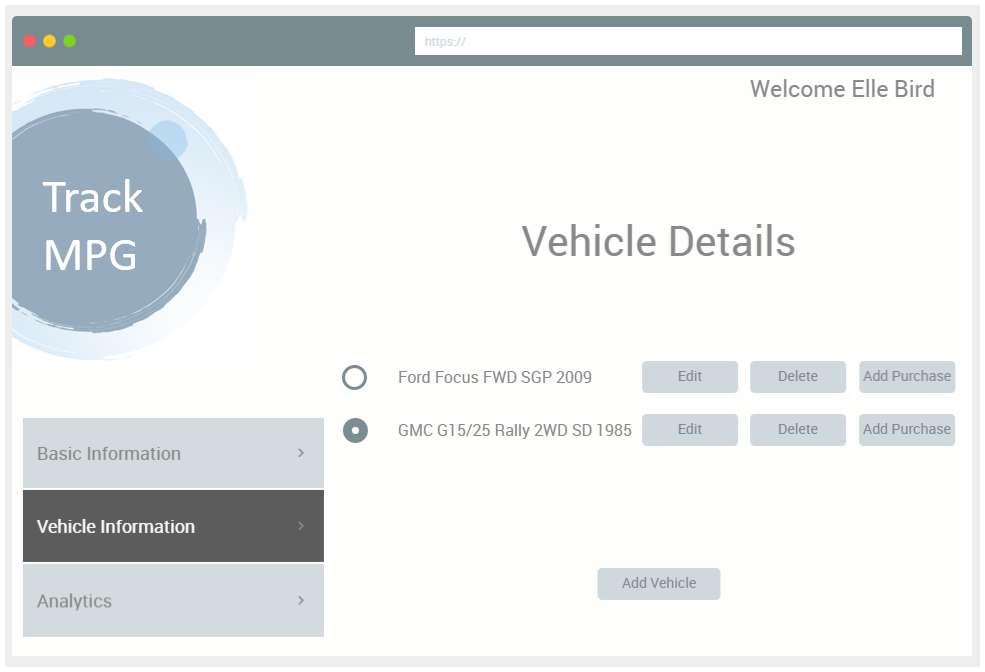
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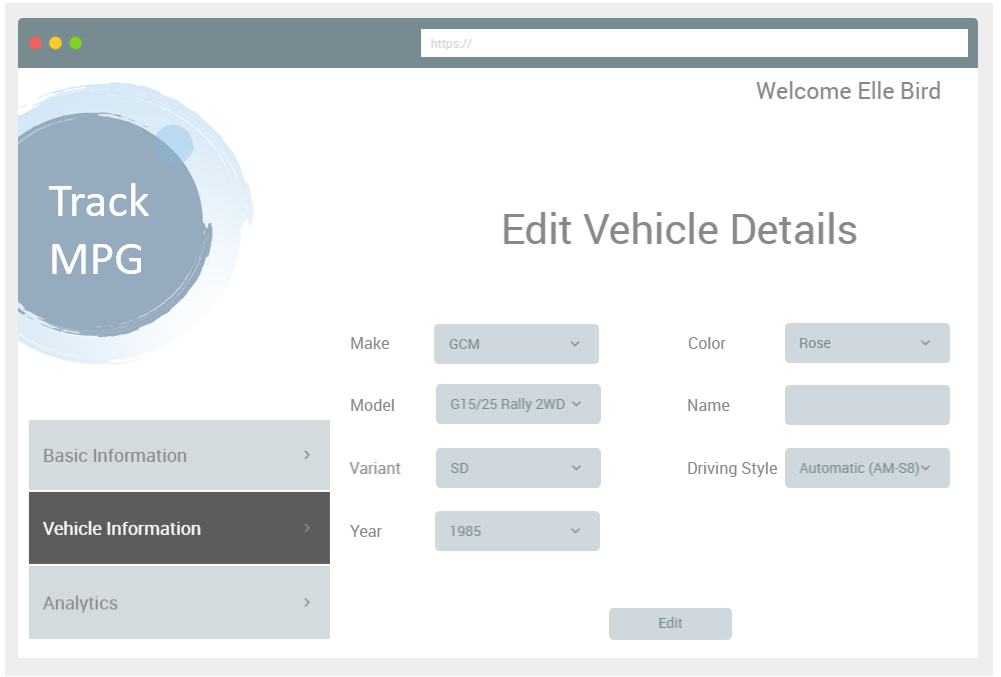
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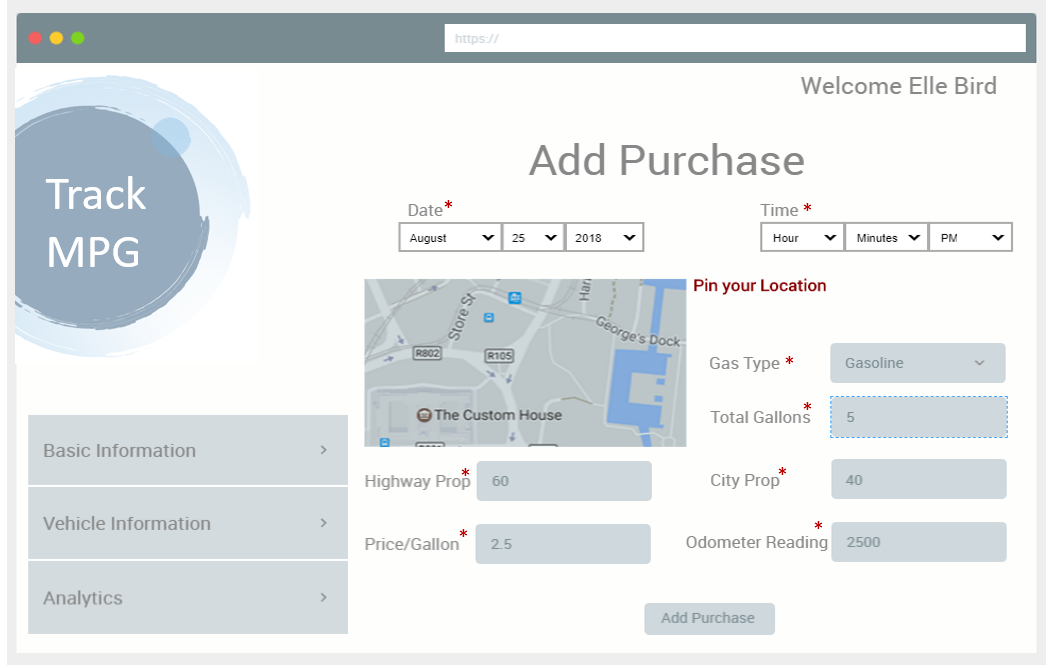
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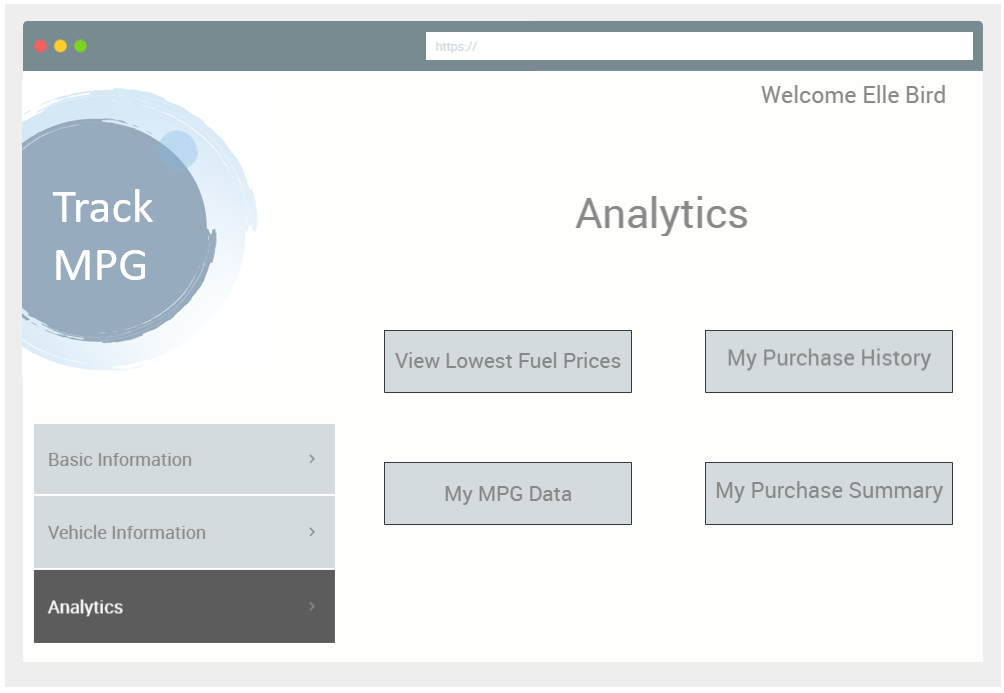
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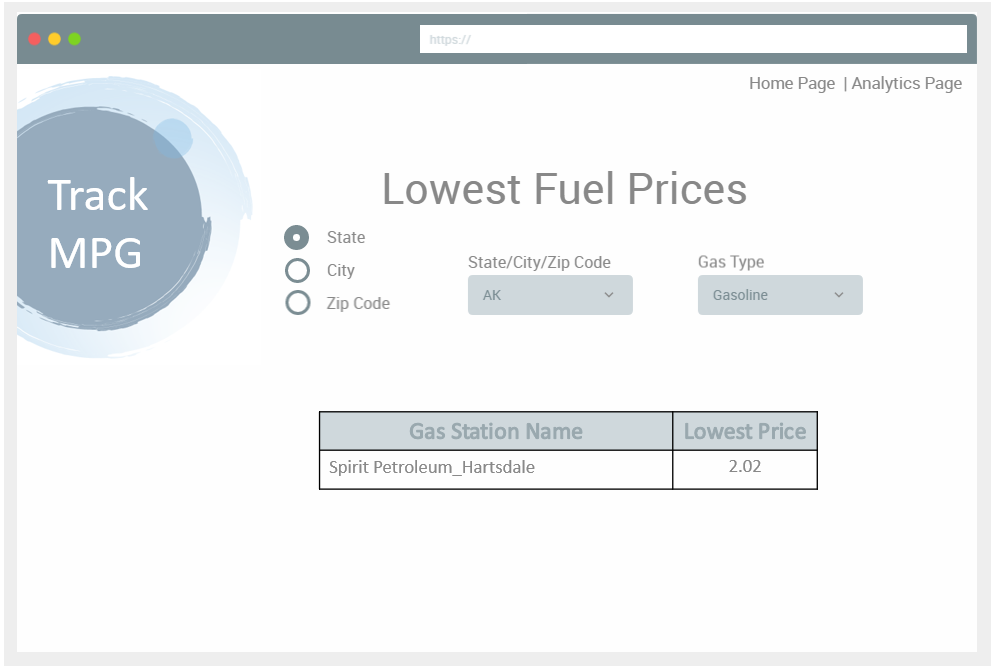
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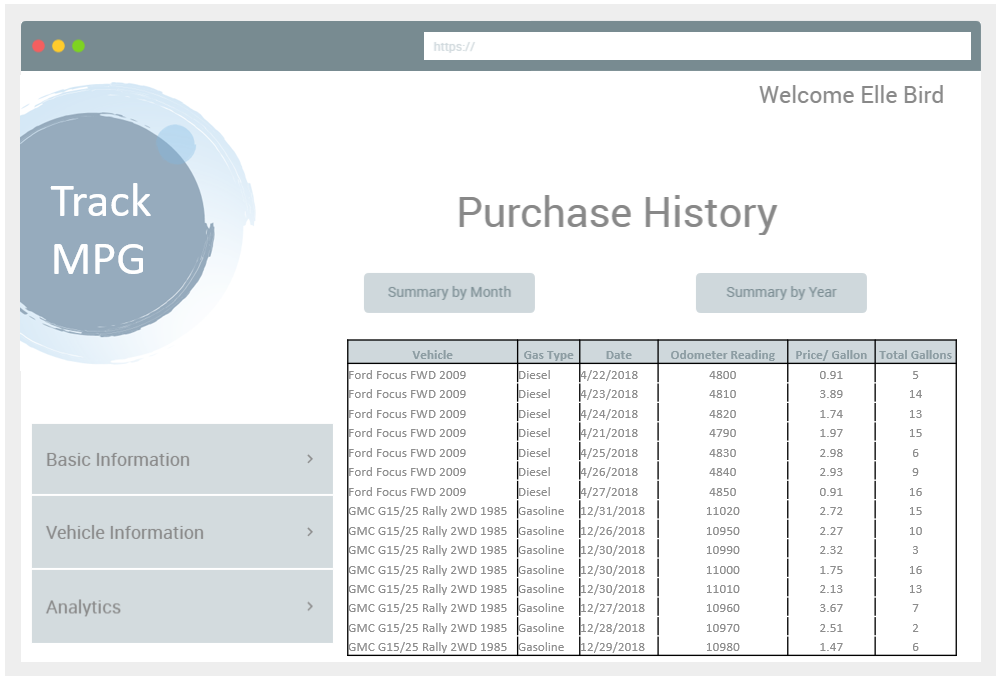
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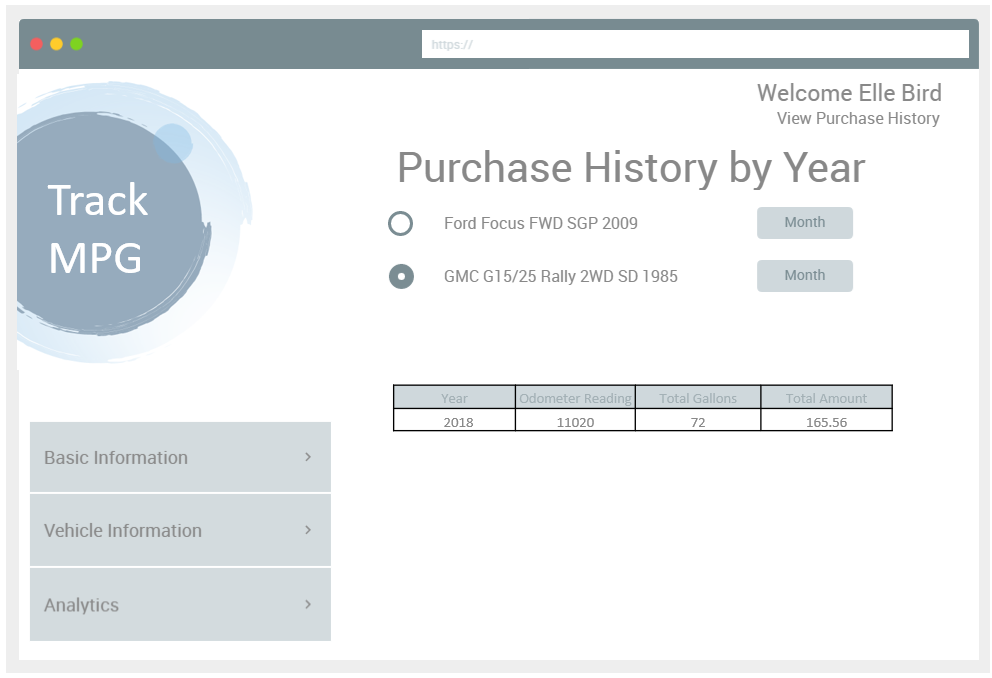
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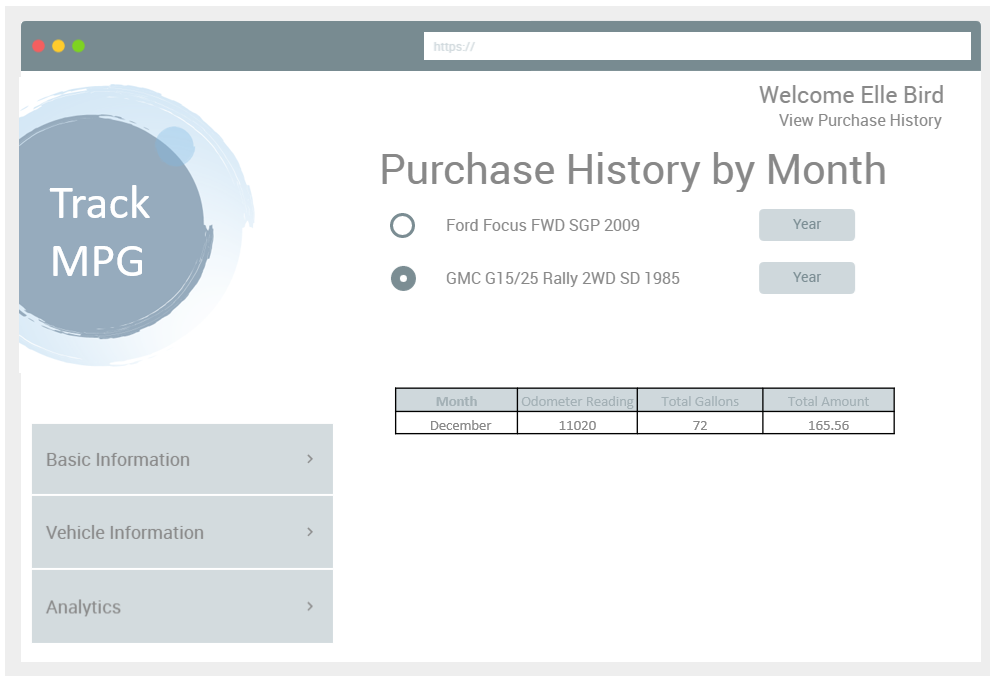
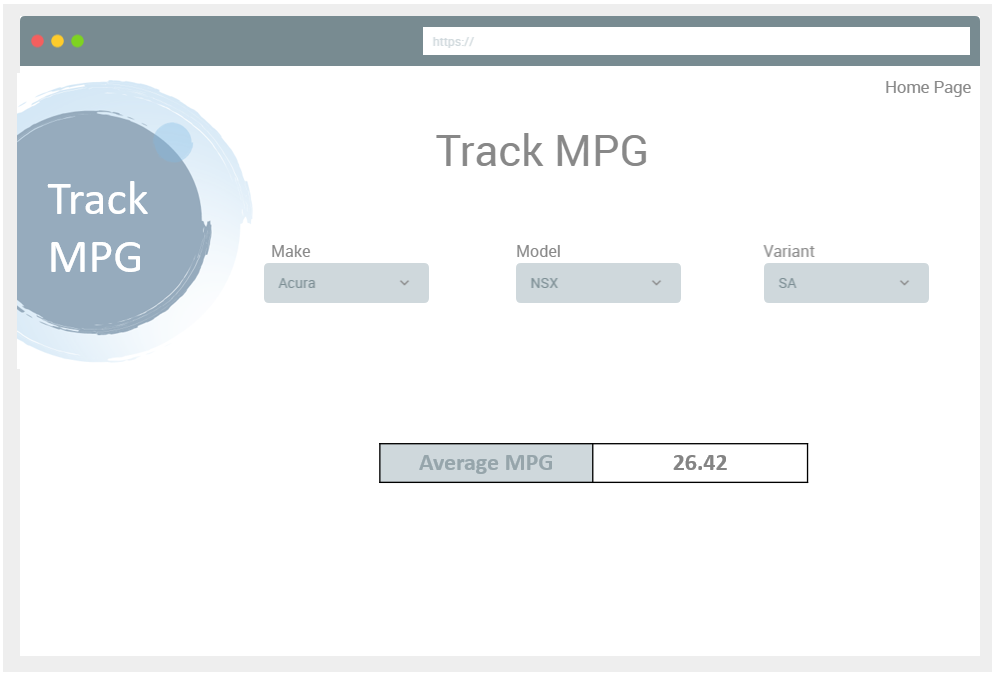
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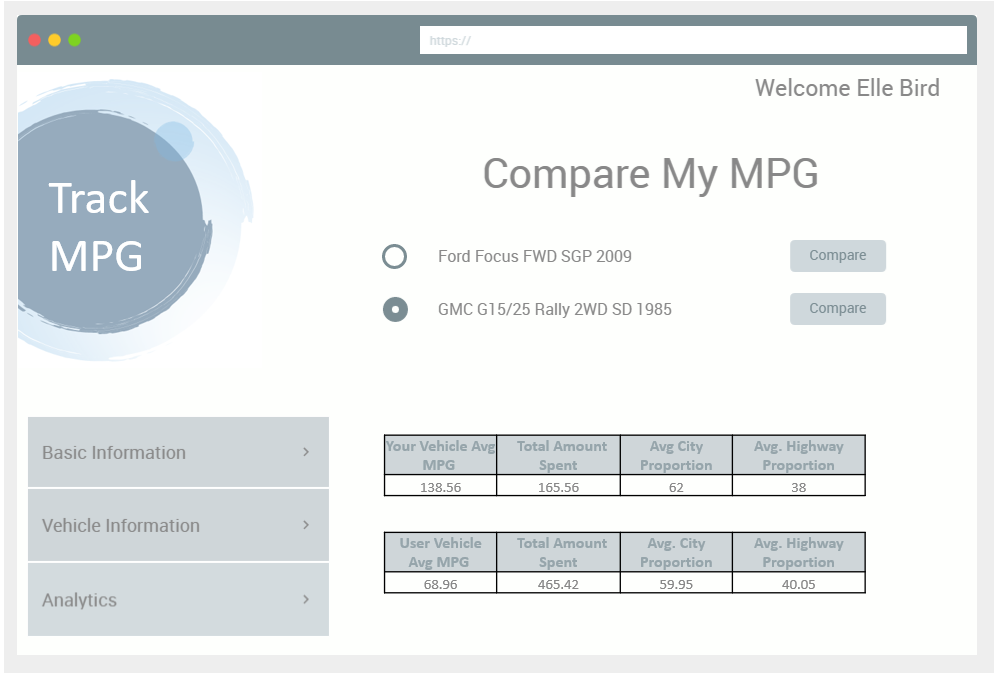
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