**PRODUCT DOCUMENT**

**1.Table Design With explanation**

Here I have created three tables Names Like

1.Category

2.Product

3.Product\_detail

The three table script is given below.

**a.Category**

USE [Demo]

GO

CREATE TABLE Category

(

id int IDENTITY(1,1) NOT NULL PRIMARY KEY,

category\_name nvarchar(50)

);

GO

**b.Product**

USE [Demo]

GO

CREATE TABLE Product

(

id int IDENTITY(1,1) NOT NULL PRIMARY KEY,

product\_code nvarchar(50),

product\_name nvarchar(50),

category\_id int FOREIGN KEY REFERENCES Category(id),

selling\_price numeric(8,2)

);

GO

**c.Product\_detail**

USE [Demo]

GO

CREATE TABLE Product\_detail

(

id int IDENTITY(1,1) NOT NULL PRIMARY KEY,

product\_id int FOREIGN KEY REFERENCES Product(id),

vendor nvarchar(50),

purchase\_date datetime,

purchase\_price numeric(8,2),

total\_count numeric(8,2),

);

GO

**2.API With Explanation**

API is an Application Programming interface. We can implement all the database operations in the api. I added entities and model here. Entitity name is Demo Entities and model is Model1. Here Added ActionResult with Route .The Api action result will be fired when an mvc controller is performed specific task on the browser.Here I have created two api controller

**1.Product Controller**

**2.Product \_detail controller**

**1.Product Controller**

**AddProduct()**

The HTTP Post request is used to create new record in the database.Here I have created **AddProduct()** action method in the product controller to insert new product record in the database using entity framework. The action method that will handle HTTP Post request must start with word Post.

**ProductList()**

Here I have created **ProductList()** action method will handle HTTP Get request and will return list of products.This will send this HTTP request in the mvc controller and display in the view

**EditProduct()**

I have created EditProduct() action method in the product controller to update exixting record in the database using entity framework.The action method that will handle HTTP Post request

**GetProductDetailsByProductId()**

GetProductDetailsByProductId() action method in the product controller to handle HTTP Get request and will return list of records based on product id. It will send this HTTP request in the mvc controller and display in the view

**EditProductById()**

EditProductById() action method in the product controller to handle HTTP Get request and will return specific record based on id. It will send this HTTP request in the mvc controller and display in the view

**2.Product\_detail Controller**

Same process will be happening product\_detail controller.

**3.MVC With Explanation**

Here I have created two MVC controllers Name is

* **Product controller**
* **Product\_detail controller**

Then I have created below action results

a. AddProduct

b. ProductList  
c. EditProduct

d. ProductDetailListByProductId

**Product Controller**

**a.AddProduct**

Here the details of data will get from AddProduct view page from model also. The details of data will be converted into json,Then the content of json data goes the way of post method url with content

**b.Product List**

The response will get from URL and the details of list will be return in Product list view page.

**c . Edit Product**

The response will get from URL with specific id and details of data return the Edit Product view page. Then the updated record will go using Post async method with URL , id and content.

**d. ProductDetailListByProductId**

The response will get from URL and the details of products will return the ProductDetailListById view Page.

**Screen Designs**

**Product List**

|  |
| --- |
| Add New Product |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Product Code | Product Name | Category Name | Selling Price |  |
|  |  |  |  | Edit | Details |
|  |  |  |  |  |
|  |  |  |  |  |

\*Click Add new product button ,here added the Product of datas into the database

\*Click Edit button ,here edit the existing produts and datas will be updated into the database

\*Click Details button ,The products details will be displayed here.

**Product Detail Controller**

This Processing also same as product controller.

**Screen Designs**

**Product Detail List**

|  |
| --- |
| Add New Product Detail |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Product Name | Vendor Name | Purchase Date | Purchase Price | Count |  |
|  |  |  |  |  | Edit |