Program – 4

Aim:

To develop GraphQL Playground Activity using GraphQl .

Problem description:

The provided code sets up a GraphQL API server using Express.js. It defines a schema with three data types: Game, Platform, and EsrbRating. The server serves a list of video games from the 'gameCatalogue' array. Clients can query the 'games' field to retrieve information about these games. The server is hosted on localhost at port 4000 and provides a graphical interface for testing queries. This code example demonstrates how to create a basic GraphQL API for retrieving game information from a predefined dataset.

Index.js

var express = require('express');

var { graphqlHTTP } = require('express-graphql');

var { buildSchema } = require('graphql');

var gameCatalogue = [

{

"id": 1,

"title": "Game B",

"publisher": "Publisher ABC",

"developer": "Developer DEF",

"releaseDate": "2015-01-01",

"platforms":[

{ "id":1, "name": "Xbox" },

{ "id":2, "name": "Playstation" },

{ "id":3, "name": "PC" },

],

"esrbRating":{

"id":1,

"code": "E",

"name": "Everyone"

},

},

{

"id": 2,

"title": "Game c",

"publisher": "Publisher ABC",

"developer": "Developer DEF",

"releaseDate": "2018-01-01",

"platforms":[

{ "id":1, "name": "Xbox" },

{ "id":3, "name": "PC" }

],

"esrbRating":{

"id":1,

"code": "E",

"name": "Everyone"

},

},

{

"id": 3,

"title": "Game A",

"publisher": "Publisher ABC",

"developer": "Developer DEF",

"releaseDate": "2020-01-01",

"platforms": [

{ "id":1, "name": "Xbox" },

{ "id":2, "name": "Playstation" }

],

"esrbRating":{

"id":2,

"code": "M",

"name": "Mature"

},

},

]

//Construct a schema, using GraphQL schema language

var schema = buildSchema(`

type Query {

games: [Game]

}

type Game {

id: Int

title: String

publisher: String

developer: String

releaseDate: String

platforms: [Platform]

esrbRating: EsrbRating

}

type Platform {

id: Int

name: String

}

type EsrbRating {

id: Int

code: String

name: String

}

`);

//The root provides a resolver function for each API endpoint

var root = {

games: () => gameCatalogue

};

var app = express();

app.use('/graphql', graphqlHTTP({

schema: schema,

rootValue: root,

graphiql: true,

}));

app.listen(4000);

console.log('Running a GraphQL API server at http://localhost:4000/graphql');

OutPuts:









