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LAB 13 EVALUATION

Q: Create a restful web service or rest api and show the results of get , post , put and delete functions on postman (api testing application)

Solution: -

```
public class Friend
{
    internal int id;

    public string firstname { get; set; }
    public string lastname { get; set; }
    public string location { get; set; }
    public DateTime dateOfHire { get; set; }

    public Friend()
    {
    }

    public Friend(int id,string firstname, string lastname, string location, DateTime dateOfHire)
    {
        this.id = id;
        this.firstname = firstname;
        this.lastname = lastname;
        this.location = location;
        this.dateOfHire = dateOfHire;
    }
}
```

```
[Route("api/[controller]")]
[ApiController]
public class FriendController : ControllerBase
{
    List<Friend> friends = new List<Friend>();

    public FriendController()
    {
        friends.Add(new Friend(1,"Kindson", "Munonye", "Budapest", DateTime.Today));
        friends.Add(new Friend(2,"Oleander", "Yuba", "Nigeria", DateTime.Today));
        friends.Add(new Friend(3,"Saffron", "Lawrence", "Lagos", DateTime.Today));
    }
}
```

```

        friends.Add(new Friend(4, "Jadon", "Munonye", "Asaba", DateTime.Today));
        friends.Add(new Friend(5, "Solace", "Okeke", "Oko", DateTime.Today));
    }

    // GET: api/<FriendController>
    [HttpGet]
    public int Get()
    {
        return friends.Count;
    }

    // GET api/<FriendController>/5
    [HttpGet("{id}", Name = "Get")]
    public string Get(int id)
    {
        Friend friend = friends.Find(f => f.id == id);
        return "First Name = "+friend.firstname+" \nLast Name = "+friend.lastname+" \nLocation
= "+friend.location+" \nDate Of Hiring = "+friend.dateOfHire;
    }

    // POST api/<FriendController>
    [HttpPost]
    public int Post([FromBody] Friend friend)
    {
        friends.Add(friend);
        return friends.Count;
    }

    // PUT api/<FriendController>/5
    [HttpPut("{id}")]
    public string Put(int id, [FromBody] Friend friend)
    {
        Friend friendToUpdate = friends.Find(f => f.id == id);
        int index = friends.IndexOf(friendToUpdate);

        friends[index].firstname = friend.firstname;
        friends[index].lastname = friend.lastname;
        friends[index].location = friend.location;
        friends[index].dateOfHire = friend.dateOfHire;

        return "Updated Successfully";
    }

    // DELETE api/<FriendController>/5
    [HttpDelete("{id}")]
    public int Delete(int id)

```

```

    {
        Friend friend = friends.Find(f => f.id == id);
        friends.Remove(friend);
        return friends.Count;
    }
}

```

Output: -(Used Swagger)

Get API for /api/Friend

Response body

```
Number of friends = 5
```

POST API for /api/Friend

Request body

```

{
  "firstname": "string",
  "lastname": "string",
  "location": "string",
  "dateOfHire": "2022-06-23T18:11:39.259Z"
}

```

Response body

```
Number of friends = 6
```

Get API for /api/Friend/{id}

id * required

integer(\$int32)
(path)

```

First Name = Kindson
Last Name = Munonye
Location = Budapest
Date Of Hiring = 6/23/2022 12:00:00 AM

```

PUT API for /api/Friend/{id}

id * required
integer(\$int32)
(path)

```
{  
  "firstname": "string",  
  "lastname": "string",  
  "location": "string",  
  "dateOfHire": "2022-06-23T18:21:25.334Z"  
}
```

Response body

Updated Successfully

DELETE API for /api/Friend/{id}

id * required
integer(\$int32)
(path)

Response body

Number of friends = 4