**Express Function**

Ajke amra express js er express function niye kaj korbo. Er jonno express er official website e giye api refernce section e giye 5X or 4X e gelam.

Index.js ….

*const* express = *require*("express");

*const* app = *express*();

app.*get*("/", (*req*, *res*) *=>* {

  res.*send*("This is home page");

});

app.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Ekhane app.post() er moddhe req.body dekhte chaisi. But console e undefined lekha ashtese. Orthat requester bodyr moddhe kichu nai.

Ekhon amra app.use() function use korbo. Apatoto dhore nilam use functioner kaj hocche app ke kon function she use korbe sheta bole deya. Ei use er moddhe ami jodi kono function bole dei amader app shei function ta ke use korbe. use function er moddhe first express.json() function ta likhe debo. Er ortho express.json() function er return kora jinish amader app use korbe.

Index.js …

*const* express = *require*("express");

*const* app = *express*();

app.*use*(express.*json*());

app.*get*("/", (*req*, *res*) *=>* {

  res.*send*("This is home page");

});

app.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Ekhon terminal e nodemon index korle req.body hishebe ekta blank object dekhte pacchi.

Request er body te amra bivinno data pathate pari. For e.g. ami postman e raw select kore {“car”:”ford”} data ta pathalam. Ekhono ami console e blank object pacchi. Karon ami raw data pathaisi. But header content type bole dei nai. Express automatically sheta ke text/plain dhore nise. Express.json() function text/plain type er content type ke parse korte pare na. she only content type application/json ke parse korte pare.

So postman e giye Content-Type ‘application/json’ dilam. Erpor send e chaplei console e {car : ‘ford’} chole ashlo.

Orthat amar client request er shathe bodyr moddhe ja pathabe sheta jodi json hoy tahole ami sheta ei pashe json akare parse korte parbo express.json() er maddhome.

Ekhane client (postman) Content-Type ‘application/json’ bole diye ekta json data pathaise. Onnopashe express shei data ta ke request er shathe request er bodyte add kore dise req.bodyr moddhe. Req.body raw nodejs e nai. Bodyr moto kichu pete hole amader req.on event listen korte hoto ebong data gula stream akare ashto. Stream er end porjonto listen kore kore body ta banay nite hoto. Ei ejinishtai express js e easy vabe pacchi express.json() function ta call kore. Req.body typeof kore dekha jay eta ekta object. So eta jehetu ekta object console.log(req.body.car) returns ford. Orthat amake data ta amake stream ba buffer akare receive korte hocche na. client amake json pathalo. Ami onnopashe direct object akare peye jacchi req.bodyr moddhe. Express raw nodejs er request object er moddhe body namer ekta property moddhe data ta set kore dise.

Onek shomoy content type amra onno kichuo pathate pari like stream, raw data. Postman raw select korlam. Ebong header e Content-Type ‘application/json’ muche diye "application/octet-stream" set korlam. Data ta ager motoi thaklo. Ekhon programme express.json() call korle hobe na. express.raw() use korte hobe. Sheta korlam. Terminal e buffer pacchi. Ami ekbare buffer pelam. Amake req.on use kore kore event listen korte hoitese na. req.body.toString() kore eta pelam.

{

"car" : "ford"

}

So data json akare ashe nai. String akare ashche.

Orthat amar je data ami postman bodyr moddhe pathaisilam sheta first e buffer hishebe ashlo. Jehetu amai jinishtake raw diye parse korsi so toString() kore ekbare peye jacchi.

Ekhon amra express.text() function ta dekhbo. Client jodi data hishebe just simple text pathay ebong Content-Type ‘text/plain’ ullekh kore tahole onno pashe express.text() kore data parse korte parbo.

Index.js ….

*const* express = *require*("express");

*const* app = *express*();

app.*use*(express.*text*());

app.*get*("/", (*req*, *res*) *=>* {

  res.*send*("This is home page");

});

app.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Index.js …

*const* bodyParser = *require*("body-parser");

*const* express = *require*("express");

*const* app = *express*();

app.*use*(express.*urlencoded*());

app.*get*("/", (*req*, *res*) *=>* {

  res.*send*("This is home page");

});

app.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Ekhon express.static() dekhbo. Express js folder er moddhe public name ekta folder khule tate text name ekta folder khule tate test.txt file nilam. Tate kichu text likhlam. Postman e “localhost:3000/public/text/test.txt” url e hit korlam. Test.txt file er lekha pailam na. orthat vitorer jinishgula protected ache. Ekhon ami jodi chai public folder ta ke static root folder hishabe define korte tahole express.static() method use korte hobe. Static method er vitor \_\_dirname+'/public/' likhe dilam. Etar mane ami bole dilam amar static ba root folder holo ‘public’ folder ta. Er fole postman e “localhost:3000/text/test.txt” --- ‘get’ method e ei url e hit korlei hobe. Hit korar por postman e text.txt er lekhata pailam. Static method e ekta 2nd parameter deya jay. ‘text’ folder er moddhe ekta file nilam ‘home.html’. tate kichu ekta likhlam. static method er 2nd paramer hishebe ekta object pathalam {index: ‘home.html’}. ekhon postman er url e “localhost:3000/text/” likhe hit korle postman e home.html er lekha pacchi.

Index.js ….

*const* express = *require*("express");

*const* app = *express*();

app.*use*(

  express.*static*(\_\_dirname + "/public/", {

    index: "home.html",

  })

);

app.*get*("/", (*req*, *res*) *=>* {

  res.*send*("This is home page");

});

app.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Ekhon express.router() er khela dekhbo.

Index.js …

*const* express = *require*("express");

*const* app = *express*();

*const* router = express.*Router*();

app.*use*(router);

router.*get*("/", (*req*, *res*) *=>* {

  res.*send*("This is home page");

});

router.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Express.Router() call kore router name ekta variable er moddhe nilam. Ekhane ‘router’ holo ekta router object.

App.use(router) kore app ke bole dilam ei router ta use koro. Routing mechanism takei alada kore ekta object er moddhe diye dey. Ami chaile multiple router object create korte pari like router1, router2… ebong ami app ke bole dite parbo specifically kon router object ta use korte hobe.

Ekhon app.get kingba app.post er bodole router.get ba router.post use kora jay.

Router er khetre url case insensitive.

Index.js …

*const* express = *require*("express");

*const* app = *express*();

*const* router = express.*Router*();

app.*use*(router);

router.*get*("/about", (*req*, *res*) *=>* {

  res.*send*("This is about page");

});

router.*post*("/", (*req*, *res*) *=>* {

  console.*log*(req.body);

  res.*send*("This is home page with post request");

});

app.*listen*(3000, () *=>* {

  console.*log*("Listening on port 3000");

});

Jodio programme e about small letter er. Postman e localhost:3000/About enter korleo postman e “This is about page”pacchi.

Case sensitive korar jonno express.Router({caseSensitive: true}) korte hobe.