

Node+Express+MongoDB

Review Learned

How to run server

What is nodemon

How to install require module

How to create mongodb server

Express Generator

What is Expressjs

Express is a minimal and flexible Node.js web application framework that provides a robust set of features for web and mobile applications.

What is Express Application Generator

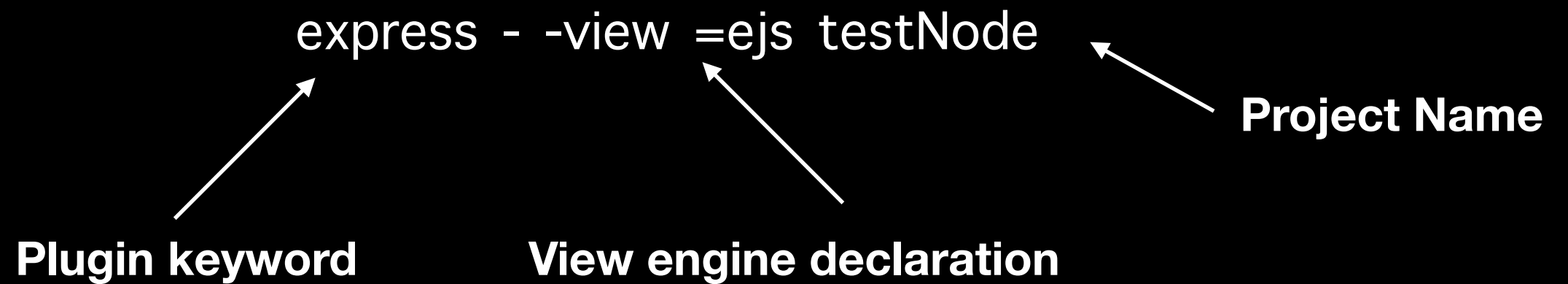
The *Express Application Generator* is not the only generator for Express applications, and the generated project is not the only viable way to structure your files and directories. The generated site does however have a modular structure that is easy to extend and understand.

How To Install

```
npm install express-generator -g
```

Express Generator

Generation Express Project



Install package & Run

Go to project path

```
cd projectName
```

Install package

```
npm install
```

Run project

```
npm start
```

Check the project

```
localhost:3000 at browser
```

Missions

- Change server local variable and check
- Add new view page
- Add new new route for view
- Add new local variable
- Add link to home page
- Add new view page name as “user-add.ejs”
- Also Add router get for this view
- Add a form at this view(name,email,password)
- Add new post router for this form
- Show result with res.end method
- Add nodemon package at package.json name as “dev” and check

Insert MongoDB in Express

Open App.js

Insert module

```
var mongoose = require('mongoose');
```

Add mongodb connection

```
mongoose.connect('mongodb://127.0.0.1/librarydb');  
var db = mongoose.connection;  
db.on('error',console.error.bind(console,'MongoDB connection error:'))
```

Insert MongoDB in Express

Create model folder

Create User.js file under model folder and add following code

```
var mongoose = require('mongoose');
var Schema = mongoose.Schema;
var UserSchema = new Schema({
  name: {
    type:String,
    required: true
  },
  email: {
    type:String,
    required: true
  },
  password: {
    type:String,
    required: true
  }
});
module.exports =mongoose.model('Users',UserSchema);
```


Insert MongoDB in Express

Open route file and add the module

```
var User = require('../models/User');
```

Can add, read, modify and Delete using Model instant

Add Data

```
var user = new User();  
user.name = req.body.name;  
user.email = req.body.email;  
user.password= req.body.password;  
user.save(function(err,rtn){  
  if(err) throw err;  
  console.log(rtn);  
  res.redirect('/')  
});
```

Insert MongoDB in Express

Read Data

In route

```
User.find((err, rtn) => {  
  if (err) throw err;  
  res.render('user-list', {  
    user: rtn  
  });  
});
```

In view

Create user-list.ejs and table. In table body insert following code

```
<% for(var i = 0; i< user.length; i++){%>  
  <tr>  
    <td><%= user[i].name %></td>  
    <td><%= user[i].email %></td>  
    <td><%= user[i].password %></td>  
  </tr>  
<%}%>
```

Insert MongoDB in Express

Update Data

```
router.get("/update/:id",function(req,res){

    User.findById(req.params.id,function(err,rtn){
        if(err) throw err;
        res.render("user-update",{user:rtn});
    });
});

router.post("/update",function(req,res){
    var update = {
        name: req.body.name,
        email: req.body.email,
        password: req.body.password
    }
    User.findByIdAndUpdate(req.body.id,$set: update}, function(err,rtn){
        if(err) throw err;
        res.redirect("/");
    });
});
```

Insert MongoDB in Express

Delete Data

```
router.get('/delete/:id', function(req, res) {  
  User.findByIdAndRemove(req.params.id, function(err, rtn){  
    if (err) throw err;  
    console.log('rtn');  
    res.redirect('/list');  
  })  
});
```