



**Cookie**: Piece of Data

next time when Browser sends a get request

### \* Session

Time Browser interacts with the Server and that time cookie gets created  
During session or log in cookies are there and when log out cookies get destroyed

## # Passport for authentication

Passport

Simple, unobtrusive authentication for Node.js

Passport is authentication middleware for Node.js. Extremely flexible and modular, Passport can be unobtrusively dropped in to any Express-based web application. A comprehensive set of strategies support authentication using a username and password, Facebook, Twitter, and more.

```
app.js - VIM
passport.authenticate("google");
```

## \* Use Passport

~ npm i passport passport-local passport-local-mongoose express-session

```
const session = require("express-session");
```

```
const passport = require("passport");
```

```
const passportLocalMongoose = require("passport-local-mongoose")
```

```
app.use(express.static("public"));
app.set('view engine', 'ejs');
app.use(bodyParser.urlencoded({
  extended: true
}));

app.use(session({
  secret: "Our little secret.", // Create Session with some initial configuration
  resave: false,
  saveUninitialized: false
}));

I
app.use(passport.initialize()); // from here we can use passport
app.use(passport.session()); // use passport for session

mongoose.connect("mongodb://localhost:27017/userDB", {useNewUrlParser: true});
mongoose.set("useCreateIndex", true); // to avoid deprecation warning
const userSchema = new mongoose.Schema ({
  email: String,
  password: String
});

userSchema.plugin(passportLocalMongoose); // will hash & salt our passwords
                                         and save users in database
const User = new mongoose.model("User", userSchema);

passport.use(User.createStrategy()); // to create local login strategy

passport.serializeUser(User.serializeUser());
passport.deserializeUser(User.deserializeUser());
```

## \* Serialise : Creates cookie and stuffs it up with information

## Deserialise : Allows passport to crumble the cookie and disover the information of inside

```
app.post("/register", function(req, res){  
  User.register({username: req.body.username}, req.body.password, function(err, user){  
    if (err) {  
      console.log(err);  
      res.redirect("/register");  
    } else { method given by passport  
      passport.authenticate("local")(req, res, function(){  
        res.redirect("/secrets");}); // name of strategy  
    }  
  });  
});
```

if we are logged in we should stay logged in also in secrets

```
route  
app.get("/secrets", function(req, res){  
  if (req.isAuthenticated()){  
    res.render("secrets");  
  } else {  
    res.redirect("/login");  
  }  
});
```

```
app.post("/login", function(req, res){  
  
  const user = new User({  
    username: req.body.username,  
    password: req.body.password  
  });  
  
  req.login(user, function(err){ // if login successful  
    if (err) {  
      console.log(err);  
    } else {  
      passport.authenticate("local")(req, res, function(){ // start authentication  
        res.redirect("/secrets");  
      });  
    }  
  });  
});
```

```
app.get("/logout", function(req, res){  
  req.logout();  
  res.redirect("//");  
});
```

\* Note : Because our cookies are saved and authentication is on after I login I can use secrets without logging in again where login is required but after I logout I cannot use secrets without logging in

\* Everytime we restart the server cookies are deleted