Note 1:

Videos for building vidly project: 4-14, 5-13, 8-7, 8-8, 8-9 and more

Note 2:

**Regarding to validation:**

First, we have a validation on the client side (using a library like Joi-browser), but when building the backend, we assume that we don’t have any validation on the client.

Second, we should have a validation in our RESTful APIs on the server side (using Joi also for example), specifically to respond with 400 (bad request), 401 (unauthorized) , 403 (forbidden) , and 404 (not found) in case of errors.

Third, we should have a validation in our database level. In relational databases, like SQL Server or MySql, we have this level of validation at the database level, but in mongoDB we don’t have this, so the validation is implemented in mongoose.

Why validate on this level? Because sometimes we have proper request body that passes RESTful APIs validation but in the code of saving a document to database using mongoose, we forget to mention some properties. So, we want to make sure that the request is ok and our code is ok too.

Note 3:

**Environment variables:**

We have many environment variables like PORT, NODE\_ENV, and jwtPrivateKey. Note that NODE-ENV and PORT is preserved keyword variables. We set these variables while developing in our development machine, but when we deploy the app, we set them on the server machine, heroku, see video 15-8.

ملاحظة 4: **الـ Asset files**

توضع على الـ root في الـ app في folder وليكن اسمه pub أو public. أما في الـ react إذا أردنا أن يتم فتح فايل في المتصفح أو تحميله الى جهاز المستخدم بالضغط على link الذي هو anchor tag فهنا يجب أن يكون لدينا folder باسم public توضع فيه الـ documents التي نريدها أن تُفتح أو تُحمَّل.

ملاحظة 5: **استخدام الـ middleware function**

استخدام الـ middleware يكون هكذا app.use(function(req, res, next) {}) أي أن use تأخذ reference فلا يحصل عند التباس مع middleware مثل helmet فالعبارة التالية app.use(helmet()) هو أن الاستدعاء يرجع function reference للـ middleware وليس هو الـ middleware.