Assignment 4.3 – API Gateway Part III

Instructions

- 1. Open the /models/user.js file and add two new call back functions, add and getById
 - a. add

```
// user.save is used to add a new user in our database
pmodule.exports.add = (user, callback) => {
    user.save(callback);
};
```

b. getById

```
module.exports.getById = (id, callback) => {
    var query = {_id: id};
    User.findById(query, callback);
};
```

- 2. Add jsonwebtoken and bcryptjs
 - a. npm install jsonwebtoken bcryptjs --save
- 3. Open the /controllers/authController.js file and implement the user_register and user_token functions
 - a. Require statements

```
var User = require('../models/user');
var jwt = require('jsonwebtoken');
var bcrypt = require('bcryptjs');
var config = require('../config');
```

b. user_register()

```
// Register a new user on POST
exports.user_register = function(req, res) {
    var hashedPassword = bcrypt.hashSync(req.body.password, 8);

var newUser = new User({
    username: req.body.username,
    password: hashedPassword,|
    email: req.body.email
    });

User.add(newUser, (err, user) => {
    if (err)
        return res.status(500).send('There was a problem registering the user.');

    var token = jwt.sign({ id: user._id}, config.web.secret, {
        expiresIn: 86400 // 24 hours
    });
    res.status(200).send({ auth: true, token: token });
});
```

c. user_token()

```
// Verify token on GET
exports.user_token = function(req, res) {
    var token = req.headers['x-access-token'];
    if (!token) return res.status(401).send({ auth: false, message: 'No token provided'});
    jwt.verify(token, config.web.secret, function(err, decoded) {
        if (err) return res.status(500).send({auth: false, message: 'Failed to authenticate token.'});

        User.getById(decoded.id, function(err, user) {
            if (err) return res.status(500).send('There was a problem finding the user.');
            if (!user) return res.status(404).send('No user found.');
            res.status(200).send(user);
        });
};
```

- 4. Build, run, and verify there are no errors
- 5. Take a screenshot of your solution (expand all directories except node_modules)
- 6. Take a screenshot of your CLI window (I should see log messages from morgan)
- 7. Take a screenshot of your solution running in a web browser
- 8. Combine all screenshots in a single word document and include your name, date, and assignment