Project 2 – Web Application Development

Due Saturday, May 5th, 2018 @ 11:59pm via Github

Before we get started…

Please note that Project 2 is comprised of everything that you have learned in this tutorial course. This project is all about building a web application from scratch. That means you have your frontend application linked to the backend Node.js application. This application SHOULD save and retrieve data based on the user's actions. With everything you have learned, you have the power to create any big-scale web applications (and maybe more?!), but we'll limit ourselves to something smaller since this project is aimed to help you apply your knowledge in this tutorial course.

Please note!
You can _work with a partner or two others on this project_ (it's not recommended to work by yourself on this project…)_._ This is good exposure to working in a team environment. It will also hone your communication skills, collaboration skills, and much more! If you guys want to include more team members, please notify me as soon as possible! (Please note that the more the team members, more work must be applied in the application so that it will reflect the strengths of the team, i.e. I expect that your web application will be much more bigger than just a 2-man or 3-man team.)

When you create your team, be sure to tell me your team members and your team name!

Some inspiration…
In your web application project, you are free to develop anything! This project allows you the creative freedom; you shouldn't create something too simple, but you do not need to go hardcore unless you **have** to. Here, I would like to suggest some ideas when you start your frontend application development:
- Engineering a Question-and-Answer platform
- Making a game (creating a game based on Mario or some sort of RPG game? It can be any game that allows you to make calls to the backend!)
- Developing an instant messaging application
- Etc.

The possibilities are endless! Just be sure to record your idea under the Read Me file! (Please take a look at the ***Including a "Read Me" file*** section to fill this particular part in!)

Including a "Read Me" file
When you are finished your frontend application, you need to include a "Read Me" file in your repository. In this "Read Me" file, please fill in the following details _briefly_:

- ***How to start the application***
- ***What this application is about***
- ***Who was involved in this project?***
- ***Development: How did you start development on this application***
- ***Development bumps and issues***
- ***Answer to the following question: "Are web applications 100% secure when you do secure it, such as when you encrypt a password? If not, why?"***

What do you need to do? What should you accomplish in this project?

At the end of the day, everyone in your team will need to work with each other. Take initiative on your parts that you were assigned. Of course, if you need any help, be sure to ask your team members. You also have the freedom to ask me to help you out! However, _I will not be providing source code to your group since this project is based on your idea._ You should have an understanding of how to start this project. As you guys work on it, be sure to consistently save your work and upload it to Github when you need to! This is especially useful if you need to roll back to a commit of a working copy if you really need to.

Submissions

When you are done, submit your work through Github in a repository called "c5project2-<team name>" shared by Evan before Saturday, May 5th, 2018 @ 11:59pm. Late submissions will not be marked.

Achievement Marks

You can view your marks on course_PORTaL. This project is worth 28% of your final mark.

Achievements	*Marks*
Web application is organized	/ 5
Is the application working as intended? (e.g. frontend application can send data to backend, application links you to the appropriate place, etc.)	/ 20
Your application manages data on the backend ONLY – saves and stores data, retrieves data, etc.	/ 25
You utilized POST, PUT, GET, DELETE, and/or PATCH HTTP requests properly and handled HTTP responses effectively	/ 25
You handled errors on the backend (such as HTTP 404 errors)	/ 10
Utilized MongoDB/MongoDB Stitch/a NoSQL Equivalent/MySQL properly	/ 10
readme.txt or readme.md or readme.doc(x)	/ 5
BONUS: utilized AngularJS or ReactJS	/ 30 bonus marks
Total	/ 100