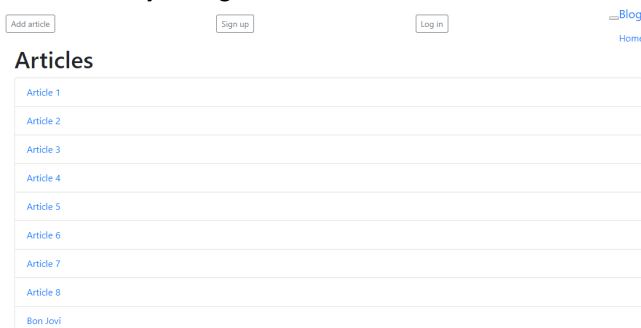# Coursework Report

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1   Introduction

This is my report for web technologies coursework 2. In this project i am expected to create a blog web platform. I am aiming to start my sites navigation to my home screen where the existing articles reveal in a list with clickable article titles, where the user upon clicking is redirected to another page where the user can see the specific article. The user has the option to post, read and modify posts. I have done a lot of research and a lot of mistakes regarding the understanding of the technologies that i used but managed to come with the following technologies: Node.js NPM, Pug Template Engine, Express framework, Bower Package Manager(Bootstrap), MongoDB Database and Mongoose ODM.It is a simple blog web app compare to other blogs in the market but it is simple which makes it very easy for the user to find its way around the web site.

Figure 1: Home page of my blog platform running the list of articles from my MongoDB
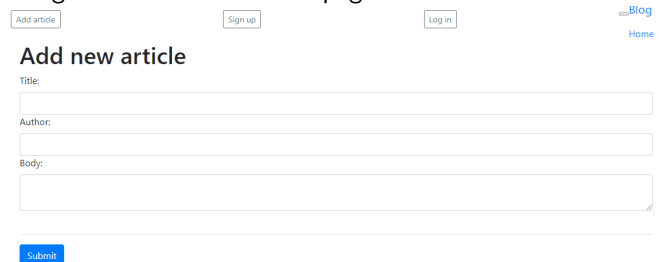

2   Design

For my software design my plan is to start with creating my web app from the node.js console constructing my JSON file. Afterwards, i will set up my MongoDB database in which i will store the articles of my blog platform. Therefore, now i have a database running in the background. Afterwards, i am aiming to create my project folder and initialize it with my existing package JSON file. Then, i will install express web framework for the robust features that provides, also at this point i will have set up my main JavaScript file (app.js) to run on my device local port making sure that it appears on my browser. Moreover, i will install pug template engine also formally known as Jade for the views of my platform (layout, adding articles to the blog, editing articles as simply viewing

articles as well). The plan is by now to have a first view of my layout. Then i will interact with the database in order to manage and retrieve articles from my MongoDB database and present them in a list view at my home page. Then using Bower package i will set up a bootstrap interacting a bit with my blogs design (creating buttons, routes, models etc) and start adding functionality to my layout. Finally i will have add article button that will navigate to a new page where the user can add an article and appear instantly on the home page retrieved from the database and on click of an article the user will have the option to edit and update the information of the article.

Figure 2: Add new article page with submission button

3   Implementation

Furthermore, after planning what my design was going to be, it was now time to start implementing what i had in mind. Firstly i create my JSON file using the command "npm init" to start of my project. Then after downloading MongoDB i opened my command line as an administrator and set up my MongoDB database to have it ready running in the background ready to be used later for my persistence. Then i started constructing my project folder with my second file which is my "app.js", inserting my requires for all the required technologies to the top of the file and implementing my route methods in its content to be able to navigate my web platform. Moreover, i then through the windows command line accessed MongoDB and using cmd commands i created my articles collection and added a couple of articles through cmd commands in order to test that they appear on my home page. Then, after ensuring the articles can come from the db i start making my platform design meaning the main layout of my home page using bootstrap. After i have a base of my design i start inserting buttons, to start functioning 'add article', 'sign up' and 'log in' pages as well as making my articles clickable and to have a view with edit and delete buttons. Then, when i am done with my models, views, and router methods and i can now navigate around my

platform, add articles and edit articles i enter validations as well to my add article so it requires the title, author and body fields and also provide messages on top stating the problem in the case with red colour and also message for when a new article is added as well with green colour that the article was added.

Figure 3: View on click of a specific article, in this case article one

4 Critical Evaluation

A comparison against the original concept i did well and managed to achieve a working blog with the basic concept of a blog. I was asked to implement a simple blog platform which i did, also my platform should of being able to add a new post, edit an existing post and view an existing post which does. Also my platform should have been deleting existing posts which doesn't, although i tried i left my attempt in my code although it is not working just to simply show my attempt. My platform should have persistence which has using MongoDB database to fetch, and modify my the articles. I also wanted to have users logging in as authors of articles but it didn't work for me as well. Although i did the buttons and their views for Sign Up and Log In to show my work. Compare to other blogs available out there i am no where close in implementing such advanced blogs with the knowledge i currently have, but i feel that i am in a good spot of understanding the development of web apps to improve my skills and create better web applications in the feature richer in features and content. Possible improvements would be as specified above in my evaluation to have a functional delete post, and to have users that could log in as well as for security reasons to avoid modification of the users articles from others than the authors. Also i could have worked more in my design of the navigation bar but i don't have a lot of experience with pug (Jade) syntax and didn't manage to have something more attractive.

Figure 4: Edit the information of an article in this figure

5 Personal Evaluation

In my opinion i learned lots of things from this assessment like creating an application with node.js and along with node use many other packages using console of git bash which helped learn also gits console commands and ways to work with more efficiency. I also learned commands for using MongoDB database and also how easy is to write wrong syntax in the console. Also through conflicts from my router methods i completely understood the way node works with the server and client side, with the requests and the responses. I feel that i completely underestimated node.js and i feel that i could performed a lot better if i started earlier.

Figure 5: Register form for new users

6 Conclusion

In conclusion so far android studio is very interesting and different than what i did so far with other programming languages dragging more of my attention as well as my interest. In the future i plan to create my first conceptual idea without time pressuring and with further research.

Figure 6: Register form for new users

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