

CSC561 NoSQL Databases

Final Project

For our final project of the semester, we will be building a queueing app for walk-ins. This is similar to what we see in restaurants when you add your name to the wait list and receive a text when a table is available. The queue-ing app is a response to the COVID-19 situation so that users can avoid lines/groups of people. For example, <https://csc570e.uis.edu:19000>

You will be using Vue.js/Quasar frameworks to interact with Google Firebase Cloud Firestore a NoSQL cloud backend as a service solution.

I will provide a starting point code for the app with a basic structure and functionality. Your task is to:

- Design a page with an interface for admins to checking users in and mark their status as complete
- Update user display from the list as their status is changed to complete

To get your started as a first step, you need to create and setup your Google Firebase Cloud Firestore database and then copy the firebaseConfig object from the Project Overview project settings page and add it to the file src/boot/firebase.js.

Please name your Firebase database 'csc561-NetID. For example, csc561-tllos1

Extra Credit: Please note that this is completely optional. I have included it because we have a very skilled group of students this summer, and I feel that it is important to challenge you.

- Improve the security of the app by changing the access rules to something more robust than test
- Add user authentication and authorize users as regular users and admins of the application
- Add user authentication by Google
- Add a phone number field to the user input so that we can notify the user when their turn comes up
- Add a 'Cancel' feature to allow students to cancel their place in the queue in case something comes up
- Add a reporting tool for stats on visits (number of users helped, average wait time, most popular times of the day, most common reason for visit, etc)
- Validate input, for example, require a username
- Anything else you think would be helpful

This is an actual app that is being developed for UIS. I am turning this project into a contest. We will take the best final project and put it into production for use by various departments at UIS. You will receive credit/acknowledge for your efforts in designing this app.

Video Tutorials

We will be using Google Firebase – Cloud Firestore as well as Vue-js and Quasar:

Learning Vue.js

https://www.linkedin.com/learning-login/share?forceAccount=false&redirect=https%3A%2F%2Fwww.linkedin.com%2Flearning%2Fvue-js-essential-training-2%3Ftrk%3Dshare_ent_url&account=43607124

https://www.linkedin.com/learning-login/share?forceAccount=false&redirect=https%3A%2F%2Fwww.linkedin.com%2Flearning%2Fvue-js-essential-training-2%3Ftrk%3Dshare_ent_url&account=43607124

(You may need to click the Sign In button in the upper right corner, and then log in with your UIS NetID and password.)

Google Firebase – Cloud Firestore

[23 min 08 sec]:

https://cdnapisec.kaltura.com/index.php/extwidget/preview/partner_id/1371761/uiconf_id/13362791/entry_id/1_hndao1fy/embed/dynamic

Vue.js/Quasar Application that connects to Google Firebase Cloud Firestore

[43 min 08 sec]:

https://cdnapisec.kaltura.com/index.php/extwidget/preview/partner_id/1371761/uiconf_id/13362791/entry_id/1_n2mfaa1k/embed/dynamic

Use this table to determine which container is yours. You will log into the share with .\NetID for the username (.\tllos1 for example) and **your UIN for the password**.

<u>Netid</u>	<u>Windows share</u>	<u>Url of the PHP application</u>
agang2	\\10.64.3.56\agang2	https://csc570e.uis.edu:9444
bbala5	\\10.64.3.56\bbala5	https://csc570e.uis.edu:9445
bguti6	\\10.64.3.56\bguti6	https://csc570e.uis.edu:9446
brodr22	\\10.64.3.56\brodr22	https://csc570e.uis.edu:9447
chick7	\\10.64.3.56\chick7	https://csc570e.uis.edu:9448
eunsik2	\\10.64.3.56\eunsik2	https://csc570e.uis.edu:9449
jlund6	\\10.64.3.56\jlund6	https://csc570e.uis.edu:9450
jshei3	\\10.64.3.56\jshei3	https://csc570e.uis.edu:9451
mpav13	\\10.64.3.56\mpav13	https://csc570e.uis.edu:9452
rsayy2	\\10.64.3.56\rsayy2	https://csc570e.uis.edu:9453

sarya7	\\10.64.3.56\sarya7	https://csc570e.uis.edu:9454
skoch7	\\10.64.3.56\skoch7	https://csc570e.uis.edu:9455
szhen6	\\10.64.3.56\szhen6	https://csc570e.uis.edu:9456
zwold2	\\10.64.3.56\zwold2	https://csc570e.uis.edu:9457
smeka6	\\10.64.3.56\smeka6	https://csc570e.uis.edu:9458
pshet7	\\ 10.64.3.56\pshet7	https://csc570e.uis.edu:9459

You will not need to submit anything to GitHub. I will grade your assignment by checking the URLs.