

Cloud Computing (CS495)

Firestore Cloud Hosting

Lab #5

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➤ What is “Firebase Cloud messaging”?

Firebase Hosting provides fast and secure static hosting for your web app

Firebase Hosting is production-grade web content hosting for developers. With Hosting, you can quickly and easily deploy web apps and static content to a global content-delivery network (CDN) with a single command.

➤ How does it work?

Firebase Hosting is built for the modern web developer. Static sites are more powerful than ever with the rise of front-end JavaScript frameworks like Angular and static generator tools like Jekyll. Whether you are deploying a simple app landing page or a complex Progressive Web App, Hosting gives you the infrastructure, features, and tooling tailored to deploying and managing static websites.

Hosting gives your project a subdomain on the firebaseapp.com domain. Using the Firebase CLI, you can deploy files from local directories on your computer to your Hosting server. Files are served over an SSL connection from the closest edge server on our global CDN.

➤ How does it work?

In addition to static content hosting, Firebase Hosting offers lightweight configuration options for you to be able to build sophisticated Progressive Web Apps. You can easily rewrite URLs for client-side routing or set up custom headers.

Once you're ready to take a site to production, you can connect your own domain name to Firebase Hosting. We automatically provision an SSL certificate for your domain so all your content is served securely.

➤ **Firebase Hosting Features**

- Served over a secure connection
 - The modern web is secure. Zero-configuration SSL is built into Firebase Hosting so content is always delivered securely.
- Fast content delivery
 - Each file you upload is cached on SSDs at CDN edges around the world. No matter where your users are, the content is delivered fast.
- Rapid deployment
 - Using the Firebase CLI, you can get your app up and running in seconds. Command line tools make it easy to add deployment targets into your build process.
- One-click rollbacks
 - Quick deployments are great, but being able to undo mistakes is even better. Firebase Hosting provides full versioning and release management with one-click rollbacks.

➤ Deploying Your Web App

- Install the Firebase CLI
 - Download and install Node.js and npm from <https://nodejs.org/>
 - Run this command “npm install -g firebase-tools”
- Login to your account
 - Run “firebase login –interactive”
- Set up a project directory
 - Use cd command to move to your project directory
 - Run “firebase init”
- Deploy your site
 - To deploy your website and get your domain url run this command “firebase deploy”

➤ Task 4&5

Part (a):

- You are required to integrate Firebase storage into you android client and allow the user to select any type of files to upload to the storage.
- Once you finish uploading you will receive the download link which you should store using Firebase database under a node called "links".

Part (b):

- Create a webpage deploy it using Firebase hosting.
- This webpage should use javascript client code to access the Firebase database and read the node "links" and dynamically display the download links in a table.
- Each download link will have a delete button beside it; clicking that button should delete this record from the database.

❖ Note: You MUST make sure that the web app is added to the same firebase project that you created online for the android app to have access to the same database.

➤ Task 4&5

❖ Note: You MUST make sure that the web app is added to the same firebase project that you created online for the android app to have access to the same database.

➤ Delivery will be on Wednesday 2/5/2018 during lab time.

➤ Bonus Maybe considered for well designed tasks

➤ Team is max 3 members

➤ References:

➤ <https://firebase.google.com/docs/hosting/>

➤ <https://firebase.google.com/docs/hosting/quickstart>

➤ <https://firebase.google.com/docs/hosting/deploying>

➤ <https://firebase.google.com/docs/storage/android/start>

➤ <https://firebase.google.com/docs/database/web/start>

➤ Reference

<https://firebase.google.com/docs/hosting/>