**Firebase Functions setup:**

**Helping Link:**

<https://fireship.io/courses/cloud-functions/intro-setting-up-firebase-cloud-functions/>:

**1:** **npm install firebase-tools –g:**

For install firebase tools globally.

**2:firebase login | firebase login –interactive:**

**3:** **firebase init functions:**

Here we select only functions by using space and arrow keys up down.

**4: Index.ts.**

After install functions there is index.ts file there we put some code.

**5: Signup Function in component.ts file.**

In this file we call that function that we create in index.ts file in register user function.

if(this.registerForm.valid){

      console.log(formData);

      this.isLoading = true;

      this.authService.SignUp(email, password, firstName, lastName, address, state, postalCode).then(res =>{

        const addRoleFunction = this.aff.httpsCallable('addRole');

        addRoleFunction({ email: email, claims: { user: true } })

          .subscribe(async (res1: any)=>{

          })

        this.isLoading = false;

        console.log(res);

      })

    }else{

      Object.keys(this.registerForm.controls).forEach(controlName =>

        this.registerForm.controls[controlName].markAsTouched()

      );

      return;

    }

**6: Auth Guard.**

In authguard we change the can activate function to this.

canActivate(

    next: ActivatedRouteSnapshot,

    state: RouterStateSnapshot): Observable<boolean | UrlTree> | Promise<boolean> | boolean {

    // if (this.authService.isLoggedIn !== true) {

    //   this.router.navigate(['login'])

    // }

    // return true;

    return this.afAuth.authState.pipe(

      take(1),

      switchMap(async (user: any) => {

        if (user) {

          // const token = await user.getIdTokenResult();

          // if (token.claims.admin) {

          //   return true;

          // } else {

          //   return this.router.createUrlTree(['/permission-denied']);

          // }

          return true;

        } else {

          return this.router.createUrlTree(['/login']);

        }

      })

    );

**7: Then we diploy Firebase functions that we create in step one to firebase.**

Open firbase functions in integrated terminals then run this command.

firebase deploy --only functions

and this command we found in package.json file of firebase function **display.**

**8: Then we need access of firebase account for diploy these functions.**

**9: for redirect user and admin.**

After successfully login for redirect the user we use this code for redirect in signin function.

SignIn(email: string, password: string) {

      return this.afAuth.signInWithEmailAndPassword(email, password)

         .then((result: any) => {

            this.afAuth.currentUser.then(async (user: any) => {

               const token = await user.getIdTokenResult();

               if (token.claims.admin) {

                 this.router.navigate(['/admin']);

               }else {

                 this.router.navigate(['/home/carsplan']);

                 this.SetUserData(result.user);

               }

             }).catch((error) => {

               window.alert(error.message)

            });

            // this.ngZone.run(() => {

            //    this.router.navigate(['/home/carsplan']);

            // });

            // this.SetUserData(result.user);

         // }).catch((error) => {

         //    window.alert(error.message)

         })

   }

Password of sendgrid.

UsmanShanTechmania@#

Key:

SG.xgZg\_N4cQPmjOqlSHL4zoQ.ttjpY0iBUZpOupuFqvUq7hSzKKzMZwNxDvSywnPIXNQ

Password:

SG.xgZg\_N4cQPmjOqlSHL4zoQ.ttjpY0iBUZpOupuFqvUq7hSzKKzMZwNxDvSywnPIXNQ