

TITLE: A “GitHub” for Deep Learning Models: Online Host, Visualization, and Deployment.

TEAM NAME: CODE BREAKERS

TEAM ID: 5

TEAM MEMBERS:

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INTRODUCTION:

This project aims to create a hosting service similar to GitHub that allows users to host their trained models, share them with the public, search for models, rank the models, allow model download, and online testing and deployment.

PROJECT GOAL AND OBJECTIVES:

We developed a web application similar to ‘GitHub’ for users where they

can host their models and providing access for them to download the models and rate them accordingly.

MOTIVATION:

With the advances in deep learning applications, sharing the trained models online becomes a critical component of the overall deep learning lifecycle. Currently, trained models are share on private websites or dumped into storage services like GitHub, which cannot visualize the model and its metadata, test it online, or deploy it online.

SYSTEM REQUIREMENTS:

- A hosting website. Users can create accounts and have profiles, similar to a social network, or GitHub.
- Users can upload their trained models to the website.
- Users can “like” or “vote” up and down for models, comment on them and submit issues on a model (or report a model)
- Models can be downloaded from the website.
- Users has dashboards about their models, views, ratings, etc.

PROJECT PLAN USING ZEN HUB TOOLS:

Schedule for four increments:

Advanced Software Engineering ☆
Change Workspace >

Boards

Reports

Milestones

Notifications

Create...

Invite

/few tutorials

shortcuts

support and training

rahuldhart23

rahuldhart23

Advanced Software Engineering > Milestones

Milestones

New Milestone

Increment-1

Start Feb 8, 2019 Due by Feb 26, 2019 Duration: 19 days

See this Milestone on the Board

Edit Milestone Close Milestone Delete Milestone

Increment-2

Start Feb 8, 2019 Due by Mar 19, 2019 Duration: a month

See this Milestone on the Board

Edit Milestone Close Milestone Delete Milestone

Increment-3

Start Feb 8, 2019 Due by Apr 16, 2019 Duration: 2 months

See this Milestone on the Board

Edit Milestone Close Milestone Delete Milestone

Increment-4

Start Feb 8, 2019 Due by May 3, 2019 Duration: 3 months

See this Milestone on the Board

Edit Milestone Close Milestone Delete Milestone

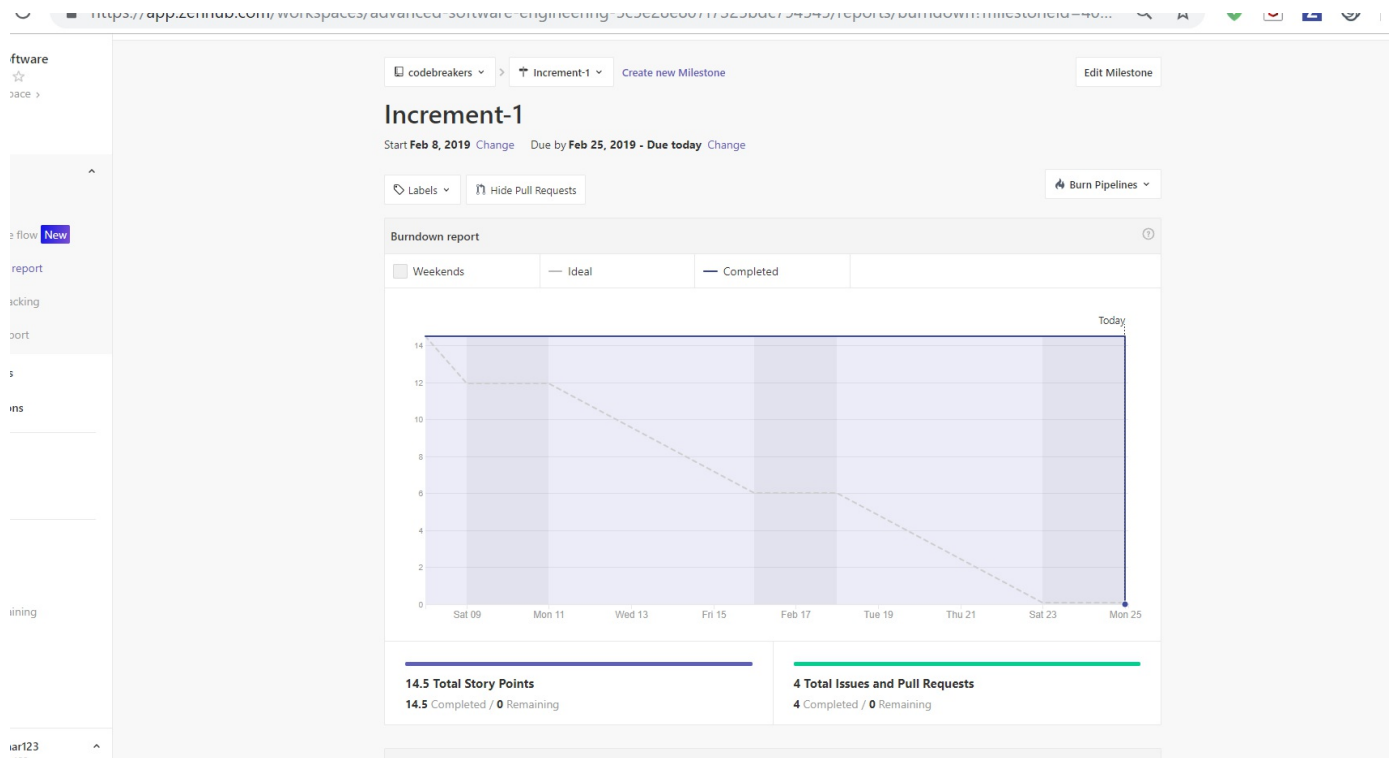
Project Timeliness:

The below are the issues raised during the increment-1 and moved them to closed state once the

individual task is done.

BURNDOWN CHART:

1. Design and Architecture
2. Login, Register User Interface
3. UML Diagrams



FIRST INCREMENT REPORT:

INTRODUCTION:

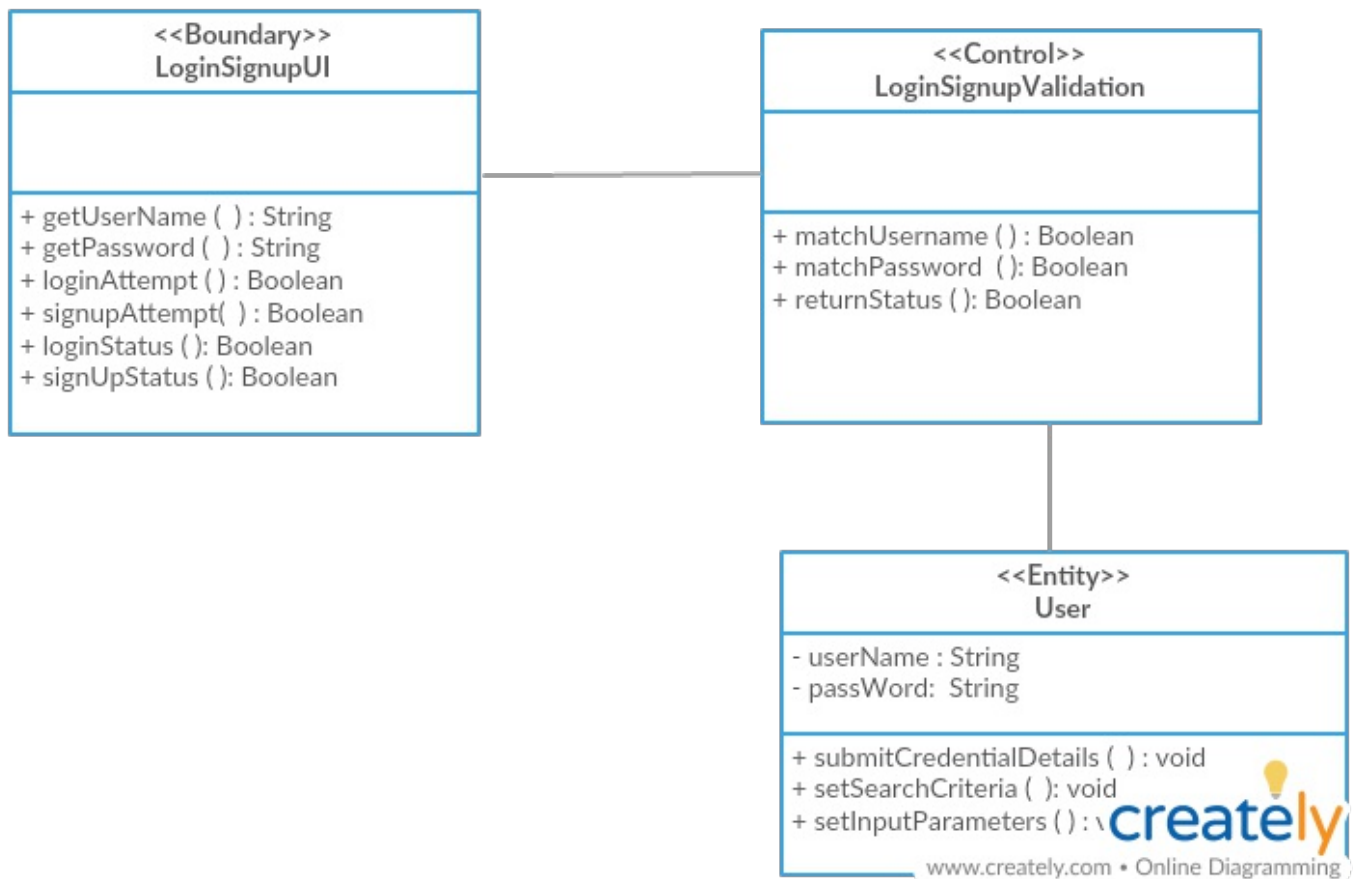
A web application that avails users to register with valid credentials. We have setup Firebase Authentication and Firebase DB that stores credentials of the users.

TECHNOLOGIES USED:

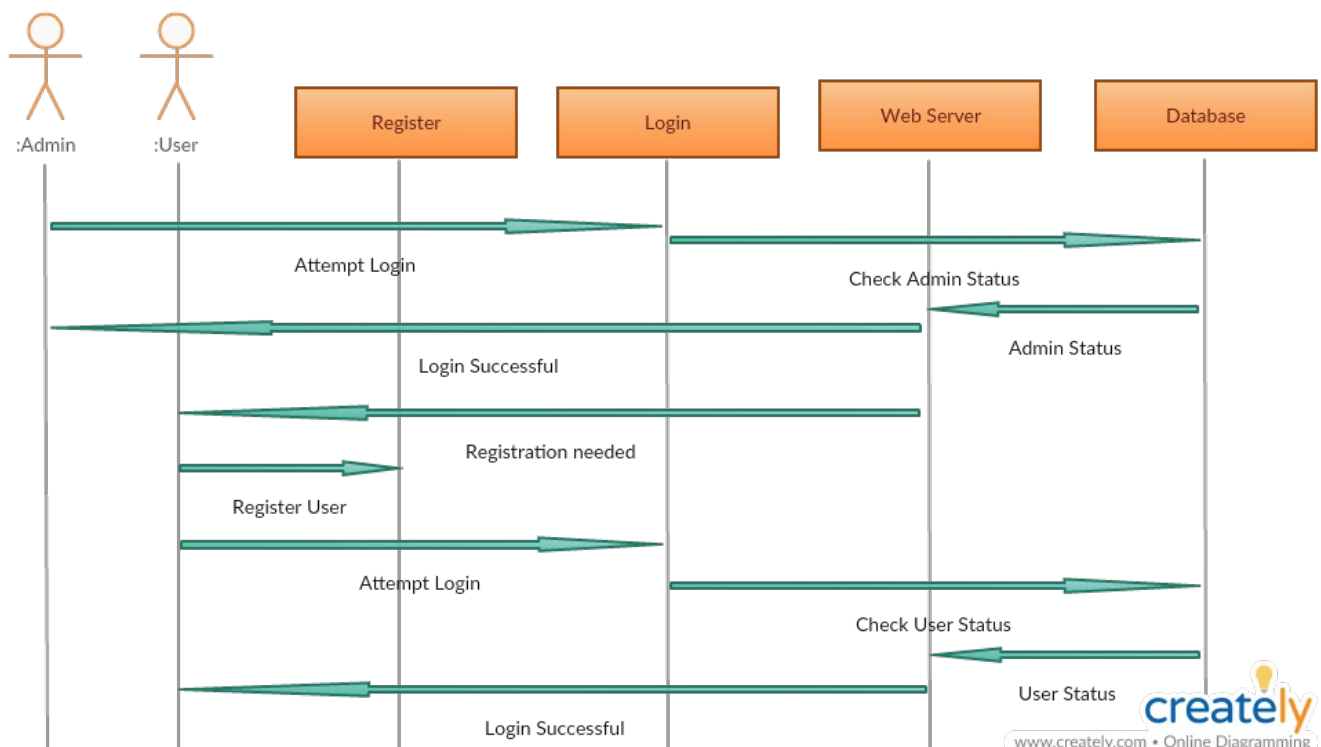
- HTML5, CSS3
- BOOTSTRAP
- ANGULAR7
- FIRE BASE AUTHENTICATION
- FIRE BASE STORAGE

UML DIAGRAMS:

1. Class Diagram:

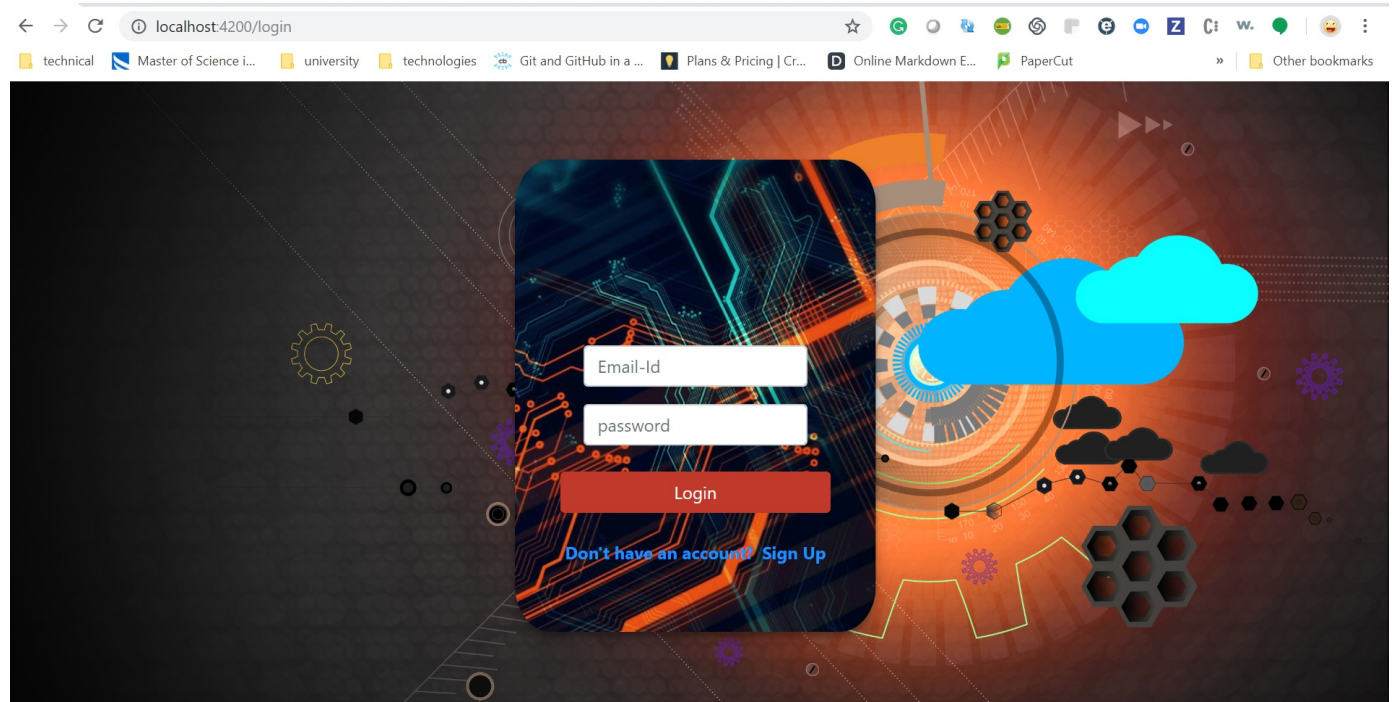


2. Sequence Diagram:

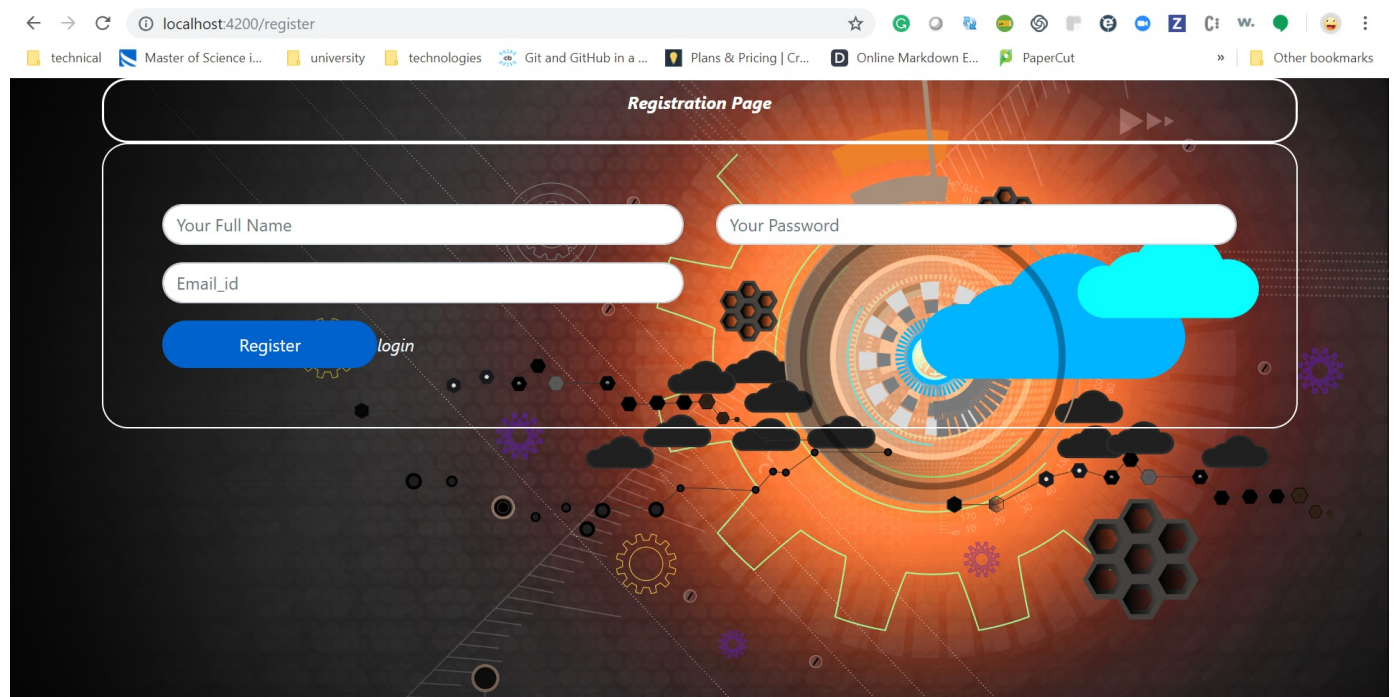


OUTPUT:

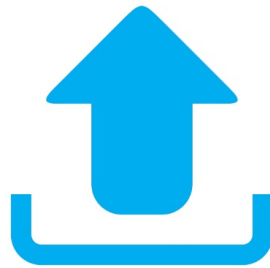
Login page



Register page



Home page



Upload your files here

Home.html

```
component.ts x  Ts main.ts x  home.component.html x  sidebar.directive.spec.ts x  sidebar.directive.ts x  app.module.ts x  styles.css x  ...

<body>
<ul style="padding-left: 280px; background-color: lightslategray; " >
  <li><a class="active" href="#home">Pull Requests</a></li>
  <li><a href="#news">Issues</a></li>
  <li><a href="#contact">Market Place</a></li>
  <li><a href="#about">Explore</a></li>
  <li><a href="#about" style="margin-left: 460px;">Profile</a></li>
</ul>
<div class="item">
  
</body>
|
<div id="wrapper" [ngClass]="ref.click === true? 'toggled' : ''" >
  <div class="overlay" [ngStyle]="{disply:ref.click === true? 'block' : 'none'}" ></div>
  <nav class="navbar navbar-inverse navbar-fixed-top" id="sidebar-wrapper" role="navigation">
    <ul class="nav sidebar-nav" style="height: 100%;background-color: lightslategray;">
      <li class="sidebar-brand">

      </li>
      <li>
        <a href="#">My Modules</a>
      </li>
      <li>
        <a href="#">Modules</a>
      </li>
    </ul>
  </div>
```

Home.ts


```
er.component.ts x home.component.html x home.component.ts x sidebar.directive.spec.ts x sidebar.directive.ts x app.module.ts x ... 5
1 import { Component, OnInit } from '@angular/core';
2 import { FirebaseAuthService } from '../firebase.service';
3 import { Router } from '@angular/router';
4
5 @Component({
6   selector: 'app-home',
7   templateUrl: './home.component.html',
8   styleUrls: ['./home.component.css']
9 })
10 export class HomeComponent implements OnInit {
11
12   constructor(public router: Router) { }
13
14   ngOnInit() {
15
16     // ...
17
18     // ...
19     this.router.navigate(['']);
20   }
21
22 }
23
```

Login.html

```
login.component.ts x login.component.html x
3 <div class="user_card">
4   <div class="d-flex justify-content-center form_container">
5     <form>
6       <div class="input-group mb-3">
7         <input type="text" class="form-control" placeholder="Email-Id" type="email" [(ngModel)]="email" name="email"/>
8       </div>
9       <div class="input-group mb-2">
10        <input type="password" class="form-control" placeholder="password" [(ngModel)]="password" name="password"/>
11      </div>
12    </form>
13  </div>
14  <div class="d-flex justify-content-center mt-3 login_container">
15    <button type="button" class="btn login_btn" (click)="login()">Login</button>
16  </div>
17  <div class="mt-4">
18    <div class="d-flex justify-content-center links">
19      <p style="..."><b>Don't have an account?</b></p>
20      <nav class="ml-2"><a style="..." routerLink="/register"><b>Sign Up</b></a></nav>
21    </div>
22  </div>
23 </div>
24 </div>
25 </div>
26
div.container.h-100 > div.d-flex.justify-content-center.h-100
3.2.4 Terminal Event Log
```

Login.ts


```
login.component.ts x
1 import { Component, OnInit } from '@angular/core';
2 import { FirebaseAuthService } from '../fireauth.service';
3 import { Router } from '@angular/router';
4
5 @Component({
6   selector: 'app-login',
7   templateUrl: './login.component.html',
8   styleUrls: ['./login.component.css']
9 })
10 export class LoginComponent implements OnInit {
11   public email;
12   public password;
13   public eMessage;
14   public sMessage;
15   constructor(public auth: FirebaseAuthService, public router: Router) { }
16
17   ngOnInit() {
18   }
19   login() {
20     this.auth.firelogin(this.email, this.password).then( onfulfilled: res => {
21       console.log(res)
22       this.eMessage = '';
23       this.sMessage = 'Login Successfull';
24       alert(this.sMessage);
25       this.router.navigate( commands: ['/home'] );
26     }, onrejected: err => {
27       console.log(err);
28       this.eMessage = err.message;
29     })
30   }
31 }
32
33 LoginComponent
```

Register.html

```
register.component.html x
18 <div class="form-content">
19   <div class="row">
20     <div class="col-md-6">
21       <div class="form-group">
22         <input type="text" class="form-control" placeholder="Your Full Name" [(ngModel)]="fullname" name="fullname" />
23       </div>
24       <div class="form-group">
25         <input type="text" class="form-control" placeholder="Email_id" [(ngModel)]="email" name="email" />
26       </div>
27     </div>
28     <div class="col-md-6">
29       <div class="form-group">
30         <input type="password" class="form-control" placeholder="Your Password" [(ngModel)]="password" name="password" />
31       </div>
32     </div>
33   </div>
34   <span>
35     <button type="button" class="btnSubmit" (click)="register()">Register</button>
36     <a routerLink="/login" style="margin-left: 10px;"><i>login</i></a>
37   </span>
38 </div>
39 </div>
40 </div>
41
```

Register.ts

```
register.component.html x register.component.ts x
3 public password;
4 public errorMessage;
5 public successMessage;
6 constructor(public auth: FirebaseAuth, public router: Router) { }
7
8 ngOnInit() {
9 }
10
11 register() {
12   this.auth.fireRegister(this.email, this.password).then( onfulfilled: res => {
13     console.log(res);
14     this.errorMessage = '';
15     this.successMessage = 'Account got Created';
16     alert(this.successMessage);
17     this.router.navigate( commands: ['/login'] );
18   }, onrejected: err => {
19     console.log(err);
20     this.errorMessage = err.message;
21     this.successMessage = '';
22     alert(this.errorMessage);
23   });
24 }
25 }
```

fireauthservice

```
register.component.html x register.component.ts x fireauth.service.ts x
1 import { Injectable } from '@angular/core';
2 import { AngularFireAuth } from 'angularfire2/auth';
3 import * as firebase from 'firebase/app';
4
5 @Injectable({
6   providedIn: 'root'
7 })
8 export class FirebaseAuthService {
9   constructor(public auth: AngularFireAuth) {
10   }
11
12   fireRegister(v1, v2) {
13     return new Promise<any>(< executor: (resolve, reject) => {
14       firebase.auth().createUserWithEmailAndPassword(v1, v2).then( onfulfilled: res => {
15         resolve(res);
16       }, onrejected: err => reject(err));
17     });
18   }
19
20   firelogin(v1, v2) {
21     return new Promise<any>(< executor: (resolve, reject) => {
22       firebase.auth().signInWithEmailAndPassword(v1, v2).then( onfulfilled: res => {
23         resolve(res);
24       }, onrejected: err => reject(err));
25     });
26   }
27
28   firesignout() {
29     return new Promise<any>(< executor: (resolve, reject) => {
```

appModule

```

12 import {FormsModule} from '@angular/forms';
13 import {FireAuthService} from '../fireauth.service';
14 import { SidebarDirective } from '../sidebar.directive';
15
16 @NgModule({
17   declarations: [
18     AppComponent,
19     LoginComponent,
20     RegisterComponent,
21     HomeComponent,
22     SidebarDirective
23   ],
24   imports: [
25     BrowserModule,
26     FormsModule,
27     AngularFireModule.initializeApp(environment.firebase),
28     AngularFireStoreModule,
29     AngularFireAuthModule,
30     AppRoutingModule],
31   providers: [],
32   bootstrap: [AppComponent]
33 })
34 export class AppModule { }
35

```