```
Git clone URL link
Git remote show origin
git remote remove origin
git checkout -b [name_of_your_new_branch]
git branch -a
```

How to create a toast

Main-nav.component.html we create a click event on About

```
    <li class="nav-item active">
      <a class="nav-link" (click)="showAbout()">About</a>
    </li>
```

On this code we navigated to main-nav.component.ts

1. We import the ToastService
2. Below the constructor after ngOnInit we create our showAbout

```
showAbout() {
this.toastService.showToast('success', 5000, 'This application was created by Oscar Vasquez.');
```

How to create login button credential capture

1. Locate login button and create a click event "login(creds)" creds is a user input.

```
<button mat-raised-button color="primary" (click)="login(user)">Login</button>
```

2. Next, we will go to login.component.html and find the input for username and password and capture the users input and pass it to the login as creds.
3. Create the banana in a box syntax [( )] and inside we will use ngModel and use the user component variable.

```
<label for="exampleInputEmail1">User Name</label>
<input [(ngModel)]="user.username" name="username" type="text" class="form
div>
iv class="form-group">
<label for="exampleInputPassword1">Password</label>
<input [(ngModel)]="user.password" name="password" type="password" class="
div>
```

4. Next, we will create an interface

```typescript
import { ToastService } from '../toast/toast.service';

export interface IUser {
  id?: number;
  username: string;
  password: string;
}
```

5. Then we will create the user input and add the required items from the interface

```typescript
export class LoginComponent implements OnInit {
  user: IUser = {
    username: null,
    password: null
  };
```

6. Then we will create the login function

```typescript
login(user: IUser) {
  console.log('from login user: ', user);
      // set the user credentials
  const presetUser = { username: 'ovasquez', password: 'selma123' };
      // log the user in
  if (user.username != null && user.password != null &&
    user.username !== '' && user.password !== '') {
    console.log('from within if statement...');
      // actually log them in
    if (user.username === presetUser.username &&
      user.password === presetUser.password) {
      // saving data to localStorage
      localStorage.setItem('user', JSON.stringify(user));
      // navigate to contacts page
      this.router.navigate(['contacts', user]);
    } else {
      // toast warraning if username or password was incorrect
      this.toastService.showToast('warning', 2000, 'Username or password incorrect!');
    }
  } else {
    console.log('Must specify credentials');
    // toast warraning if missing either username or password
    this.toastService.showToast('danger', 2000, 'Must specify credentials');
  }
}

}
```

Contact component load from a Jason files

1. Make sure to look for *ngFor="let contact of contacts; let I = index"

```html
<div class="contact-grid">
  <div class="gallery-grid">
    <mat-card class="example-card" *ngFor="let contact of contacts; let i = index">
      <mat-card-content>
```

2. then we will need to load the contacts from contacts.json files. This will add the 3 contacts in the contact.json

```typescript
async ngOnInit() {
  this.contacts = await this.loadContactsFromJson();
  console.log('this.contacts from ngOninit...', this.contacts);
}

async loadContactsFromJson() {
  const contacts = await this.http.get('assets/contacts.json').toPromise();
  return contacts.json();
}
```

3. Then we will create the banana in a box syntax [(ngModel)] ="contact.id" for all variables in the contact.json file.

```html
<label for="id">ID:</label>
<input [(ngModel)]="contact.id" type="text" class="form-control" placeholder="ID" aria-label="id" aria-describedby="basic-addon1">
```

4. Then we will go to the contacts.json file and add the owed field to the 3 contact

```json
{
  "id": 3,
  "firstName": "Joe",
  "lastName": "Biden",
  "email": "jbiden@yahoo.com",
  "phone": "(559) 111-2121",
  "editing": false,
  "owed":1000
}
```

Stopped video at 40:48

How to add a new contact

1. In the contacts.component.ts we will create a interface called IContacts

```typescript
export interface Icontact {
  id?: number;
```

```
    firstName: string;
    lastName: string;
    email: string;
    owed: number;
    phone: string;
}
```

2. Then we will create the addcontact function.

```
addContact() {
    const contact: Icontact = {
        id: null,
        firstName: null,
        lastName: null,
        email: null,
        owed: null,
        phone: null
    };
    this.contacts.unshift(contact);
}
```

3. In the contacts array we will change it from any to IContacts

```
contacts: Array<Icontact> = [];
constructor(
    private http: Http,
    private activatedRoute: ActivatedRoute,
    private router: Router,
    private toastService: ToastService
```

4. Then we add a click event to the add contact button

```
<button mat-raised-button color="primary" (click)="addContact()">Add Contact</button>
```

5. Then we will allow add contacts function to save to local storage.

```
    localStorage.setItem('contacts', JSON.stringify(this.contacts));
```

6. Then we will go and modify the ngOnInit to be able to save the new contact to local storage.

```
async ngOnInit() {
    const contacts = JSON.parse(localStorage.getItem('contacts'));
    if (contacts && contacts.length > 0) {
        this.contacts = contacts;
    } else {
```

```
    this.contacts = await this.loadContactsFromJson();
  }
```

7. Then we will create a saveToLocalStorage function and replace the the existing local storage code to this.saveToLocalStorage();

```
  this.contacts.unshift(contact);
  this.saveToLocalStorage();
}
deleteContact(index: number) {
  this.contacts.splice(index, 1);
  this.saveToLocalStorage();
}
saveToLocalStorage() {
  localStorage.setItem('contacts', JSON.stringify(this.contacts));
}
```

How to wire the delete button

1. Create the delete function and also copyed the local storage code and added it.

```
  deleteContact(index: number) {
    this.contacts.splice(index, 1);
    localStorage.setItem('contacts', JSON.stringify(this.contacts));



<button mat-raised-button color="warn" (click)="deleteContact(i)"
```

How to wire the load contact button

```
async ngOnInit() {
  this.contacts = await this.loadContacts();
}

async loadContacts() {
  let contacts = JSON.parse(localStorage.getItem('contacts'));
  if (contacts && contacts.length > 0) {
    // this.contacts = contacts;
  } else {
    contacts = await this.loadContactsFromJson();
  }
  console.log('this.contacts from ngOninit...', this.contacts);
```

```
    this.contacts = contacts;
    return contacts;
  }
```

How to make the finalize and calculation function

```
finalize() {
  this.calculate();
  const data = this.calculate();
  // this is code to do route to home page
  this.router.navigate(['home', data]);
}
calculate() {
  let owed = 0;
  for (let i = 0; i < this.contacts.length; i++) {
    // console.log('i--->', i, "this.contacts[i]", this.contacts[i]);
    owed += this.contacts[i].owed;
    // console.log('owed---->', owed);
  }
  // the math to calculate the total with tax
  return {
    numberOfContacts: this.contacts.length,
    subTotal: owed,
    taxAmount: owed * .10,
    total: owed + (owed * .10)
  };
```

How to pass the data to home page and interpolate the data to the tables.

```
ngOnInit() {
  this.activatedRoute.params.subscribe((sss) => {
    this.data = sss;
    console.log('this.data from home........', this.data);
  });
```

```
<td scope="row">{{data.numberOfContacts}}</td>
      <td>{{data.subTotal}}</td>
      <td>{{data.taxAmount}}</td>
      <td>{{data.total}}</td>
```

Have the logout button clear local storage and logout.

1. Create a click event for the logout button

```html
<button mat-raised-button color="accent" (click)="logout()">Logout</button>
```

2. In main-nav.components.ts we will import the router

```typescript
import { Router } from '@angular/router';
```

3. Then add the router code into the constructor

```typescript
constructor(private toastService: ToastService, private router: Router) { }
```

4. Then we create the logout function

```typescript
logout() {
  localStorage.setItem('user', JSON.stringify([]));
  this.router.navigate(['login']);
}
```

Setup the search input

5. First make and ngModel on the search input

```html
<input [(ngModel)]="params" class="form-control mr-sm-2" type="search"
```

6. Create the search function

```typescript
search(params: string) {
  console.log('from serch.... params', params);

  this.contacts = this.contacts.filter((contact: Icontact) => {
    return contact.firstName.toLocaleLowerCase() === params.toLocaleLowerCase();
  });
}
}
```