Create shared/models => todo.service.ts

```typescript
import { Injectable } from '@angular/core';
import { AngularFireDatabase, AngularFireList } from 'angularfire2/database';
@Injectable()

export class TodoService {
  toDoList : AngularFireList<any>;
  constructor(private firebasedb : AngularFireDatabase) { }

  getToDoList()
  {
    this.toDoList =this.firebasedb.list('titles');
    return this.toDoList;
  }
  addTitle(title : string)
  {
    this.toDoList.push({
        title : title,
        isChecked : false
      });
  }
  checkOrUnCheckTitle($key : string , flag:boolean)
  {
    this.toDoList.update($key, {isChecked : flag});
  }

  removeTitle($key : string)
  {
    this.toDoList.remove($key);
  }
}
```

Todo.component.ts

```typescript
import { Component, OnInit } from '@angular/core';
import { TodoService } from './shared/todo.service';
@Component({
 selector: 'app-todo',
 templateUrl: './todo.component.html',
 styleUrls: ['./todo.component.css'],
// access service
 providers:[TodoService]
})
export class TodoComponent implements OnInit {
// initialize an array
 todoListArray : any[];


// access service in constructor using a var
 constructor(private todoService : TodoService) { }


 ngOnInit(){

   this.todoService.getToDoList().snapshotChanges()
   .subscribe(item =>{
     this.todoListArray=[];
     item.forEach(element =>
       {
           var x = element.payload.toJSON();
           x["$key"]=element.key;
           this.todoListArray.push(x);

       })
         this.todoListArray.sort((a,b)=>

         {
           return a.isChecked - b.isChecked;
         })
   });
 }
onAdd(itemTitle)
{
```

```
  this.todoService.addTitle(itemTitle.value);

  itemTitle.value=null;
}
alertCheck($key : string , isChecked)
{
  this.todoService.checkOrUnCheckTitle($key,!isChecked);
}
onDelete($key : string)
{
  this.todoService.removeTitle($key);

}
}
```

Todo.component.html

```html
<div class="input-group">
    <input type="text" class="form-control" #itemTitle>
    <div class="input-group-addon hover-cursor" (click)="onAdd(itemTitle)">
        <i class="fa fa-plus-circle ">

        </i>
        </div>
</div>
// check if connected to firebase
<!-- <input type="submit" class="form-control" (click)="onAdd(itemTitle)" /> -->
<div style="margin: 5px 0px;">
    <ul class="list-group">
        <li class="list-group-item" *ngFor="let item of todoListArray ">
            <span class="hover-cursor" [class.text-success]="item.isChecked"
(click)="alertCheck(item.$key,item.isChecked)">
                <i class="fa fa-lg" [ngClass]="item.isChecked ? 'fa-check-circle-o' :
'fa fa-circle-o'">

                </i>
            </span>
            {{item.title}}
            <span class="hover-cursor text-danger pull-right"
(click)="onDelete(item.$key)">
```

```html
                <i class="fa fa-trash-o fa-lg"></i>
            </span>
        </li>
    </ul>
</div>
```