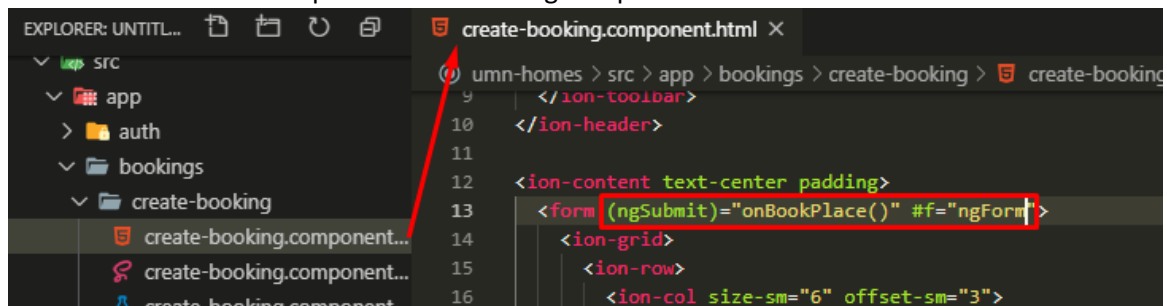


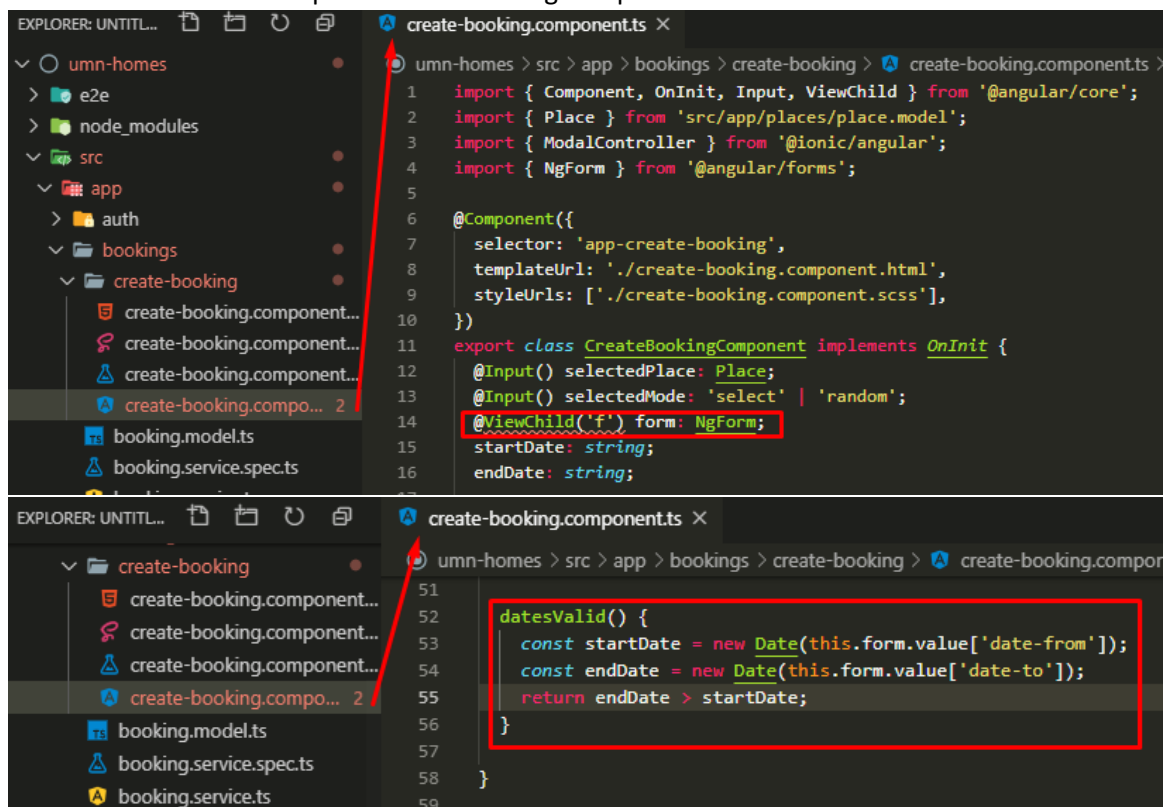
Validating & Submit Form

1. Tambahkan kode berikut pada create-booking.component.html



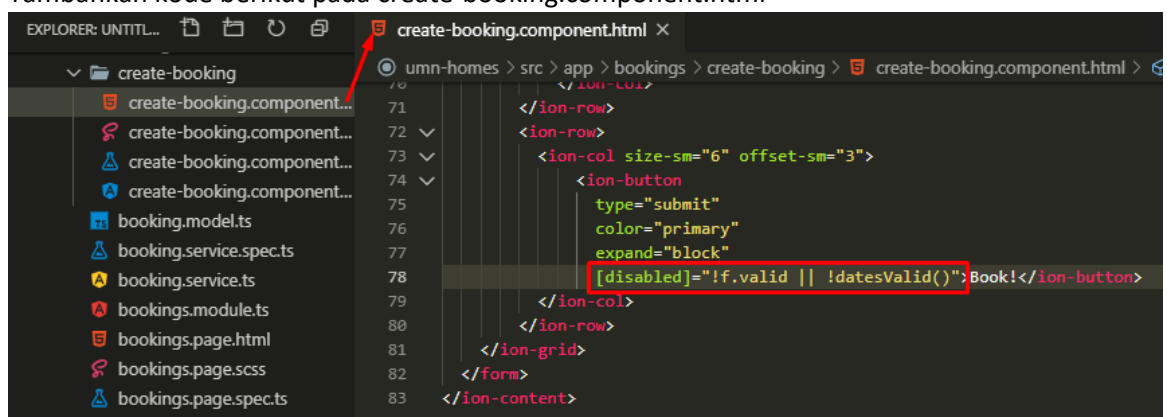
```
EXPLORER: UNTITL... create-booking.component.html X
umn-homes > src > app > bookings > create-booking > create-booking
9 </ion-toolbar>
10 </ion-header>
11
12 <ion-content text-center padding>
13 <form (ngSubmit)="onBookPlace()" #f="ngForm">
14 <ion-grid>
15 <ion-row>
16 <ion-col size-sm="6" offset-sm="3">
```

2. Tambahkan kode berikut pada create-booking.component.ts



```
EXPLORER: UNTITL... create-booking.component.ts X
umn-homes > src > app > bookings > create-booking > create-booking.component.ts X
1 import { Component, OnInit, Input, ViewChild } from '@angular/core';
2 import { Place } from 'src/app/places/place.model';
3 import { ModalController } from '@ionic/angular';
4 import { NgForm } from '@angular/forms';
5
6 @Component({
7   selector: 'app-create-booking',
8   templateUrl: './create-booking.component.html',
9   styleUrls: ['./create-booking.component.scss'],
10 })
11 export class CreateBookingComponent implements OnInit {
12   @Input() selectedPlace: Place;
13   @Input() selectedMode: 'select' | 'random';
14   @ViewChild('f') form: NgForm;
15   startDate: string;
16   endDate: string;
17
18   ngOnInit(): void {
19     // ...
20   }
21
22   datesValid() {
23     const startDate = new Date(this.form.value['date-from']);
24     const endDate = new Date(this.form.value['date-to']);
25     return endDate > startDate;
26   }
27
28   // ...
29 }
```

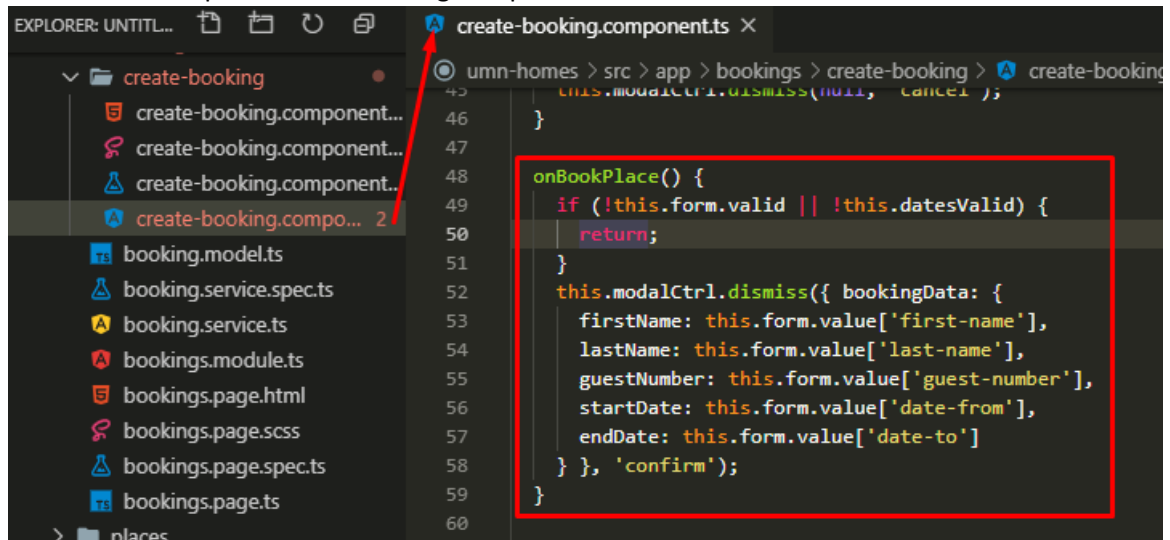
3. Tambahkan kode berikut pada create-booking.component.html



```
EXPLORER: UNTITL... create-booking.component.html X
umn-homes > src > app > bookings > create-booking > create-booking.component.html X
71 </ion-row>
72 <ion-row>
73 <ion-col size-sm="6" offset-sm="3">
74 <ion-button
75   type="submit"
76   color="primary"
77   expand="block"
78   [disabled]="!f.valid || !datesValid()">Book!</ion-button>
79 </ion-col>
80 </ion-row>
81 </ion-grid>
82 </form>
83 </ion-content>
```

4. Coba create booking, dan pilih tanggal akhir sebelum tanggal awal, apakah button disabled?

5. Modifikasi kode pada create-booking.component.html



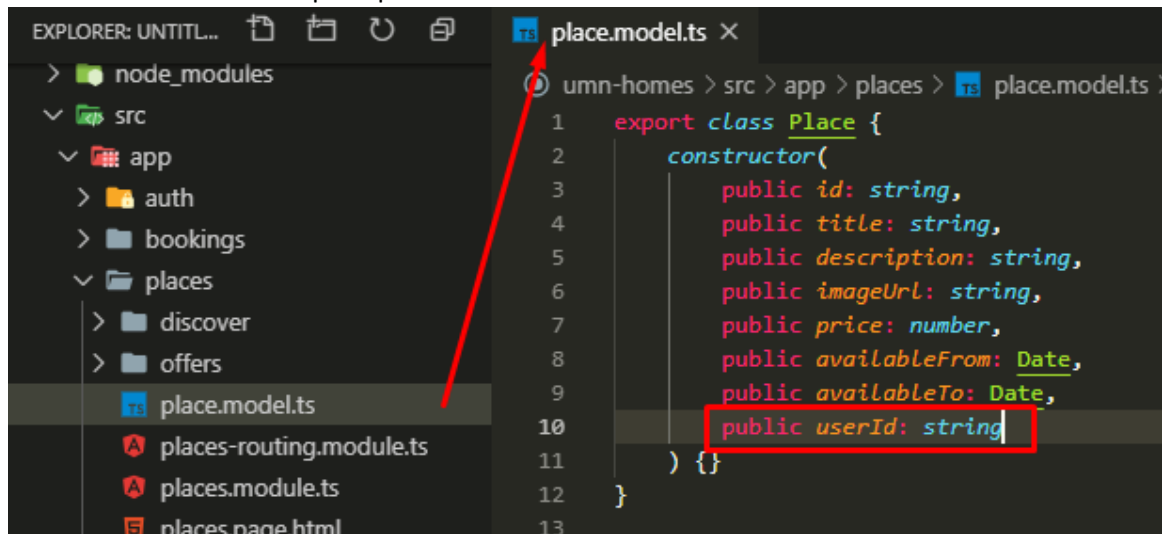
```
EXPLORER: UNTITL... create-booking.component.ts X
└─ create-booking
  ├── create-booking.component...
  ├── create-booking.component...
  ├── create-booking.component...
  └─ create-booking.compo... 2
      ├── booking.model.ts
      ├── booking.service.spec.ts
      ├── booking.service.ts
      ├── bookings.module.ts
      ├── bookings.page.html
      ├── bookings.page.scss
      ├── bookings.page.spec.ts
      └─ bookings.page.ts
  > places

45  this.modalCtrl.dismiss(null, 'cancel');
46  }
47
48  onBookPlace() {
49    if (!this.form.valid || !this.datesValid) {
50      return;
51    }
52    this.modalCtrl.dismiss({ bookingData: {
53      firstName: this.form.value['first-name'],
54      lastName: this.form.value['last-name'],
55      guestNumber: this.form.value['guest-number'],
56      startDate: this.form.value['date-from'],
57      endDate: this.form.value['date-to']
58    } }, 'confirm');
59  }
60
```

Managing State

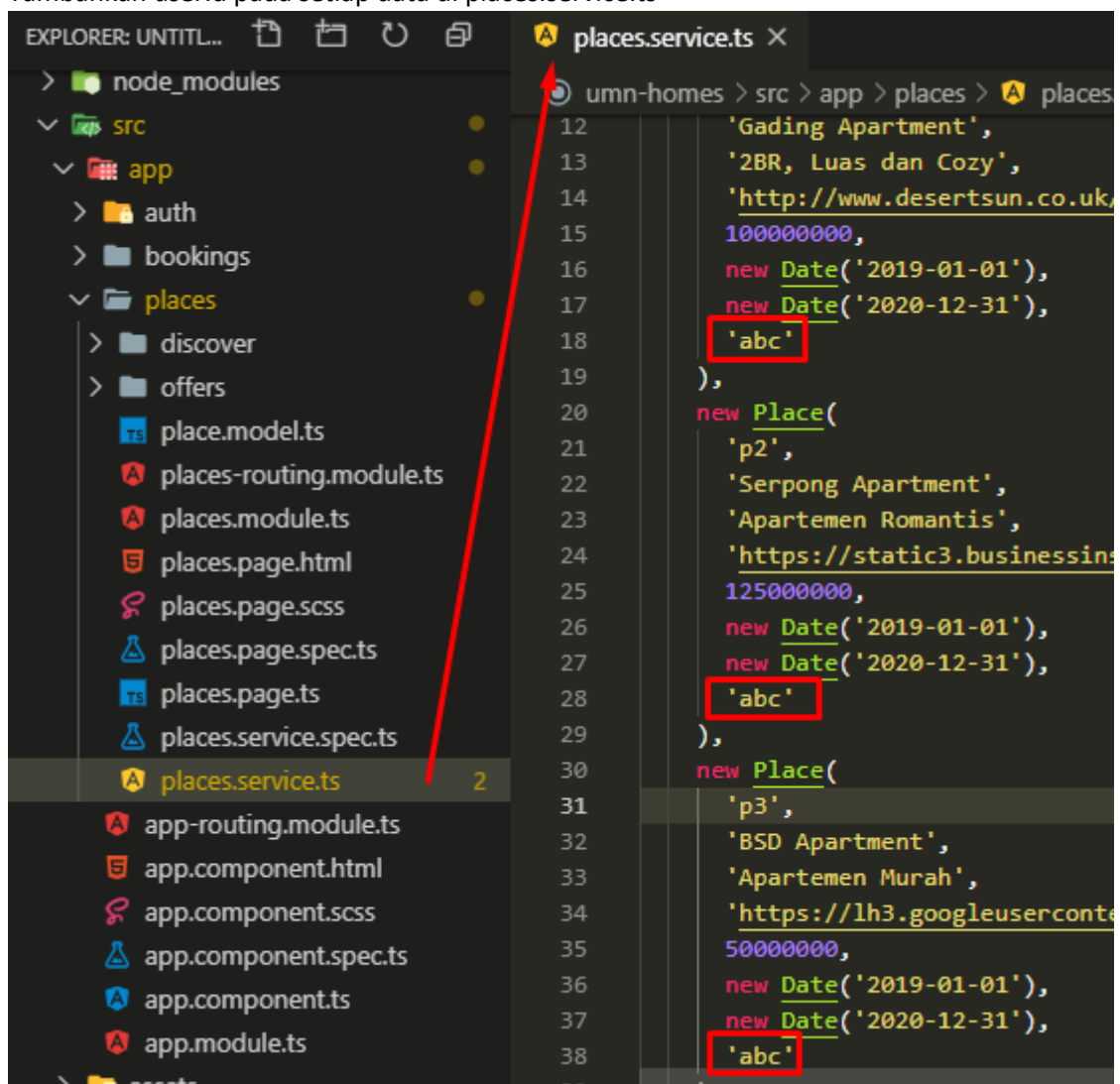
Adding New Places

1. Tambahkan kode berikut pada place.model.ts



```
1 export class Place {
2   constructor(
3     public id: string,
4     public title: string,
5     public description: string,
6     public imageUrl: string,
7     public price: number,
8     public availableFrom: Date,
9     public availableTo: Date,
10    public userId: string
11  ) {}
12 }
13
```

2. Tambahkan userId pada setiap data di places.service.ts




```
12 'Gading Apartment',
13 '2BR, Luas dan Cozy',
14 'http://www.desertsun.co.uk',
15 10000000,
16 new Date('2019-01-01'),
17 new Date('2020-12-31'),
18 'abc'
19 ),
20 new Place(
21   'p2',
22   'Serpong Apartment',
23   'Apartemen Romantis',
24   'https://static3.businessinsider.com',
25   12500000,
26   new Date('2019-01-01'),
27   new Date('2020-12-31'),
28   'abc'
29 ),
30 new Place(
31   'p3',
32   'BSD Apartment',
33   'Apartemen Murah',
34   'https://lh3.googleusercontent.com',
35   5000000,
36   new Date('2019-01-01'),
37   new Date('2020-12-31'),
38   'abc'
39 )
```

3. Tambahkan kode berikut pada `auth.service.ts`

The screenshot shows the VS Code interface. On the left, the 'EXPLORER' sidebar displays the file structure of a project. The 'app' folder is expanded, showing a sub-folder 'auth'. Inside 'auth', several files are listed, including 'auth.service.ts', which is highlighted with a red arrow. The main editor area on the right displays the contents of 'auth.service.ts'. The file path 'um-n-homes > src > app > auth > auth.service.ts' is shown at the top. The code defines an 'AuthService' class with a 'providedIn: 'root'' decorator. It has two private properties: 'userIsAuthenticated' (set to 'true') and 'userId' (set to 'abc'). There are two methods: 'userIsAuthenticated()' which returns 'this.userIsAuthenticated', and 'userId()' which returns 'this.userId'. Red boxes highlight the 'private userId' property and the 'userId()' method.

4. Tambahkan kode berikut pada `places.service.ts`

5. Tambahkan kode berikut pada `new-offer.page.ts`



EXPLORER: UNTITLED... new-offer.page.ts x

new-offer.page.scss

new-offer.page.spec.ts

new-offer.page.ts 1

offer-bookings

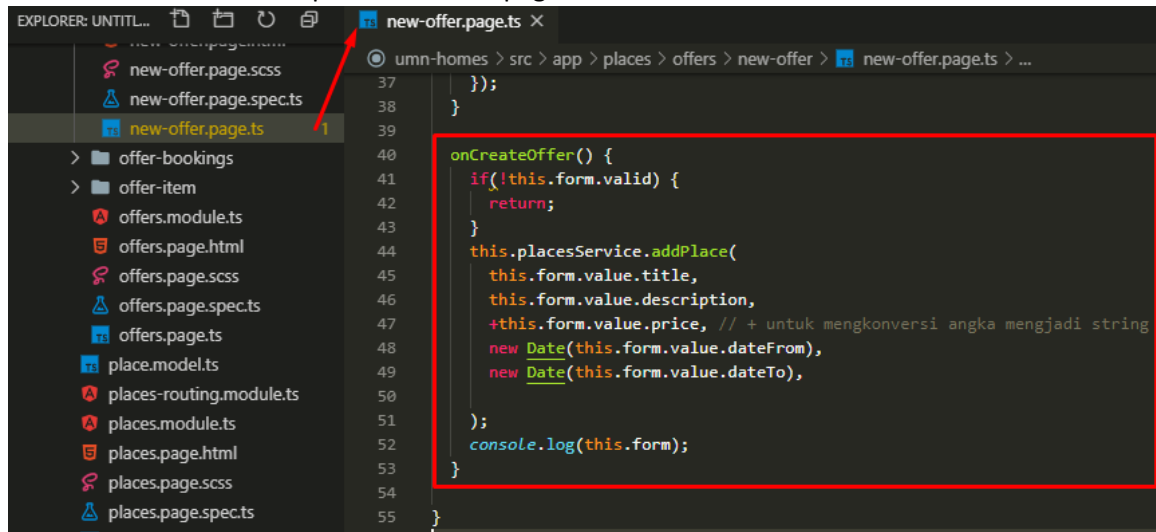
umn-homes > src > app > places > offers > new-offer > new-offer.page.ts

```

12
13 constructor(private placesService: PlacesService) { }
14
15 ngOnInit() {

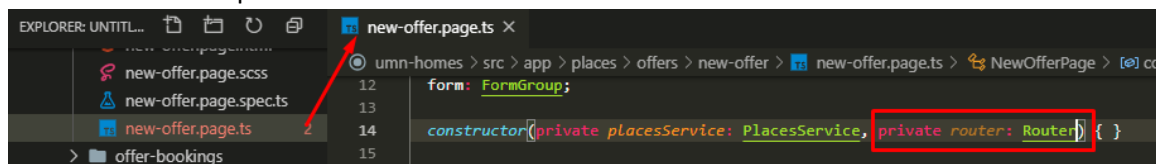
```

6. Tambahkan kode berikut pada new-offer.page.ts



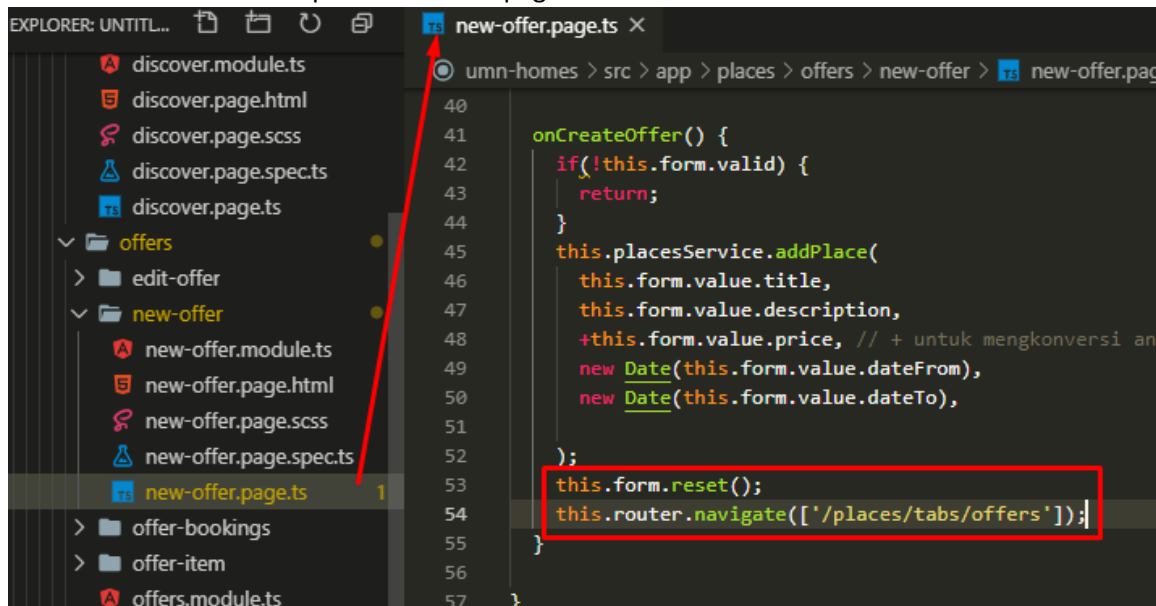
```
new-offer.page.ts
37  });
38  }
39
40  onCreateOffer() {
41    if(!this.form.valid) {
42      return;
43    }
44    this.placesService.addPlace(
45      this.form.value.title,
46      this.form.value.description,
47      +this.form.value.price, // + untuk mengkonversi angka menjadi string
48      new Date(this.form.value.dateFrom),
49      new Date(this.form.value.dateTo),
50    );
51    console.log(this.form);
52  }
53
54
55 }
```

7. Coba tambahkan new offer melalui browser, dan setelah form disubmit, apakah datanya muncul pada halaman discover?
8. Tambahkan router pada constructor new-offer



```
new-offer.page.ts
12  form: FormGroup;
13
14  constructor(private placesService: PlacesService, private router: Router) {}
15
```

9. Tambahkan kode berikut pada new-offer.page.ts

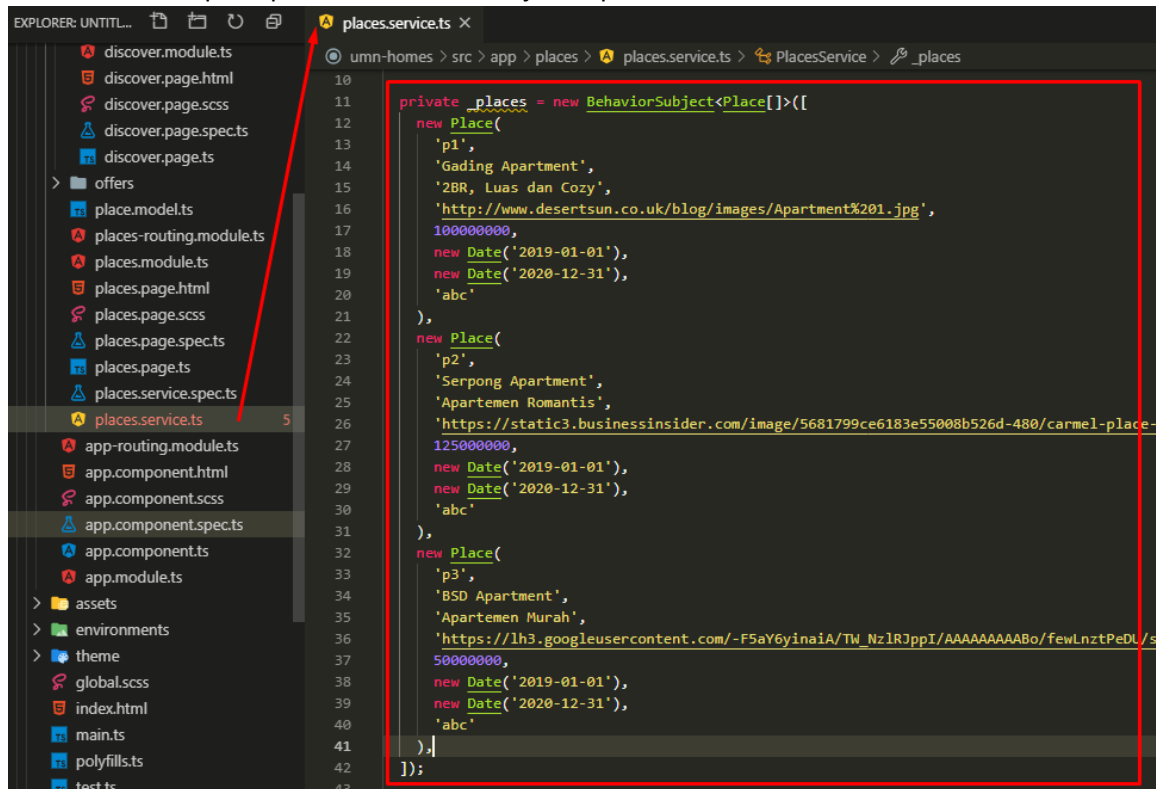


```
new-offer.page.ts
40
41  onCreateOffer() {
42    if(!this.form.valid) {
43      return;
44    }
45    this.placesService.addPlace(
46      this.form.value.title,
47      this.form.value.description,
48      +this.form.value.price, // + untuk mengkonversi an
49      new Date(this.form.value.dateFrom),
50      new Date(this.form.value.dateTo),
51    );
52    this.form.reset();
53    this.router.navigate(['/places/tabs/offers']);
54  }
55
56
57 }
```

10. Reload halaman new-offer, kemudian tambahkan new place, apa yang terjadi? Apakah data place yang baru muncul di halaman Offers?

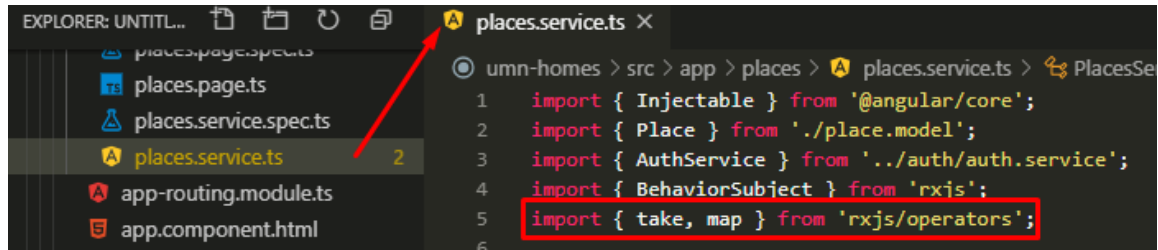
RxJS Subjects for State Management

1. Modifikasi kode pada places.service.ts menjadi seperti berikut



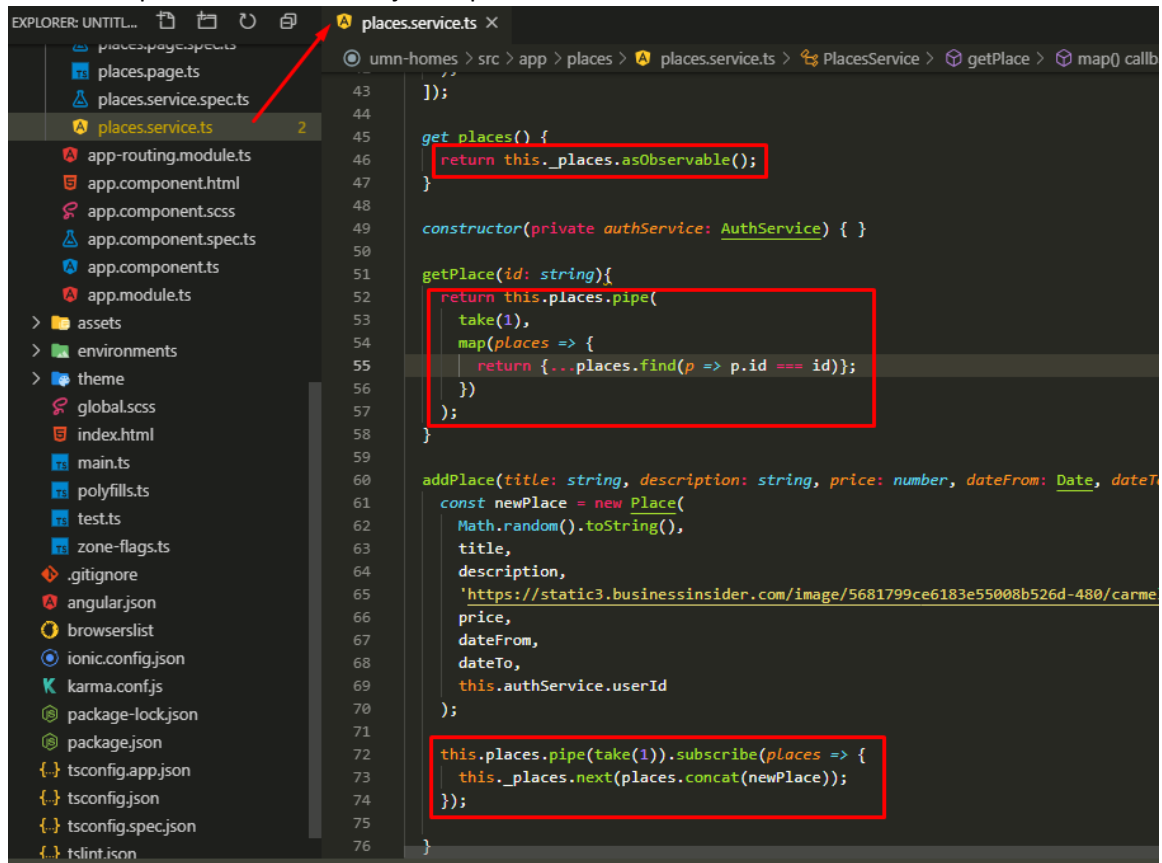
```
10  
11 private _places = new BehaviorSubject<Place[]>([  
12   new Place(  
13     'p1',  
14     'Gading Apartment',  
15     '2BR, Luas dan Cozy',  
16     'http://www.desertsun.co.uk/blog/images/Apartment%201.jpg',  
17     100000000,  
18     new Date('2019-01-01'),  
19     new Date('2020-12-31'),  
20     'abc'  
21   ),  
22   new Place(  
23     'p2',  
24     'Serpong Apartment',  
25     'Apartemen Romantis',  
26     'https://static3.businessinsider.com/image/5681799ce6183e55008b526d-480/carmel-place-125000000',  
27     125000000,  
28     new Date('2019-01-01'),  
29     new Date('2020-12-31'),  
30     'abc'  
31   ),  
32   new Place(  
33     'p3',  
34     'BSD Apartment',  
35     'Apartemen Murah',  
36     'https://lh3.googleusercontent.com/-F5aY6yinaia/TW_NzIRJppI/AAAAAAAAABo/fewLnztPeDL/s50000000',  
37     50000000,  
38     new Date('2019-01-01'),  
39     new Date('2020-12-31'),  
40     'abc'  
41   ),  
42   ]  
43   );
```

2. Tambahkan kode berikut pada places.service.ts



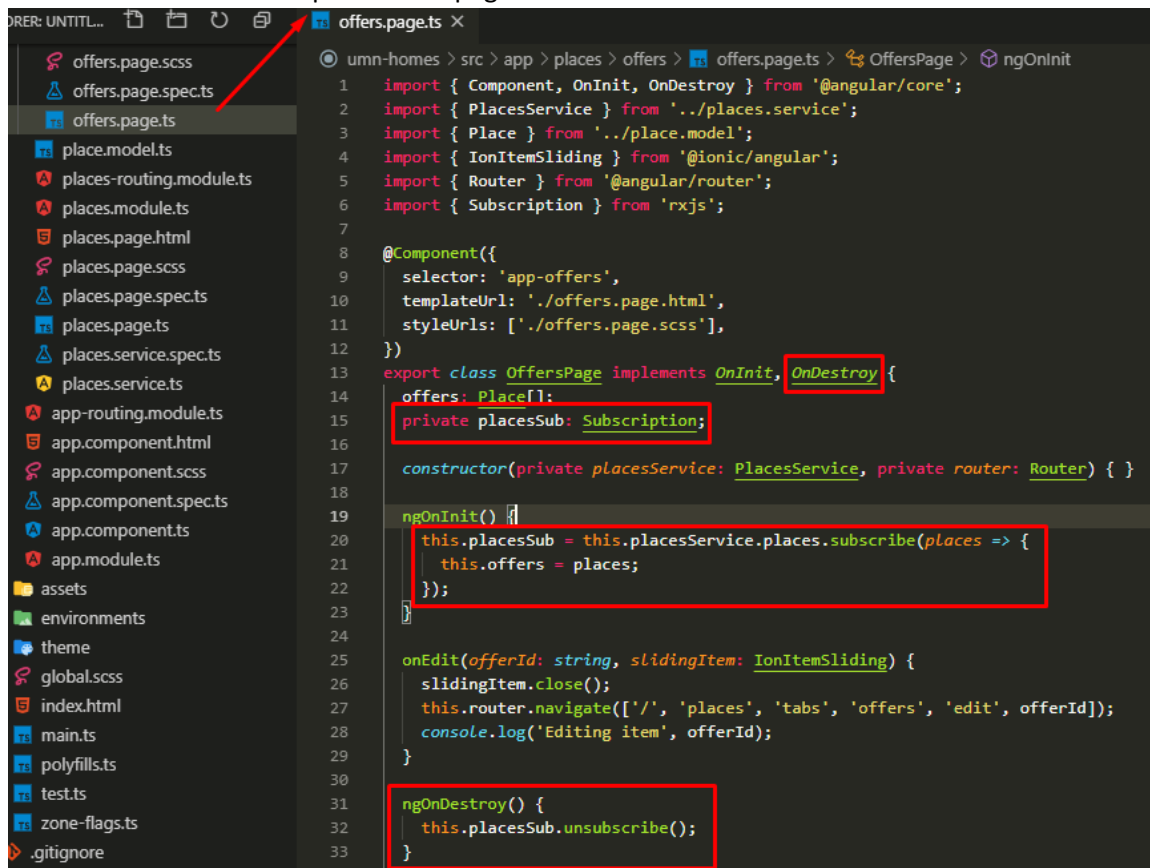
```
1 import { Injectable } from '@angular/core';  
2 import { Place } from './place.model';  
3 import { AuthService } from '../auth/auth.service';  
4 import { BehaviorSubject } from 'rxjs';  
5 import { take, map } from 'rxjs/operators';  
6
```

3. Modifikasi places.service.ts menjadi seperti berikut



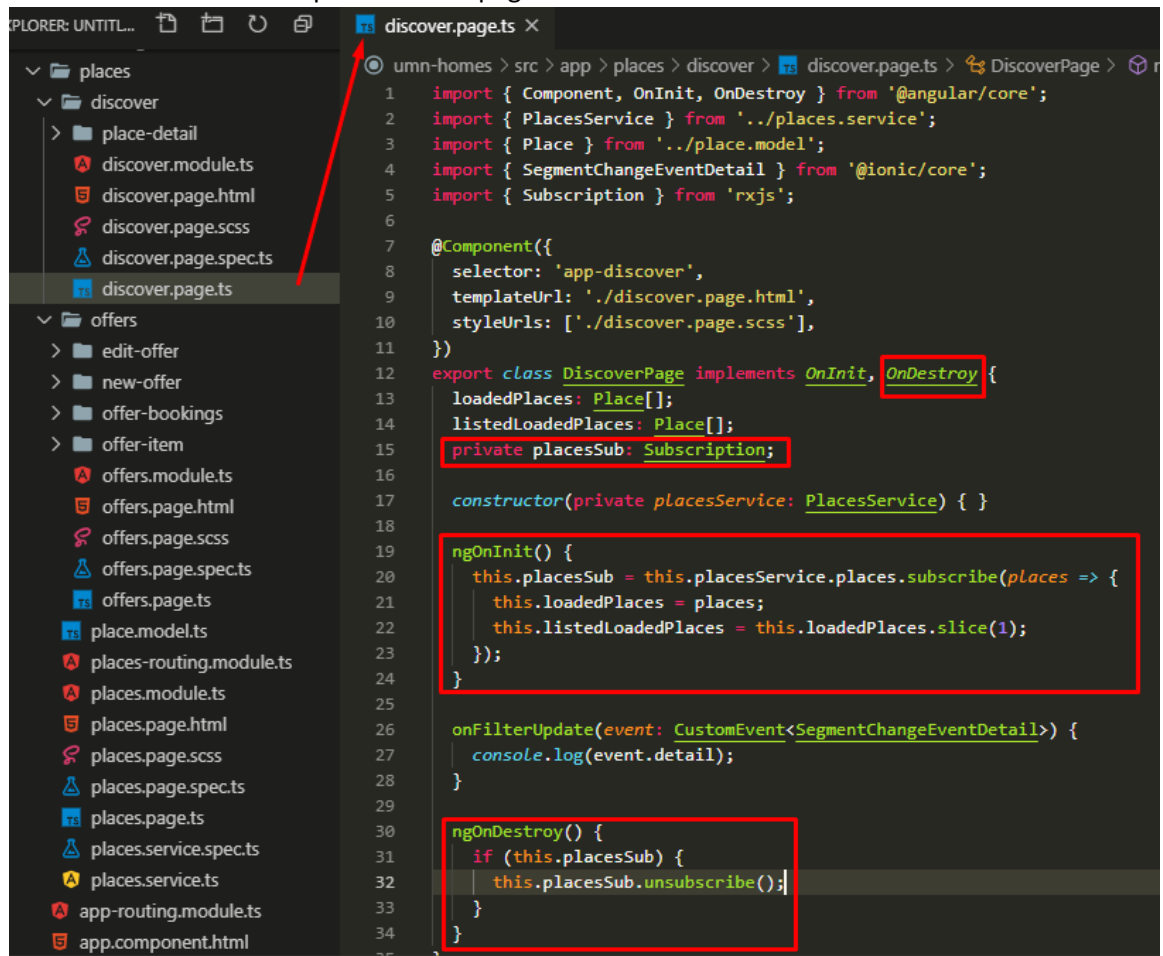
```
43  });
44
45  get_places() {
46    return this._places.asObservable();
47  }
48
49  constructor(private authService: AuthService) { }
50
51  getPlace(id: string){
52    return this.places.pipe(
53      take(1),
54      map(places => {
55        return {...places.find(p => p.id === id)};
56      })
57    );
58  }
59
60  addPlace(title: string, description: string, price: number, dateFrom: Date, dateTo: Date) {
61    const newPlace = new Place(
62      Math.random().toString(),
63      title,
64      description,
65      'https://static3.businessinsider.com/image/5681799ce6183e55008b526d-480/carme',
66      price,
67      dateFrom,
68      dateTo,
69      this.authService.userId
70    );
71
72    this.places.pipe(take(1)).subscribe(places => {
73      this._places.next(places.concat(newPlace));
74    });
75
76  }
```

4. Tambahkan kode berikut pada offers.page.ts



```
1  import { Component, OnInit, OnDestroy } from '@angular/core';
2  import { PlacesService } from '../places.service';
3  import { Place } from '../place.model';
4  import { IonItemSliding } from '@ionic/angular';
5  import { Router } from '@angular/router';
6  import { Subscription } from 'rxjs';
7
8  @Component({
9    selector: 'app-offers',
10    templateUrl: './offers.page.html',
11    styleUrls: ['./offers.page.scss'],
12  })
13  export class OffersPage implements OnInit, OnDestroy {
14    offers: Place[];
15    private placesSub: Subscription;
16
17    constructor(private placesService: PlacesService, private router: Router) { }
18
19    ngOnInit() {
20      this.placesSub = this.placesService.places.subscribe(places => {
21        this.offers = places;
22      });
23    }
24
25    onEdit(offerId: string, slidingItem: IonItemSliding) {
26      slidingItem.close();
27      this.router.navigate(['/', 'places', 'tabs', 'offers', 'edit', offerId]);
28      console.log('Editing item', offerId);
29    }
30
31    ngOnDestroy() {
32      this.placesSub.unsubscribe();
33    }
34  }
```

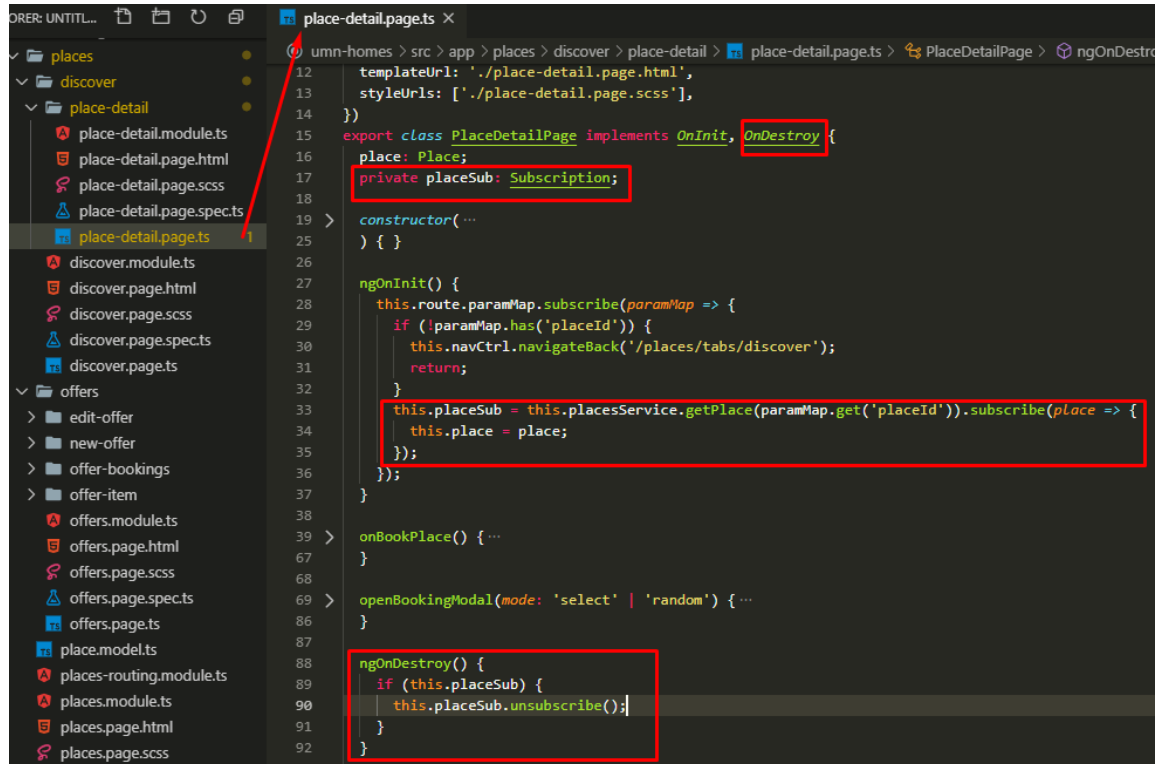
5. Tambahkan kode berikut pada discoverpage.ts



```
1 import { Component, OnInit, OnDestroy } from '@angular/core';
2 import { PlacesService } from '../places.service';
3 import { Place } from '../place.model';
4 import { SegmentChangeEventDetail } from '@ionic/core';
5 import { Subscription } from 'rxjs';
6
7 @Component({
8   selector: 'app-discover',
9   templateUrl: './discover.page.html',
10  styleUrls: ['./discover.page.scss'],
11 })
12 export class DiscoverPage implements OnInit, OnDestroy {
13   loadedPlaces: Place[];
14   listedLoadedPlaces: Place[];
15   private placesSub: Subscription;
16
17   constructor(private placesService: PlacesService) { }
18
19   ngOnInit() {
20     this.placesSub = this.placesService.places.subscribe(places => {
21       this.loadedPlaces = places;
22       this.listedLoadedPlaces = this.loadedPlaces.slice(1);
23     });
24   }
25
26   onFilterUpdate(event: CustomEvent<SegmentChangeEventDetail>) {
27     console.log(event.detail);
28   }
29
30   ngOnDestroy() {
31     if (this.placesSub) {
32       this.placesSub.unsubscribe();
33     }
34   }
35 }
```

6. Coba buka halaman Discover.

7. Tambahkan kode berikut pada place-detail-page.ts



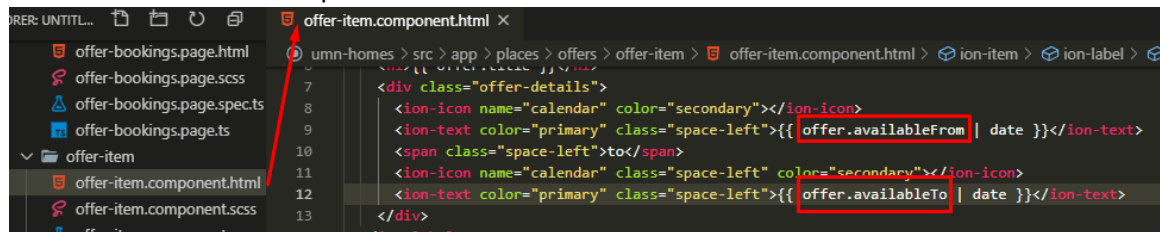
```
12 templateUrl: './place-detail.page.html',
13 styleUrls: ['./place-detail.page.scss'],
14 })
15 export class PlaceDetailPage implements OnInit, OnDestroy {
16   place: Place;
17   private placeSub: Subscription;
18
19   constructor(...
20 ) { }
21
22   ngOnInit() {
23     this.route.paramMap.subscribe(paramMap => {
24       if (!paramMap.has('placeId')) {
25         this.navCtrl.navigateBack('/places/tabs/discover');
26         return;
27       }
28       this.placeSub = this.placesService.getPlace(paramMap.get('placeId')).subscribe(place => {
29         this.place = place;
30       });
31     });
32   }
33
34   onBookPlace() { ...
35 }
36
37   openBookingModal(mode: 'select' | 'random') { ...
38 }
39
40   ngOnDestroy() {
41     if (this.placeSub) {
42       this.placeSub.unsubscribe();
43     }
44   }
45 }
```

8. Coba buka halaman place detail.

9. Modifikasi kode pada edit-offer.page.ts dan offer-bookings.page.ts menggunakan Subscription.

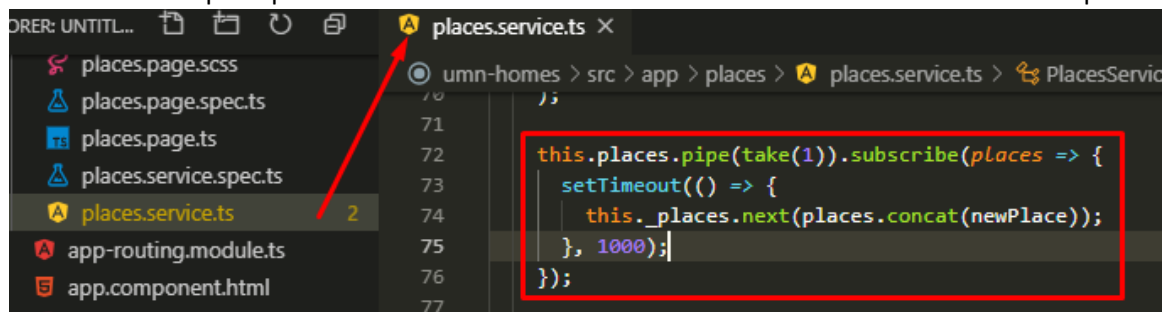
UI State

1. Modifikasi offer-item.component.html



```
7 <div class="offer-details">
8   <ion-icon name="calendar" color="secondary"></ion-icon>
9   <ion-text color="primary" class="space-left">{{ offer.availableFrom | date }}</ion-text>
10  <span class="space-left">to</span>
11  <ion-icon name="calendar" class="space-left" color="secondary"></ion-icon>
12  <ion-text color="primary" class="space-left">{{ offer.availableTo | date }}</ion-text>
13 </div>
```

2. Modifikasi kode pada places.service.ts untuk memberikan waktu tunda ketika menambah place



```
71 ;
72
73   this.places.pipe(take(1)).subscribe(places => {
74     setTimeout(() => {
75       this._places.next(places.concat(newPlace));
76     }, 1000);
77   });
```

To be continue...