

UI/UX Component Design

Customer v/s Consumer
=
Loyalty v/s Experience

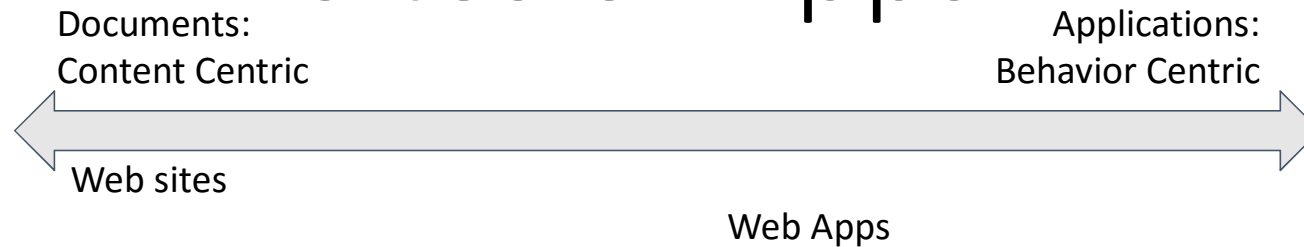
What Constitutes an Experience?

=> For the consumer

⇒ For the provider

Are these Related?

Sites or Apps?



Progressive Enhancements v/s Graceful Degradation

Is responsiveness the same?

Is everything an app?

Component Design

Key drivers

Modularity - Independent Evolution

Testability - Independently Testable

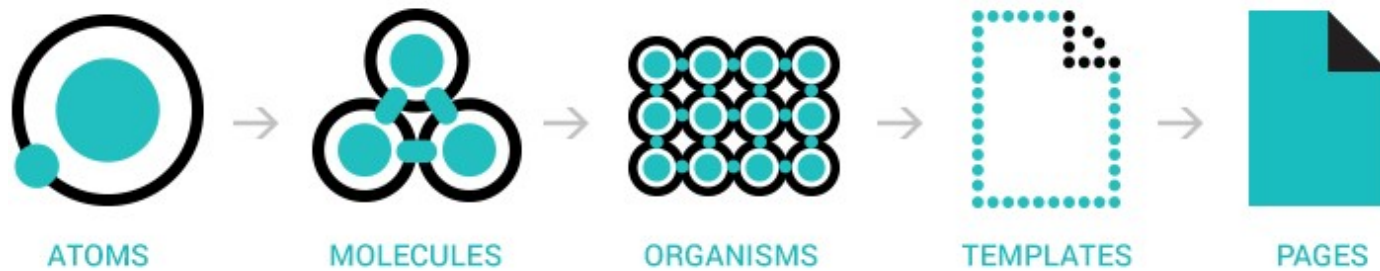
Reusability – Reusable across applications

Responsibility – Single Responsible Principle

Gather together those things that change for the same reason.
Separate those things that change for different reasons

Contentious issues: coupling, orchestration

Atomic Design



Atomic Design: Atom

Submit

☒ Radio1

☐ Radio2

☐ Radio3

Application Options

- ☒ Enable all
 - ☒ Enable feature ABC
 - ☒ Enable feature XYZ
 - ☒ Enable feature WWW

May 2017						
Su	Mo	Tu	We	Th	Fr	Sa
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

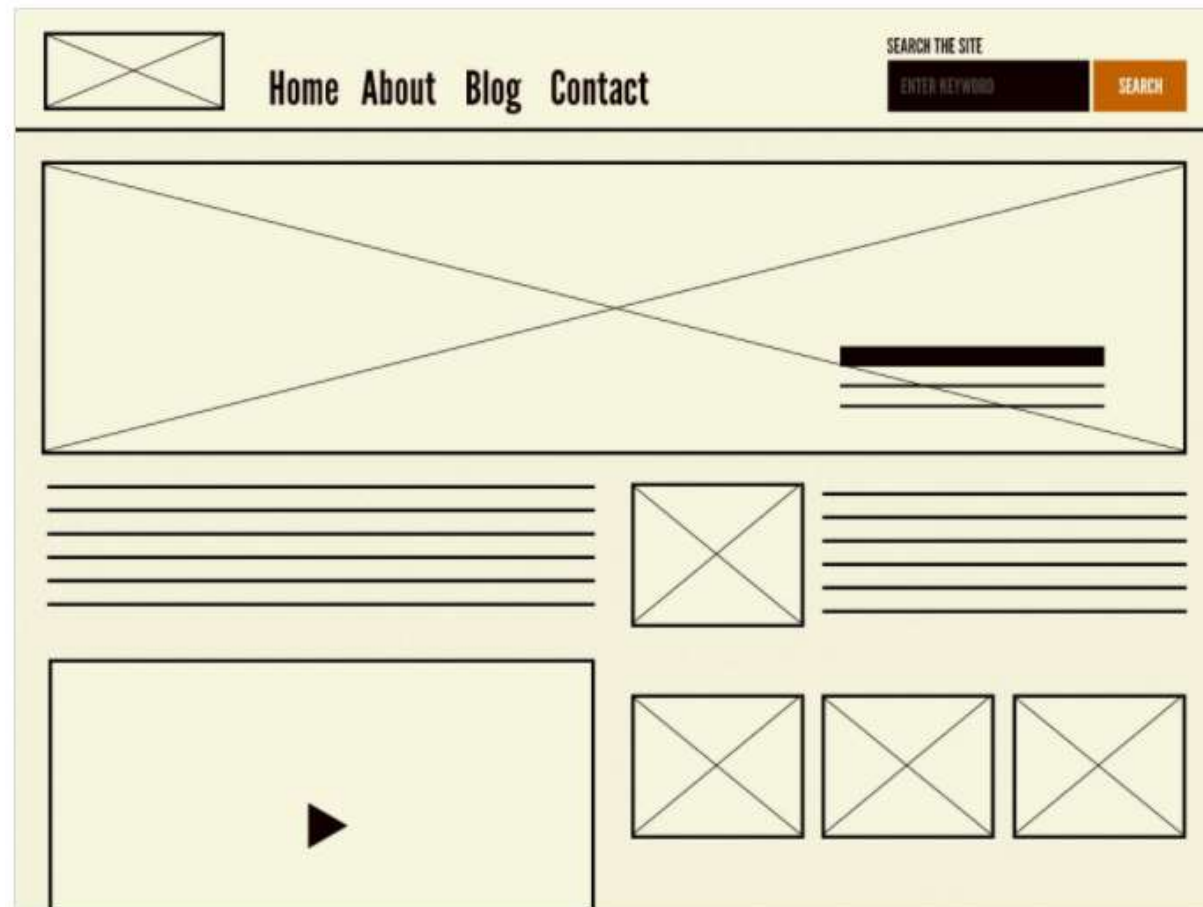
Atomic Design: Molecules



Atomic Design: Organism



Atomic Design: Template



Angular Component Design

Smart Components vs Presentational Components

Would this presentation logic be useful elsewhere in the application?

Would it be useful to split things up further?

Are we creating unintended tight couplings in the application?

Angular Component Design

```
@Component({
  selector: 'app-home',
  template: `
    <h2>All Lessons</h2>
    <h4>Total Lessons: {{lessons?.length}}</h4>
    <div class="lessons-list-container v-h-center-block-parent">
      <table class="table lessons-list card card-strong">
        <tbody>
          <tr *ngFor="let lesson of lessons" (click)="selectLesson(lesson)">
            <td class="lesson-title"> {{lesson.description}} </td>
            <td class="duration">
              <i class="md-icon duration-icon">access_time</i>
              <span>{{lesson.duration}}</span>
            </td>
          </tr>
        </tbody>
      </table>
    </div>
  `,
  styleUrls: ['./home.component.css']
})
export class HomeComponent implements OnInit {

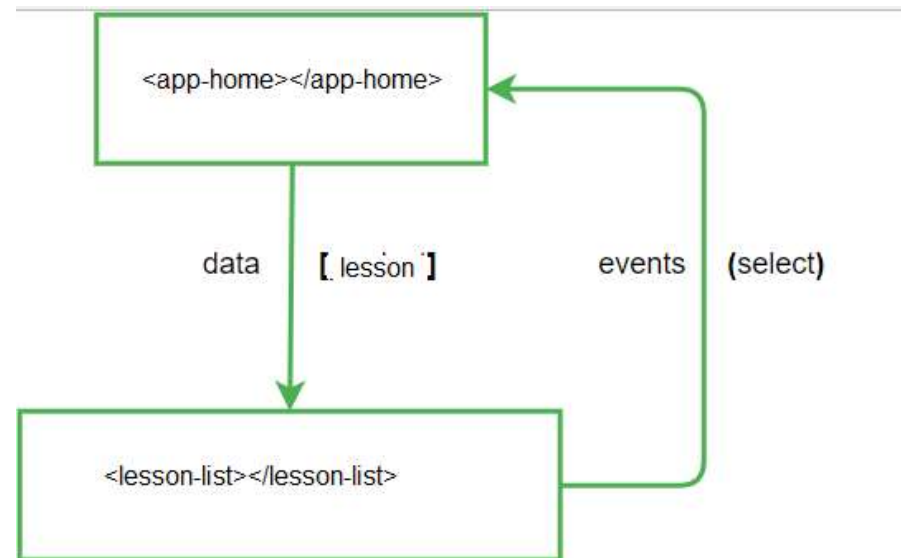
  lessons: Lesson[];

  constructor(private lessonsService: LessonsService) {
  }

  ngOnInit() {
    this.lessonsService.findAllLessons()
      .do(console.log)
      .subscribe(
        lessons => this.allLessons = lessons
      );
  }

  selectLesson(lesson) {
    ...
  }
}
```

Angular Component Design



Angular Component Design

```
import {Component, OnInit, Input, EventEmitter, Output} from '@angular/core';
import {Lesson} from "../shared/model/lesson";
```

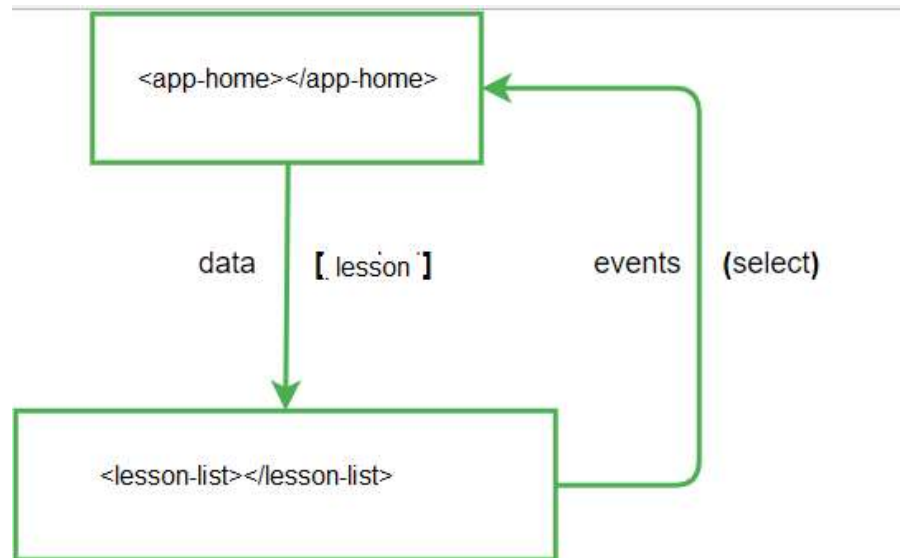
```
@Component({
  selector: 'lessons-list',
  template: `
    <table class="table lessons-list card card-strong">
      <tbody>
        <tr *ngFor="let lesson of lessons" (click)="selectLesson(lesson)">
          <td class="lesson-title"> {{lesson.description}} </td>
          <td class="duration">
            <i class="md-icon duration-icon">access_time</i>
            <span>{{lesson.duration}}</span>
          </td>
        </tr>
      </tbody>
    </table>
  `,
  styleUrls: ['./lessons-list.component.css']
})
export class LessonsListComponent {

  @Input()
  lessons: Lesson[];

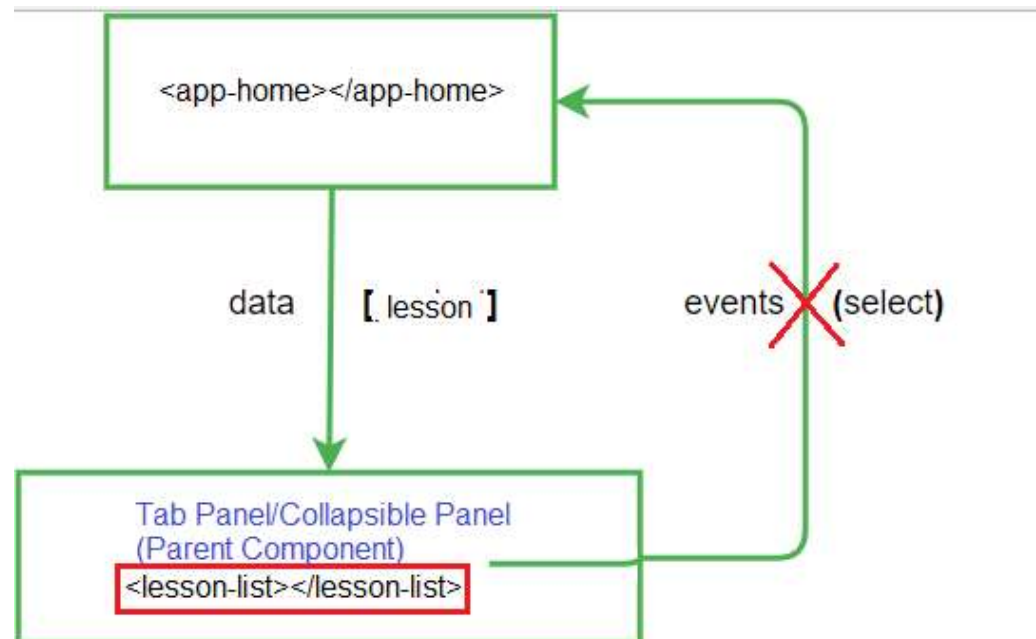
  @Output('lesson')
  lessonEmitter = new EventEmitter<Lesson>();

  selectLesson(lesson: Lesson) {
    this.lessonEmitter.emit(lesson);
  }
}
```

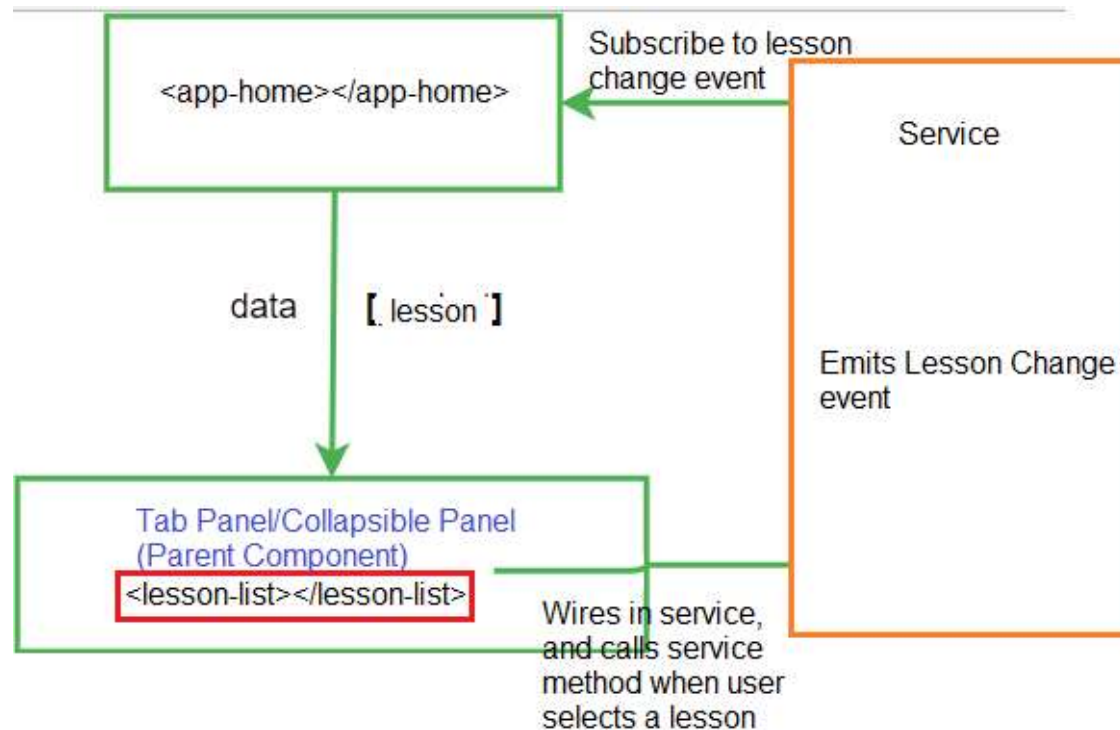
Angular Component Design



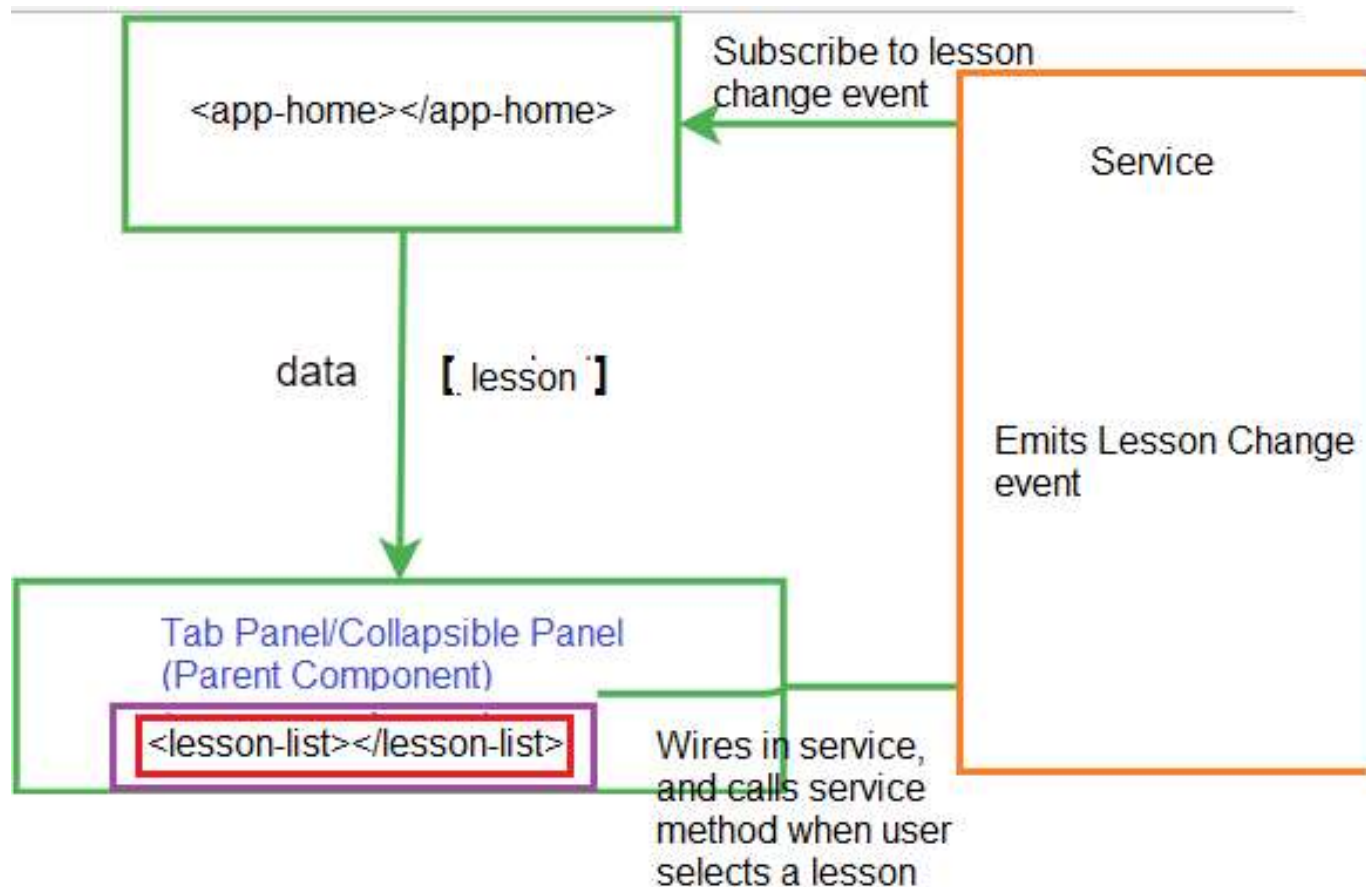
Angular Component Design



Angular Component Design



Angular Component Design



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