



基于 VMware Clarity 构建 Web 应用

Clarity Design System

Inspiring builders to create better experiences



UX guidelines



HTML / CSS



Sketch
template & library



Angular
components

Clarity - Inspiring builders to create better experiences

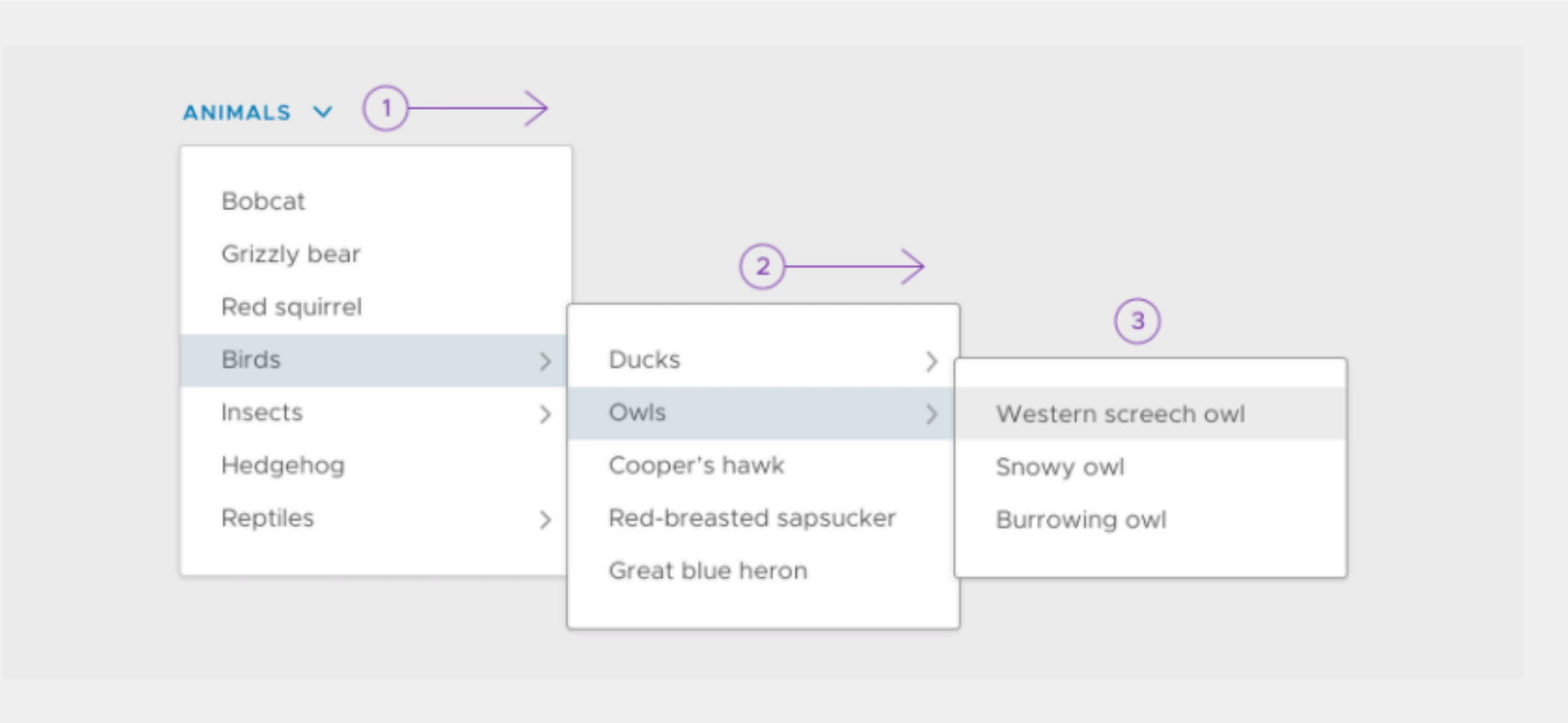
Design Guidelines

Code & Examples

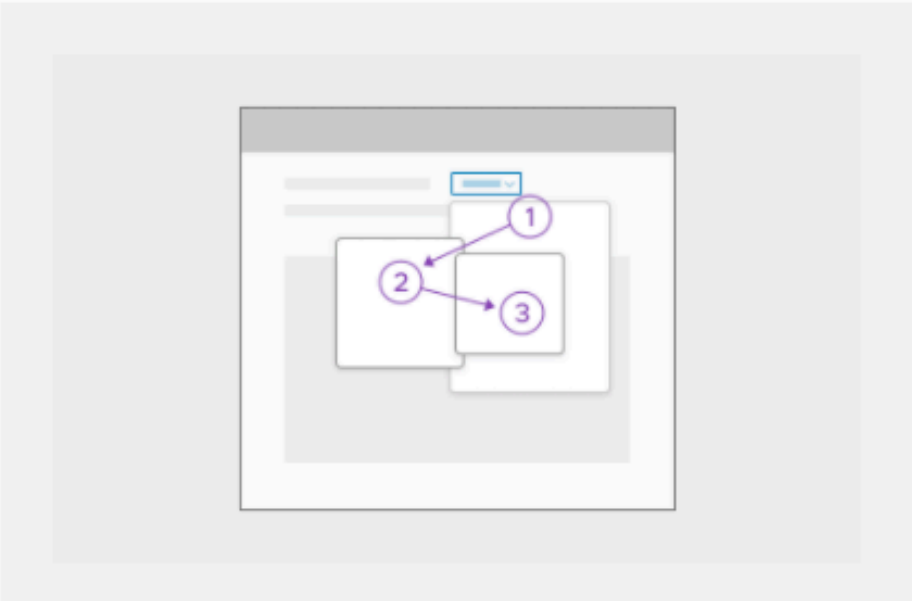
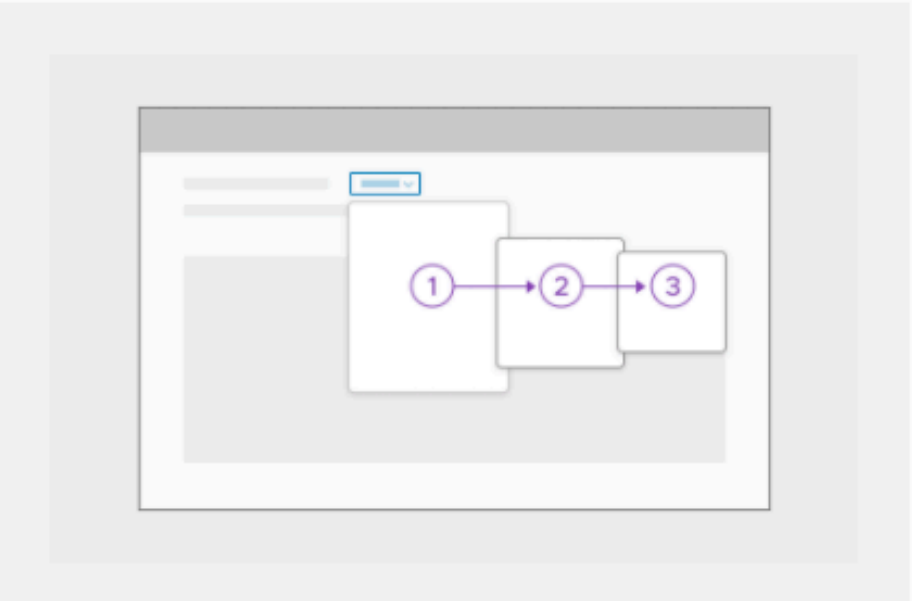
Dropdowns

Interaction

- With mouse: Click group name to reveal nested menus. Group name stays in selected state to serve as a breadcrumb
- Clicking outside of the menu dismisses all menus



Placement



Design Guidelines

TYPOGRAPHY

Metropolis: Light, Regular, Medium, Semi Bold

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Paragraph 1

Paragraph 2

Paragraph 3

Paragraph 4

Paragraph 5

Paragraph 6

Paragraph 7

Paragraph 8

Link

Link

BASE COLORS

000000

h1-4, form labels

007CBB

action blue

313131

h6, p2

E62700

action red

565656

body text, h5, form value

62A420

action green

D9E4EA

row selection

Note: additional colors are available within this file's Document Colors

BUTTONS

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

ACTION

FORMS

☐ Checkbox label

☒ Checkbox label

☐ Radio label

☒ Radio label

☐ Toggle

☒ Toggle

Input value

Select option

Select option

Textarea: Can you imagine what we will be downloading in another twenty years? Who would have ever thought that you could record sound with digital quality fifty years ago? Now we routinely download whole albums worth of music in a couple of minutes.

NAVIGATION

Project Clarity

Header Nav 1

Header Nav 2

Header Nav 3

Search

Settings

Subnav

Subnav

Subnav

Subnav

Link

Link

Link

Link

Link

Link

Link

Link

Link

Link

Link

Link

Link

SPINNERS

DATAGRID

Header 1	Header 2	Header 3	Header 4
Cell 1,1	Cell 1,2	Cell 1,3	Cell 1,4
Cell 2,1	Cell 2,2	Cell 2,3	Cell 2,4
100 - 120 of 280 items			
< 1 ... 4 5 6 ... 14 >			

TABLE

Header 1	Header 2	Header 3	Header 4
Cell 1,1	Cell 1,2	Cell 1,3	Cell 1,4
Cell 2,1	Cell 2,2	Cell 2,3	Cell 2,4

CARD

Card Title

Message: Can you imagine what we will be downloading in another twenty years? Who would have ever thought that you could record sound with digital quality fifty years ago? Now we routinely download whole albums worth of music in a couple of minutes.

ACTION ACTION

DROPDOWNS

Option

Option

Option

Option

Option

Option

Header

Option

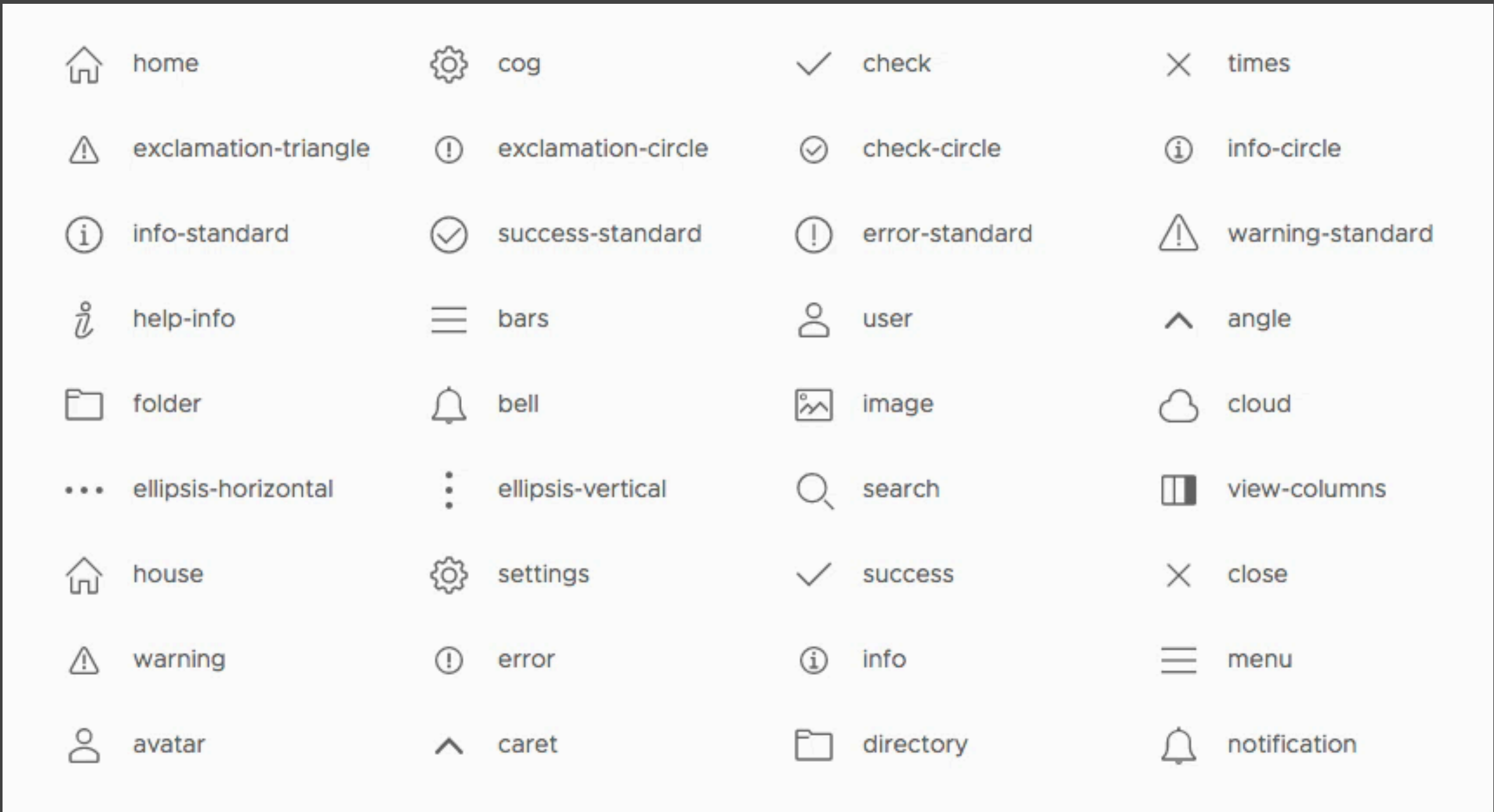
Option

Option

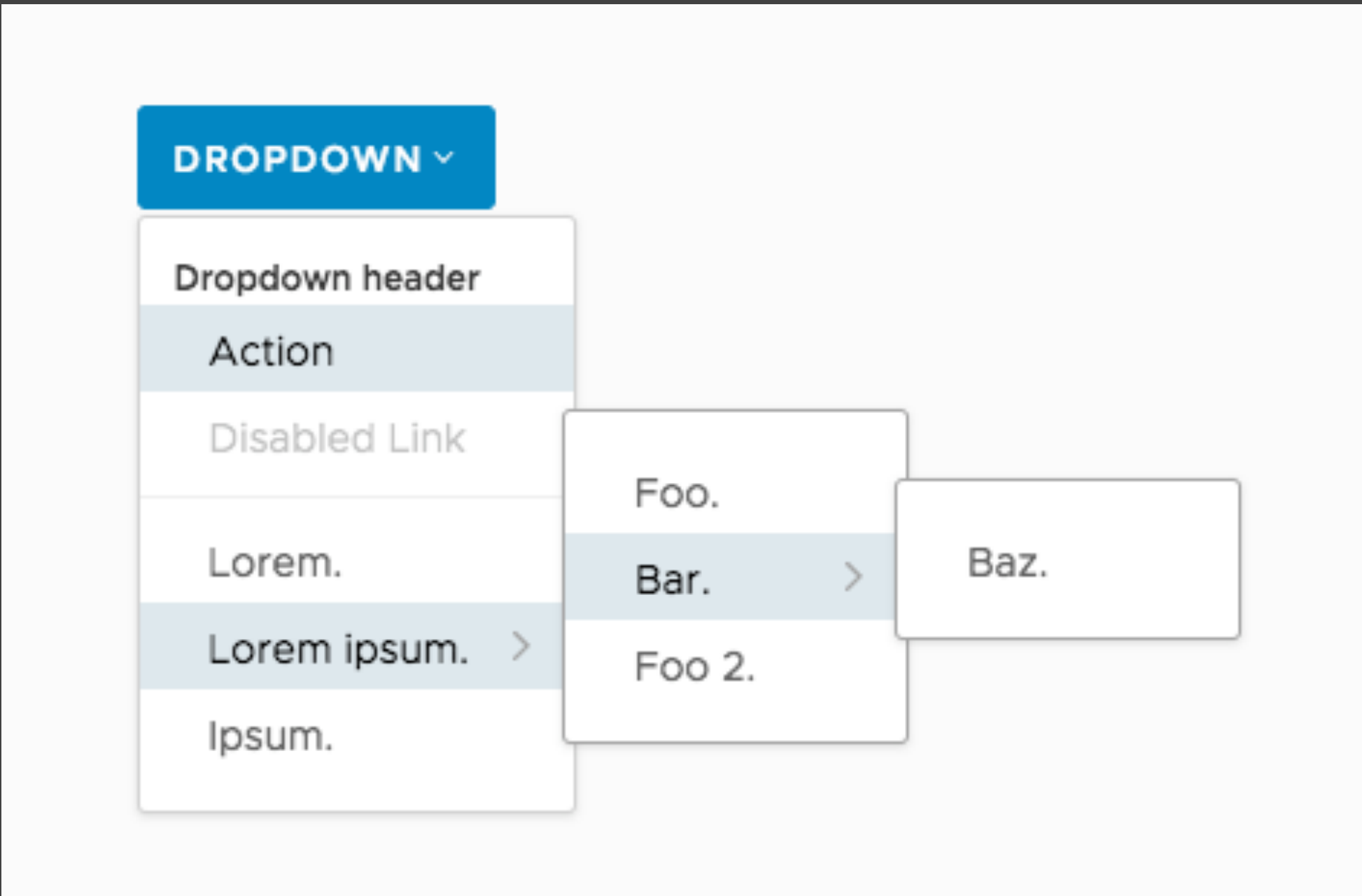
Option

Sketch Library

Clarity - Inspiring builders to create better experiences



SVG Icons



Components

Clarity Components

Inspiring builders to create better experiences

Alert	Grid	Sidenav
Badge	Header	Signposts
Button	Input	Spinner
Button Group	Label	Stack View
Card	List	Table
Checkbox	Login	Tab
Theming	Modal	Textarea
Date Picker	Password	Toggle Switch
Datagrid	Progress Bars	Tooltip
Dropdown	Radio Buttons	Tree View
Form	Select	Wizard

Clarity's Open Source Journey

Since November 15th 2016...

4200+

Stars on GitHub

1000+

Pull Requests

200+

Releases

4,000,000+

Page Views

195+

Countries

174+

Languages

Engage with Us!



<http://clarity.design>



<https://github.com/vmware/clarity>

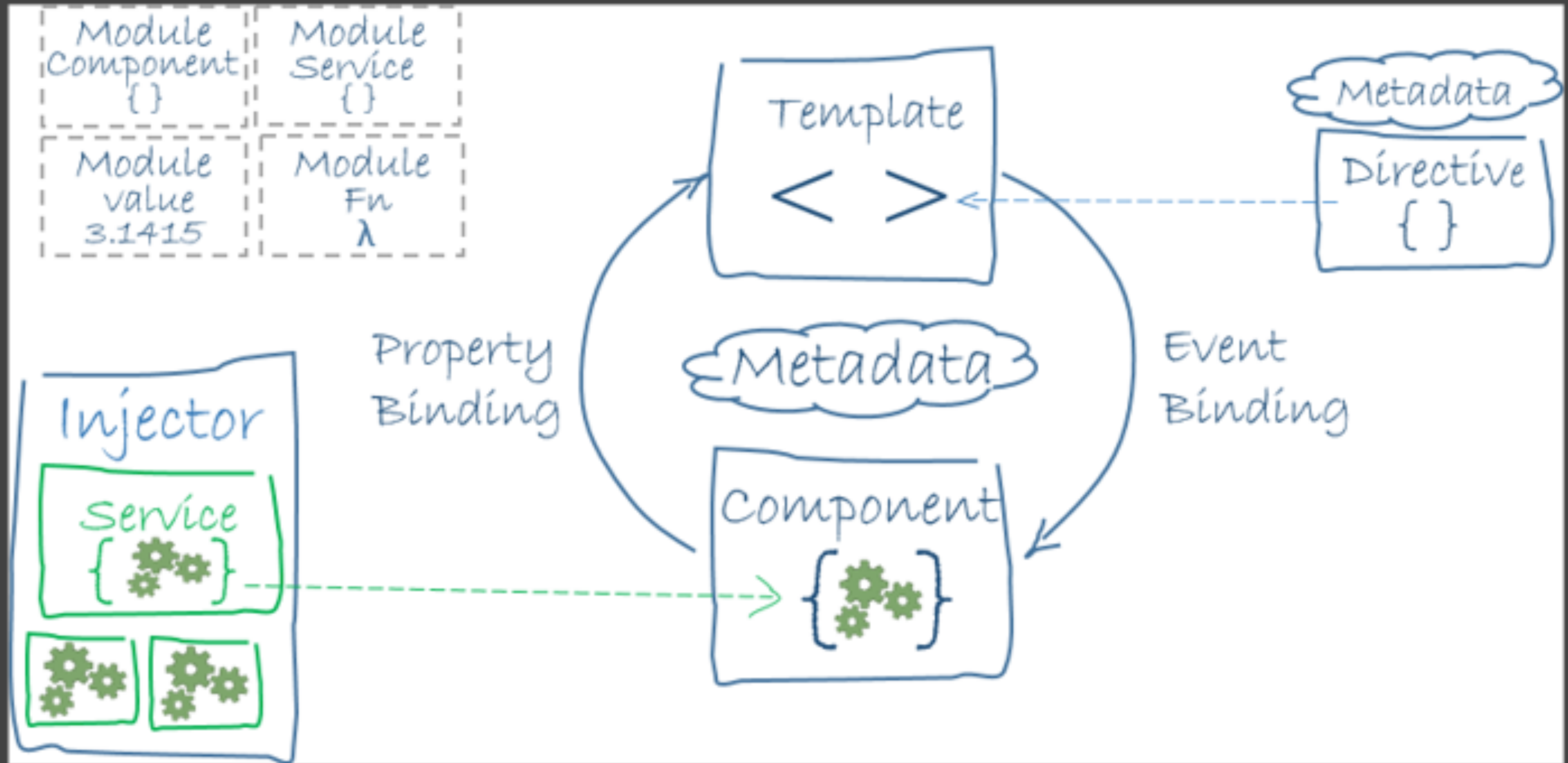


Sketch Demo




Hands-on workshop


Angular in a nutshell




(image source: <https://angular.io/docs/ts/latest/guide/architecture.html>)


Hands-on: Using Star Wars API with Clarity

 Star Wars



 People

 Planets



Pick your Star Wars captain

	Name	Birth Year 	Gender
<input type="radio"/>	Luke Skywalker	19BBY	male
<input type="radio"/>	C-3PO	112BBY	n/a
<input type="radio"/>	R2-D2	33BBY	n/a
<input type="radio"/>	Darth Vader	41.9BBY	male
<input type="radio"/>	Leia Organa	19BBY	female
<input type="radio"/>	Owen Lars	52BBY	male
<input type="radio"/>	Beru Whitesun lars	47BBY	female
<input checked="" type="radio"/>	R5-D4	unknown	n/a
<input type="radio"/>	Biggs Darklighter	24BBY	male
<input type="radio"/>	Obi-Wan Kenobi	57BBY	male

1 - 10 of 87 people




1 / 9





You've selected

R5-D4

R5-D4 has no starships. May be difficult to get around. 

- Height: 97
- Mass: 32
- Hair Color: n/a
- Eye Color: red

 0 vehicles

 0 starships

Hands-on: Using Star Wars API with Clarity

- Go to: <https://stackblitz.com/edit/ng-china-2018>
- Click on **FORK** on top navigation



Setting up the page

- A **grid** provides a structure of rows and columns for aligning content
- Clarity uses a 12-column, responsive grid
- Replace the content of [people.component.html](#) with the following:

```
<div class="clr-row">  
  <div class="clr-col-sm-12 clr-col-md-8">  
    <span>span 1</span>  
  </div>  
  <div class="clr-col-sm-12 clr-col-md-4">  
    <span>span 2</span>  
  </div>  
</div>
```

Adding a datagrid

- Add the following to the first column div in `people.component.html`:

```
<h3>Pick your Star Wars captain</h3>
<clr-datagrid>
  <clr-dg-column>User ID</clr-dg-column>
  <clr-dg-column>Name</clr-dg-column>

  <clr-dg-row *ngFor="let user of users">
    <clr-dg-cell>{{user.id}}</clr-dg-cell>
    <clr-dg-cell>{{user.name}}</clr-dg-cell>
  </clr-dg-row>

  <clr-dg-footer>{{users.length}} users</clr-dg-footer>
</clr-datagrid>
```

- Define users in `people.component.ts`:
 `users = [{ id: 1, name: "Alice" }, { id: 2, name: "Bob" }];`

Fetching data through a service

- We'll be using The Star Wars API to fetch data: <https://swapi.co/>

```
# generating a new service  
ng generate service people
```

```
# use Angular's Http module to call this API in people.service.ts
```

```
import { Injectable } from "@angular/core";  
import { Http } from "@angular/http";  
import "rxjs/add/operator/map";
```

```
@Injectable()
```

```
export class PeopleService {  
  constructor(private http: Http) { }
```

```
  get(page: number = 1) {  
    let restUrl = `https://swapi.co/api/people/?page=${page}`;  
    return this.http.get(restUrl).map(data => data.json());  
  }  
}
```

Consuming our service in the component

- In `people.component.ts`:

```
import { PeopleService } from "../people.service";

@Component({
  ...
  providers: [PeopleService]
})
export class HomeComponent {
  currentPage = 1;
  users = [];

  constructor(private peopleService: PeopleService) {
    this.peopleService.get(this.currentPage).subscribe( data => {
      this.users = data.results;
    });
  }
}
```


Populating datagrid

- Modify `people.component.html` to display data from the service call:

```
<clr-datagrid>
  <clr-dg-column>Name</clr-dg-column>
  <clr-dg-column>Birth Year</clr-dg-column>
  <clr-dg-column>Gender</clr-dg-column>

  <clr-dg-row *ngFor="let user of users">
    <clr-dg-cell>{{user.name}}</clr-dg-cell>
    <clr-dg-cell>{{user.birth_year}}</clr-dg-cell>
    <clr-dg-cell>{{user.gender}}</clr-dg-cell>
  </clr-dg-row>

  <clr-dg-footer>{{users.length}} people</clr-dg-footer>
</clr-datagrid>
```

Adding pagination - footer

- Modify the footer in `people.component.html`:

```
<clr-dg-footer>
  {{pg.firstItem + 1}} - {{pg.lastItem + 1}} of {{pg.totalItems}} people
  <clr-dg-pagination #pg [(clrDgPage)]="currentPage"
    [clrDgPageSize]="10" [clrDgTotalItems]="total">
  </clr-dg-pagination>
</clr-dg-footer>
```

- Define total in `people.component.ts`:

```
...
total = 0;

constructor(private peopleService: PeopleService) {
  this.peopleService.get(this.currentPage).subscribe( data => {
    ...
    this.total = data.count;
  });
}
```

Fetching data for another page - template

- Add datagrid's properties in `people.component.html`:

```
<clr-datagrid
  (clrDgRefresh)="refresh($event)" [clrDgLoading]="loading">
  ...
  <clr-dg-row *ngFor="let user of users">
    <clr-dg-cell>{{person.name}}</clr-dg-cell>
    ...
  </clr-dg-row>
  ...
</clr-datagrid>
```

Data direction	Syntax
data source (class) to view target (html)	{{expression}} or [target]="expression"
view target (html) to data source (class)	(target)="statement"
Two-way	[(target)]="expression"

Fetching data for another page - component

- Define variables and refresh function in `people.component.ts`:

```
import { ClrDatagridStateInterface } from "@clr/angular";

export class HomeComponent {
  ...
  selected;
  loading = true;

  constructor(private peopleService: PeopleService) {}

  refresh(state: ClrDatagridStateInterface) {
    this.loading = true;
    this.peopleService.get(this.currentPage).subscribe( data => {
      ...
      this.loading = false;
    });
  }
}
```

Enabling selection

- Add datagrid's properties for selection in `people.component.html`:

```
<clr-datagrid [(clrDgSingleSelected)]="selected"  
  (clrDgRefresh)="refresh($event)" [clrDgLoading]="loading">  
  ...  
  <clr-dg-row *ngFor="let user of users" [clrDgItem]="user">  
    ...  
  </clr-dg-row>  
  ...  
</clr-datagrid>
```

Displaying selection (1)

- Add a card to the other column in `people.component.html`:

```
<ng-container *ngIf="selected">
  <h3>You've selected</h3>
  <div class="card">
    <div class="card-header">
      {{selected.name}}
    </div>
    <div class="card-block">
      ...
    </div>
    <div class="card-footer">
      ...
    </div>
  </div>
</ng-container>
```

Displaying selection (2)

- Fill out card-block with data in `people.component.html`:

```
<div class="card">
  ...
  <div class="card-block">
    <ul>
      <li>Height: {{selected.height}}</li>
      <li>Mass: {{selected.mass}}</li>
      <li>Hair Color: {{selected.hair_color}}</li>
      <li>Eye Color: {{selected.eye_color}}</li>
    </ul>
  </div>
  ...
</div>
```


Displaying selection (3)

- Fill out card-block with data in [people.component.html](#):

```
<div class="card">
  ...
  <div class="card-footer">
    <div class="clr-row">
      <div class="clr-col-6">
        <clr-icon shape="car"></clr-icon>
        {{selected.vehicles.length}} vehicles
      </div>
      <div class="clr-col-6">
        <clr-icon shape="plane"></clr-icon>
        {{selected.starships.length}} starships
      </div>
    </div>
  </div>
</div>
```


Extra - adding an alert inside the card

```
<div class="card-block">
  <clr-alert *ngIf="selected.starships.length == 0"
    [clrAlertSizeSmall]="true" [clrAlertType]="'warning'">
    <div class="alert-item">
      <span class="alert-text">
        {{selected.name}} has no starships. May be difficult to get around.
      </span>
    </div>
  </clr-alert>
  ...
</div>
```

The Final Product

Star Wars

People

Planets

Pick your Star Wars captain

	Name	Birth Year ⓘ	Gender
<input type="radio"/>	Luke Skywalker	19BBY	male
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<input type="radio"/>	R2-D2	33BBY	n/a
<input type="radio"/>	Darth Vader	41.9BBY	male
<input type="radio"/>	Leia Organa	19BBY	female
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<input type="radio"/>	Beru Whitesun lars	47BBY	female
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1 - 10 of 87 people

<<

<

1

>

>>

You've selected

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R5-D4 has no starships. May be difficult to get around.

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0 vehicles

0 starships

Thank You!

Q&A