



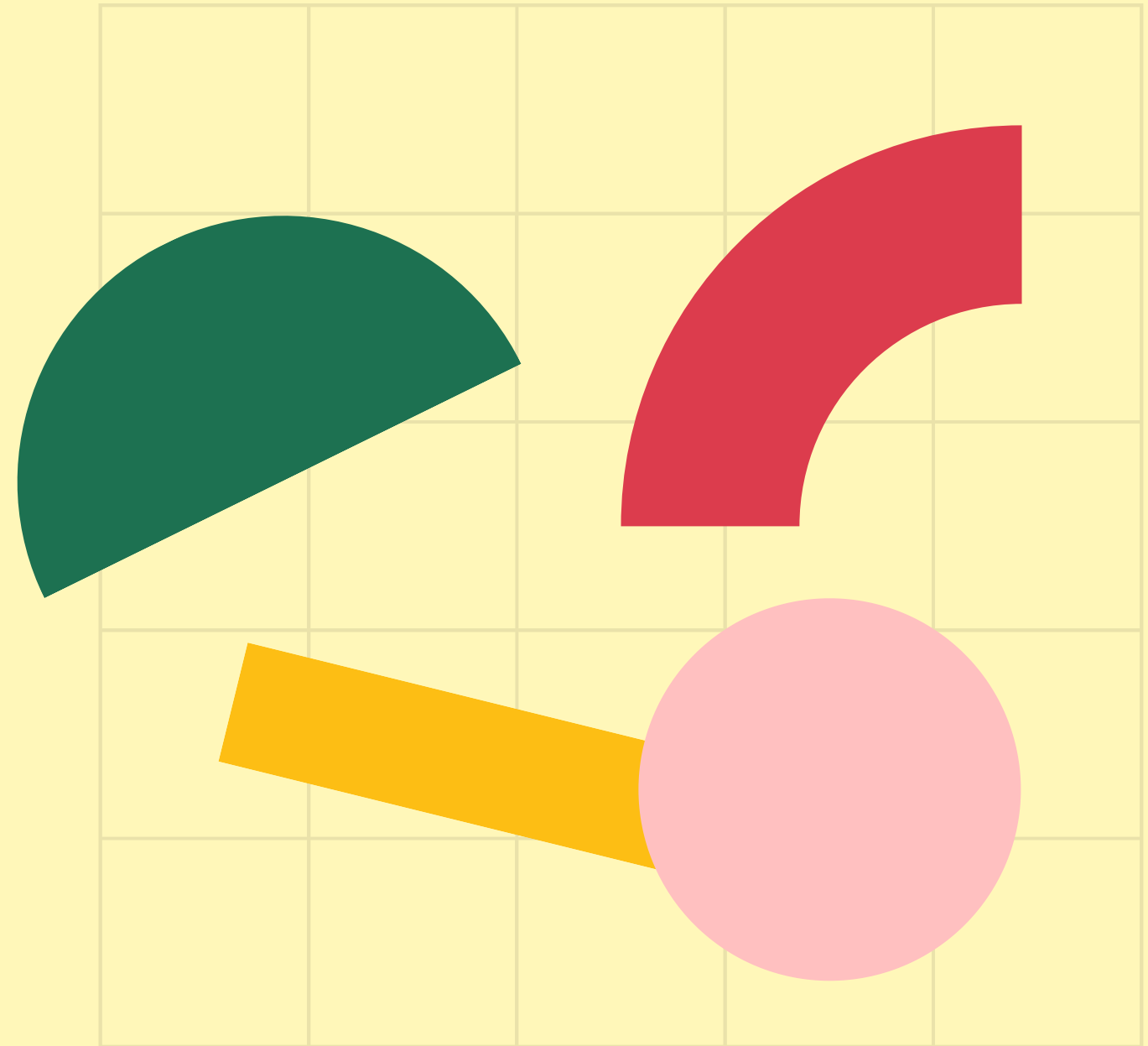
JS Objects

Our Second Data Structure

Unit Goals

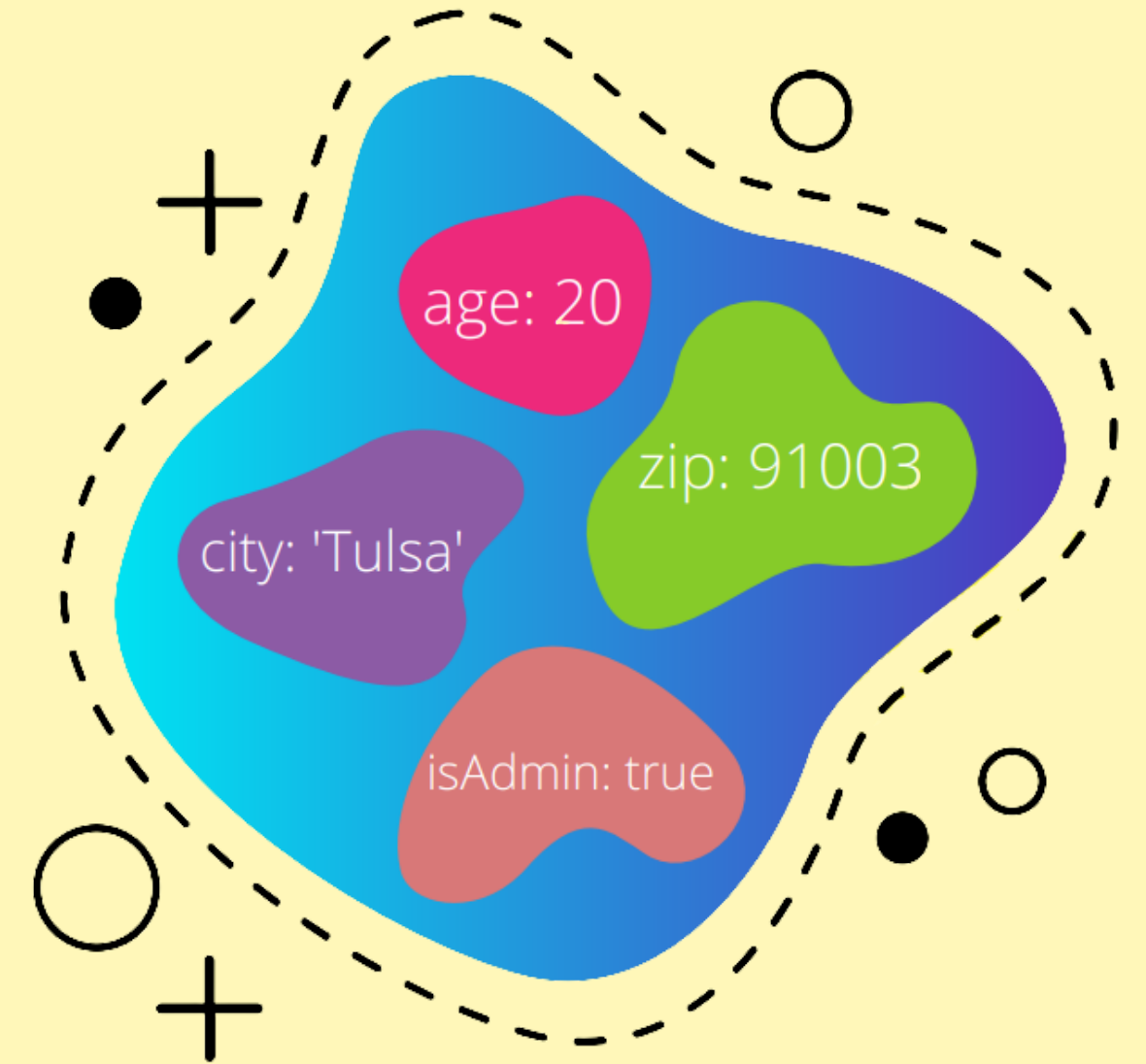
what we'll cover

- what objects are
- accessing object data
- updating and adding properties

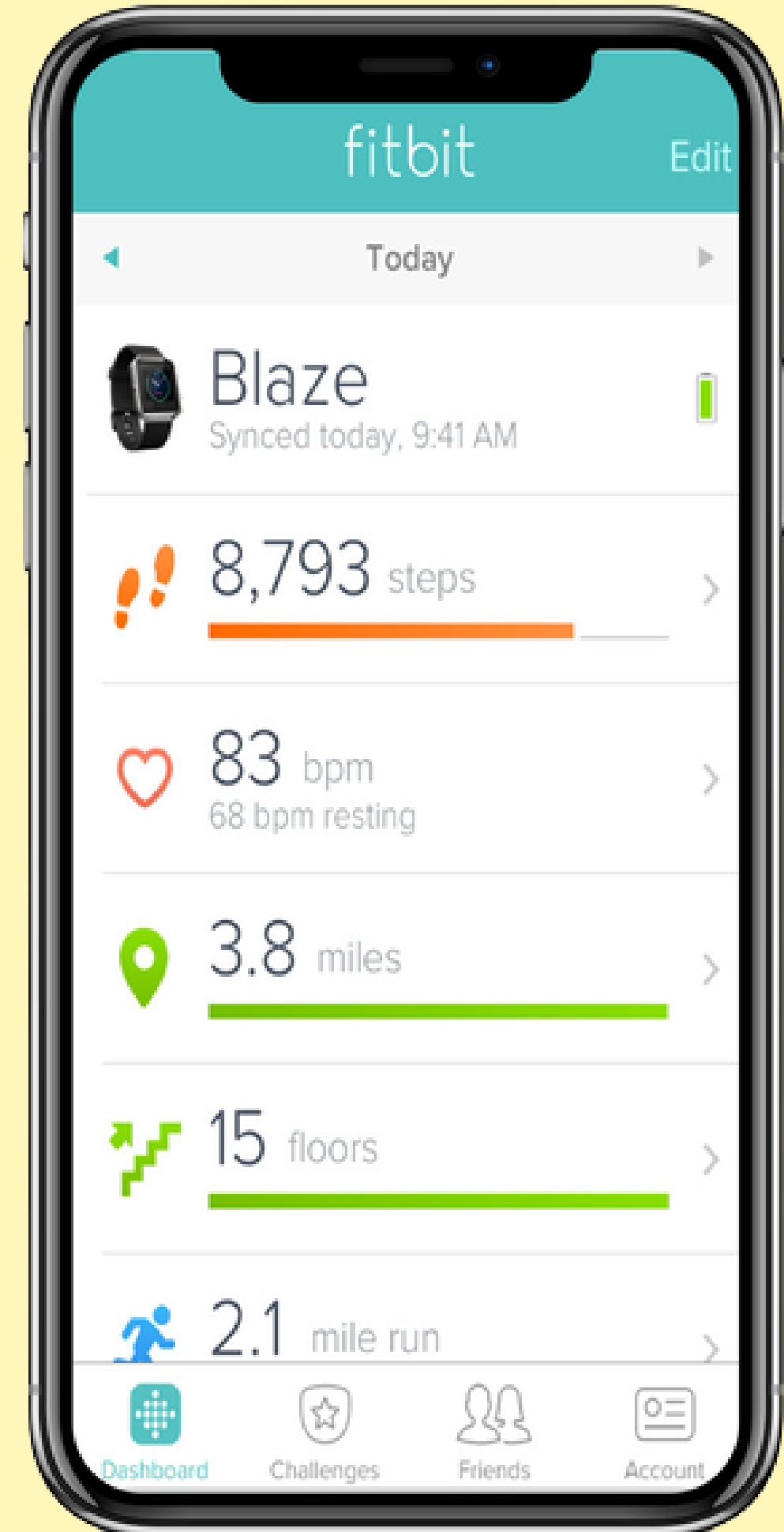


OBJECTS


- Objects are collections of **properties**.
- Properties are a key-value pair.
- Rather than accessing data using an index, we use custom keys



HOW WOULD YOU STORE THIS?



USING AN OBJECT



```
const fitBitData = {  
  totalSteps      : 308727,  
  totalMiles      : 211.7,  
  avgCalorieBurn  : 5755,  
  workoutsThisWeek : '5 of 7',  
  avgGoodSleep    : '2:13'  
};
```

PROPERTY = KEY + VALUE



+



KEY - VALUE PAIRS



```
username: "TomCat"  
upvotes: 7  
text: "great post!"
```

DICTIONARY

ALL TYPES WELCOME



```
let comment = {  
  username      : 'sillyGoose420',  
  downVotes     : 19,  
  upVotes       : 214,  
  netScore      : 195,  
  commentText   : 'Tastes like chicken lol',  
  tags: ['#hilarious', '#funny', '#silly'],  
  isGilded: false  
};
```


VALID KEYS

ALL KEYS ARE
CONVERTED TO
STRINGS*



*Except for symbols, which we haven't covered yet.

ACCESSING DATA



```
const palette = {  
  red: '#eb4d4b',  
  yellow: '#f9ca24',  
  blue: '#30336b'  
}
```



```
palette.red //"#eb4d4b"
```



```
palette['blue'] //"#30336b"
```



```
let color = 'yellow';  
palette[color] //"#f9ca24"
```

UPDATING AND ADDING PROPERTIES

```
const fitBitData = {  
  totalSteps      : 308727,  
  totalMiles      : 211.7,  
  avgCalorieBurn  : 5755,  
  workoutsThisWeek : '5 of 7',  
  avgGoodSleep    : '2:13'  
};  
//Updating properties:  
fitBitData.workoutsThisWeek = '6 of 7';  
fitBitData.totalMiles += 7.5;  
  
//Adding a new property  
fitBitData.heartStillBeating = true;
```

ARRAYS + OBJECTS

```
const shoppingCart = [  
  {  
    product: 'Jenga Classic',  
    price: 6.88,  
    quantity: 1,  
  },  
  {  
    product: 'Echo Dot',  
    price: 29.99,  
    quantity: 3,  
  },  
  {  
    product: 'Fire Stick',  
    price: 39.99,  
    quantity: 2,  
  },  
]
```

```
const student = {  
  firstName: 'David',  
  lastName: 'Jones',  
  strengths: ['Music', 'Art'],  
  exams: {  
    midterm: 92,  
    final: 88,  
  },  
}
```