

Referenced / Normalized Data Set

Two-Way Referencing

Many:Many Relationship

room bookings collection

```
{
  "id": 1,
  "title": "Civic Center Views from a Contemporary City Pad",
  "reservations": [
    {
      "userId": "1159",
      "userResId": 23
    },
    {
      "userId": "1159",
      "userResId": 24
    },
    {
      "userId": "2385",
      "userResId": 40
    }
  ]
}
```

app

user's reservations collection

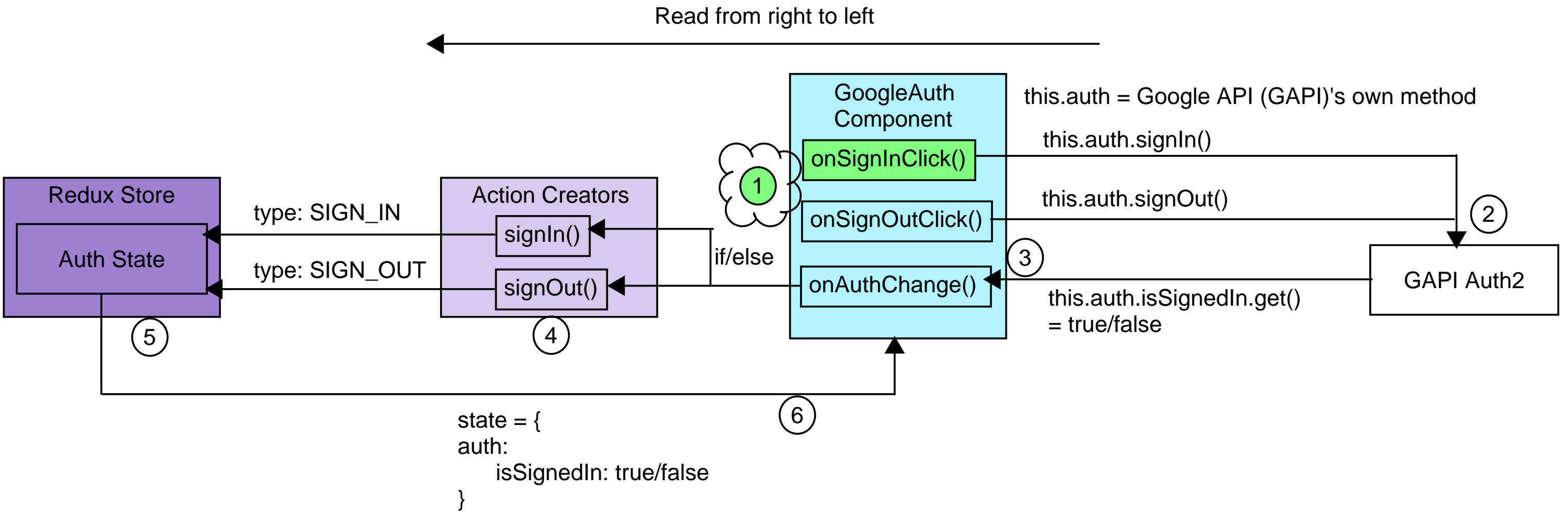
```
{
  "id": 40,
  "bookingId": 1,
  "startDate": "June 20th 2020",
  "endDate": "June 26th 2020",
  "userId": "2385" // from Google Auth
}
```

log

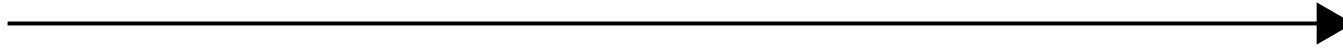
```
{
  "id": 23,
  "bookingId": 1,
  "startDate": "June 10th 2020",
  "endDate": "June 13th 2020",
  "userId": "1159" // from Google Auth
},
{
  "id": 24,
  "bookingId": 1,
  "startDate": "July 1st 2020",
  "endDate": "August 17th 2020",
  "userId": "1159" // from Google Auth
},
}
```

log

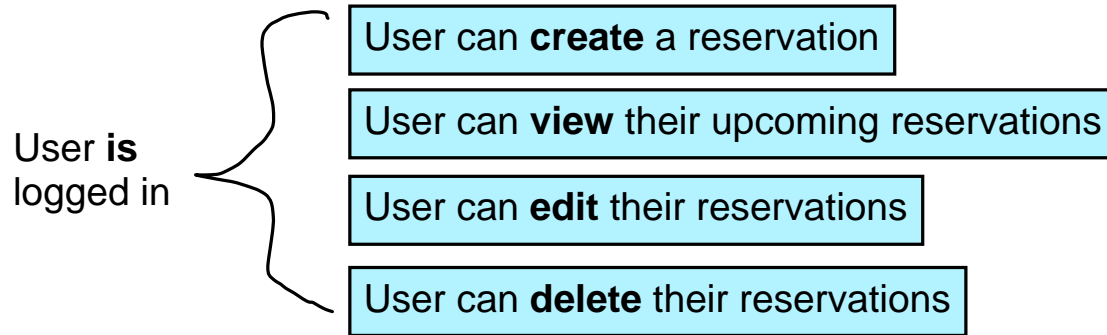
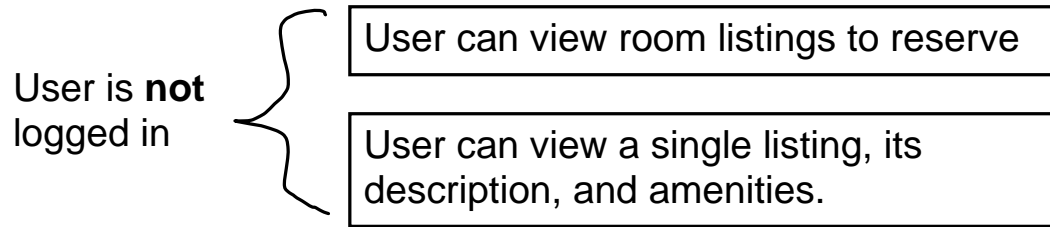
log



Read from left to right



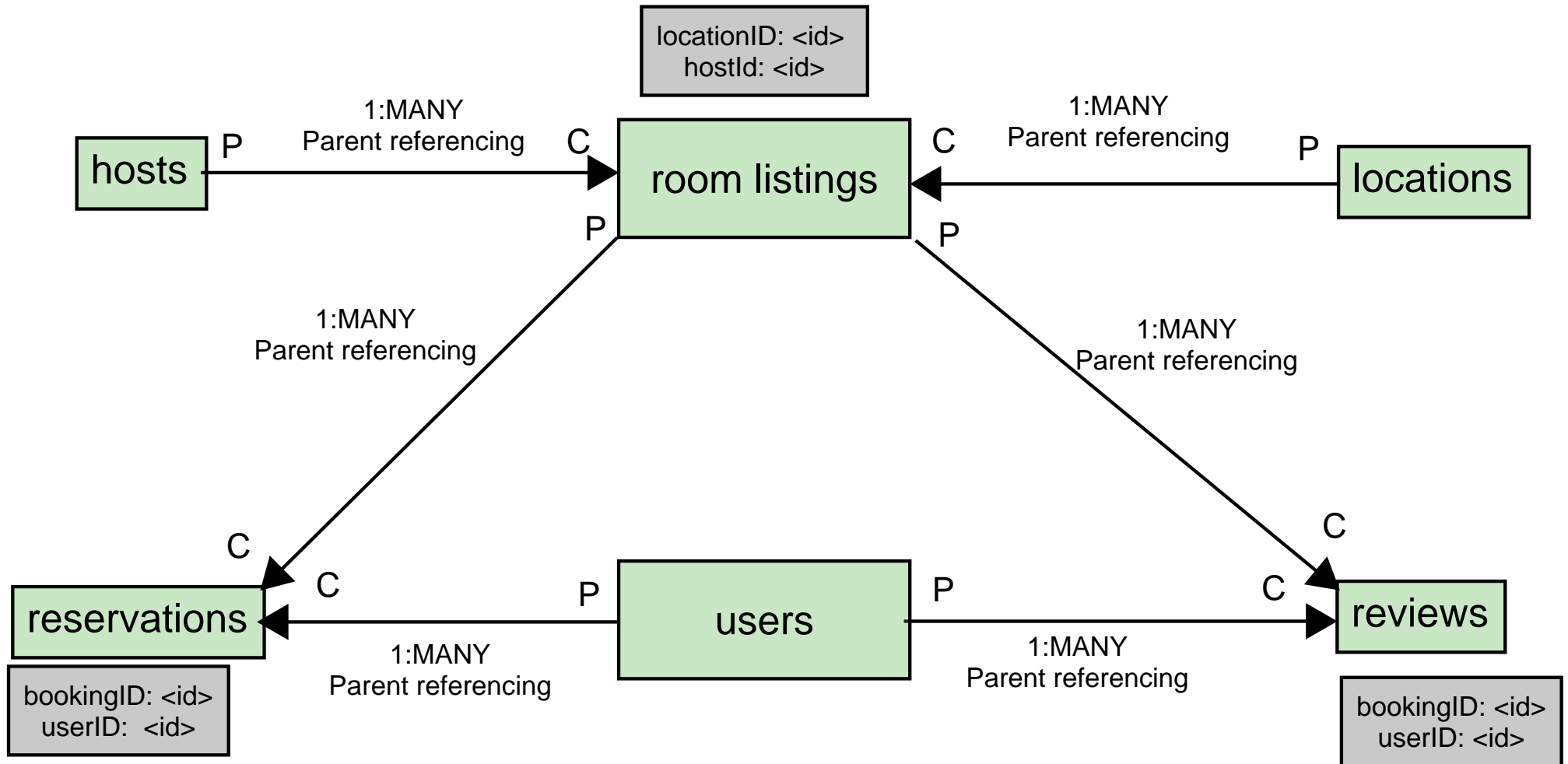
Action	Method	Route	Response
List of all bookings	GET	/roomListing	Array of bookings
Get one booking	GET	/booking/:id	Single booking
Create a reservation	POST	/user	Single reservation
Update a reservation	PUT	/user/:id	Single reservation
Delete a reservation	DELETE	/user/:id	Nothing



bookingReducer = [room, room, room]

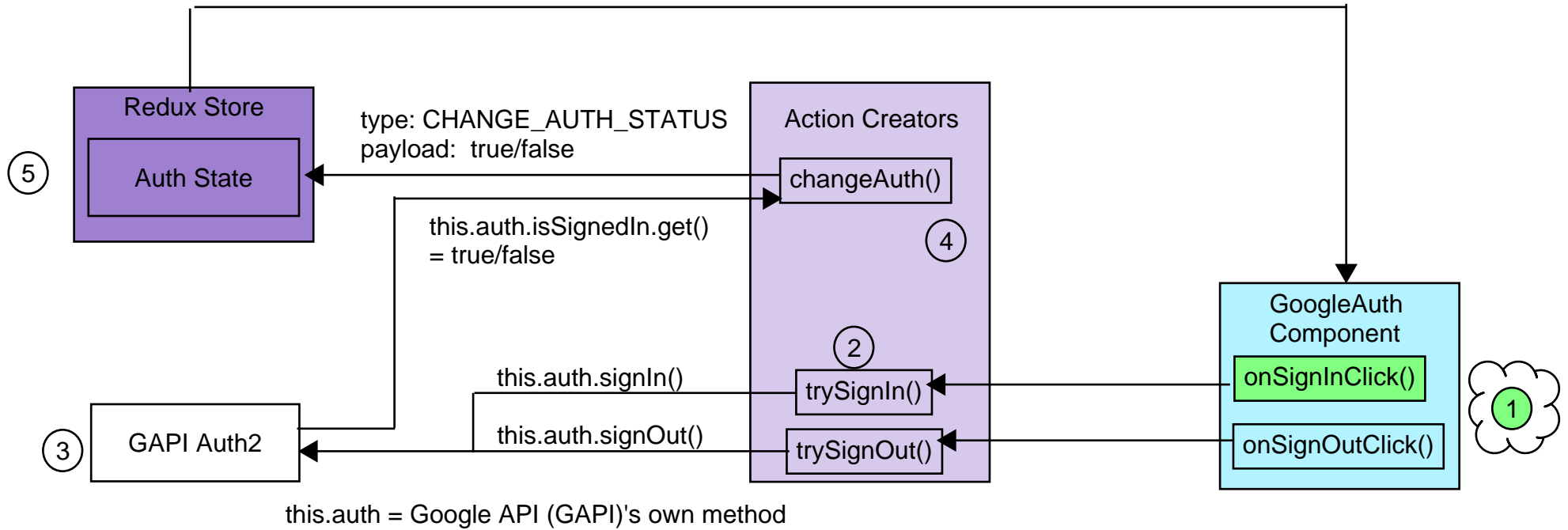
```
bookingReducer = {  
  1: room with ID 1  
  2: room with ID 2  
  9: room with ID 9  
}
```

mock-airbnb Data Model



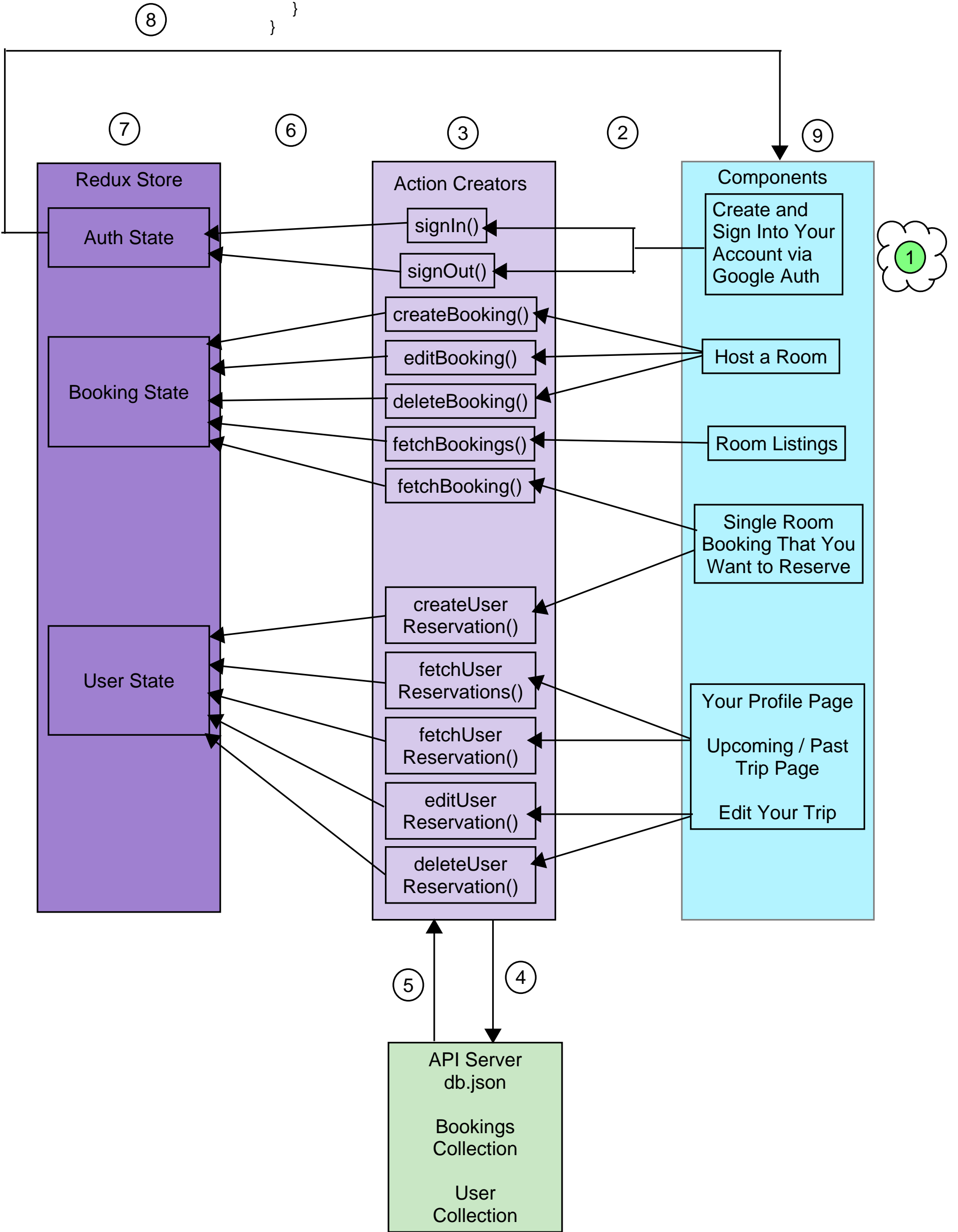
Read from right to left

```
state = {  
  auth: {  
    isSignedIn: true/false  
  }  
}
```



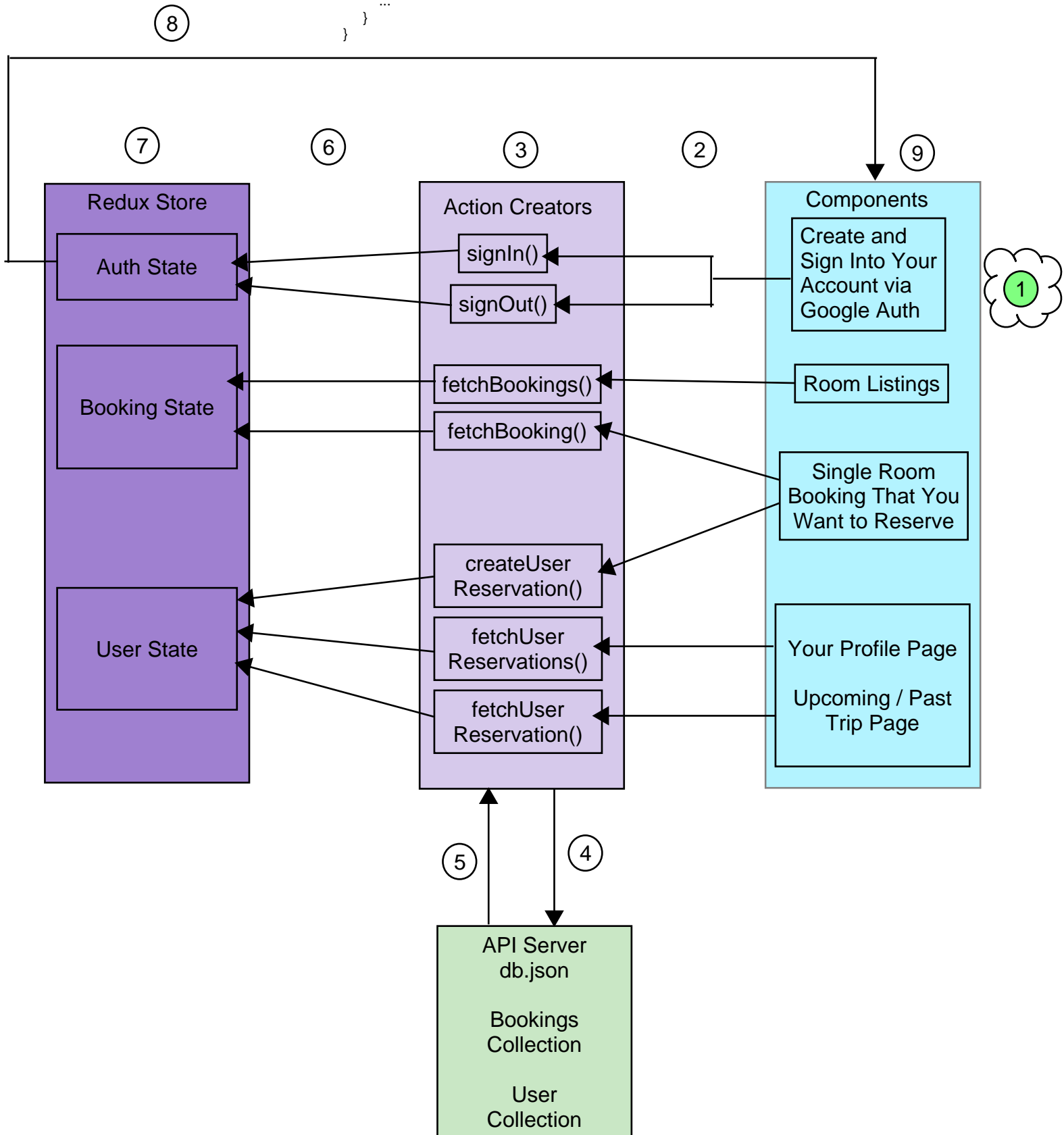
Read from right to left

```
state = {
  auth: {isSignedIn, userProfile},
  bookings: {
    1: {"title": ...},
    2: {"title": ...},
    ...
  },
  userReservations: {
    "reservation": {"bookingId": 1, ...},
    "reservation": {"bookingId": 2, ...},
    ...
  }
}
```



Read from right to left

```
state = {  
  auth: {isSignedIn, userProfile},  
  bookings: {  
    1: {"title": ...},  
    ...  
  },  
  userReservations: {  
    "reservation": {"bookingId": 1, ...},  
    ...  
  }  
}
```



- User is **not** logged in

User can view room listings to reserve

User can view a single listing, its description, and amenities.
- User is logged in

User can **create** a reservation

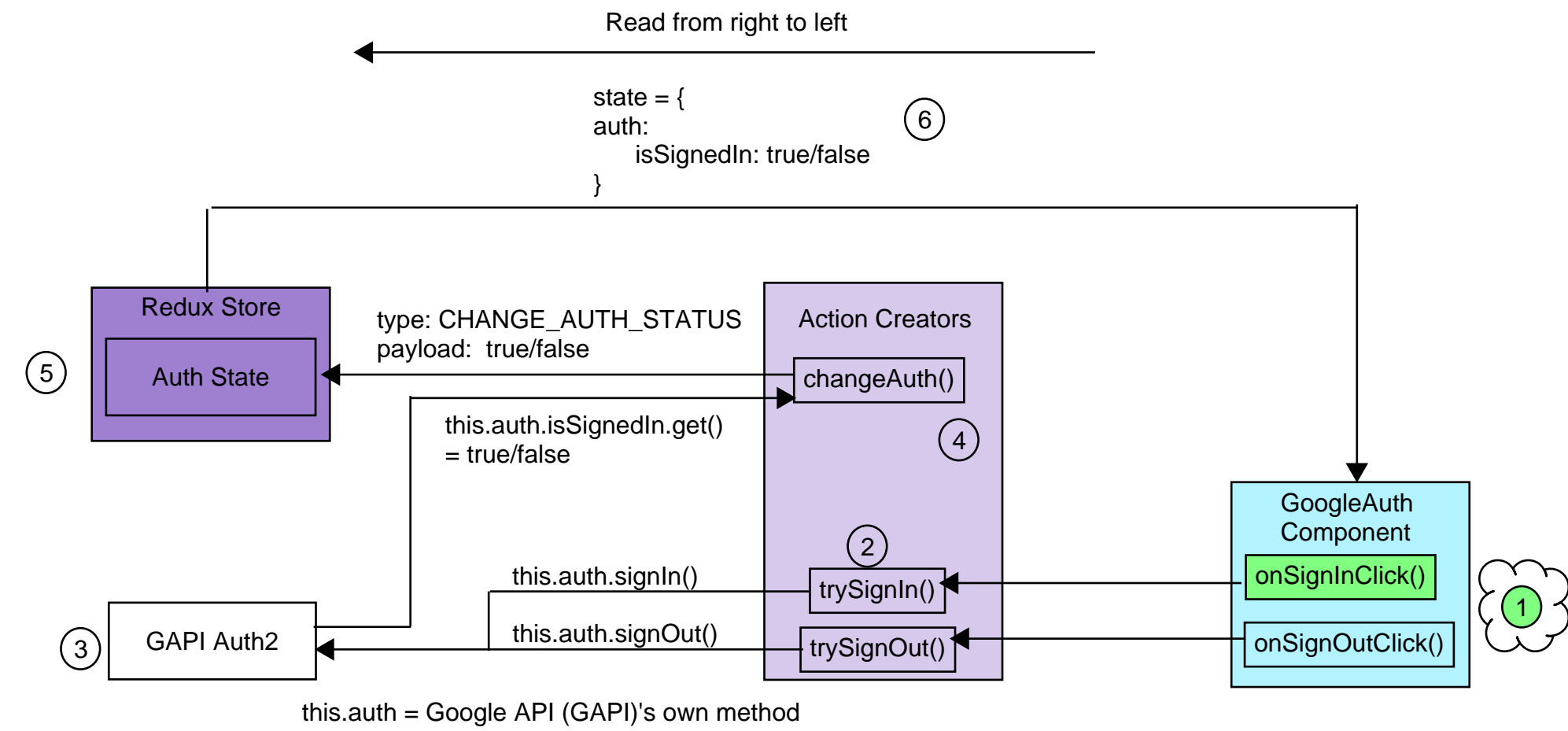
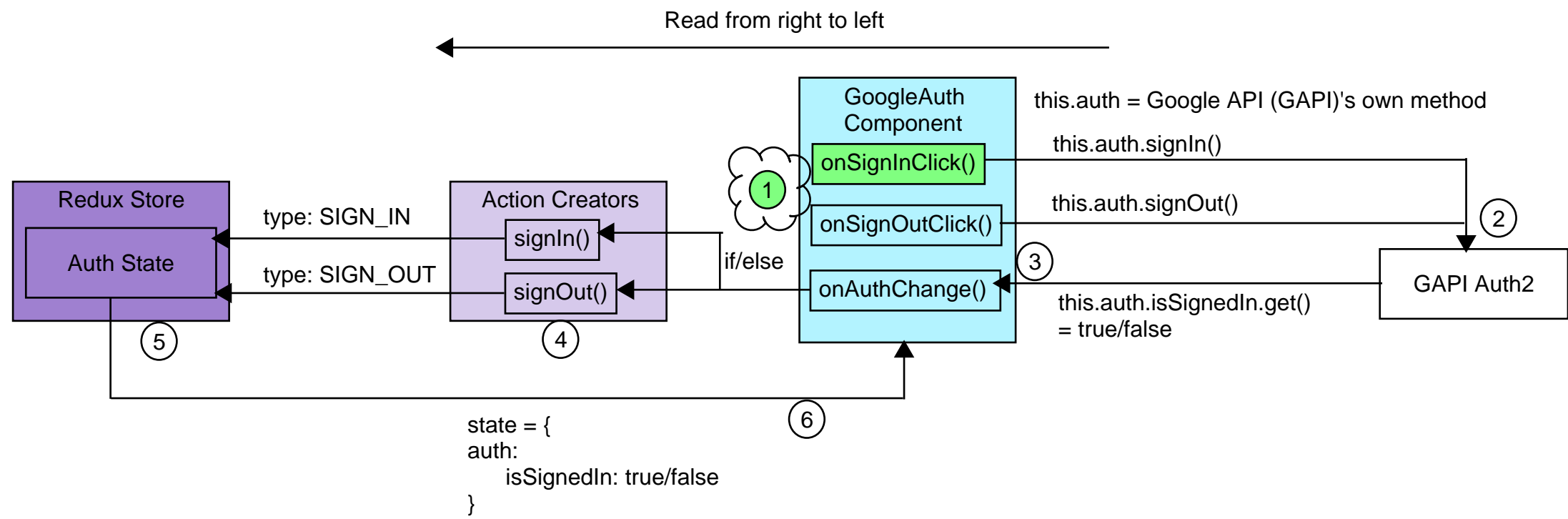
User can **view** their upcoming reservations

User can **edit** their reservations

User can **delete** their reservations

```
bookingReducer = {
  1: room with ID 1
  2: room with ID 2
  9: room with ID 9
}
```

bookingReducer = [room, room, room]



Read from left to right

Action	Method	Route	Response
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Delete a reservation	DELETE	/user/:id	Nothing

reviews, host, location, and reservations are being embedded in the room listings in order to build the project on small scale but if I were to scale the project larger, then this is what needs to happen on the data side

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Many:Many Relationship

room bookings collection

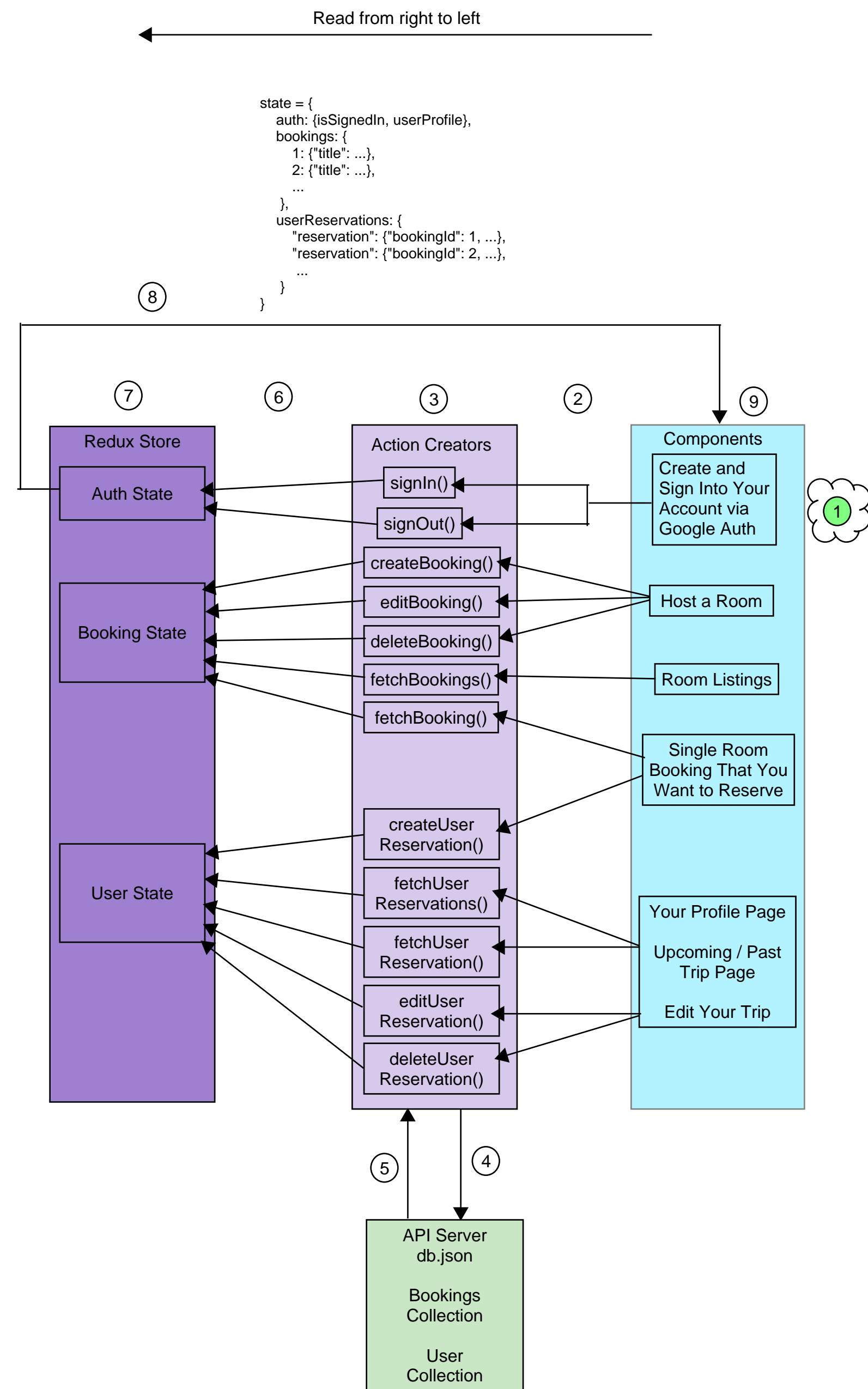
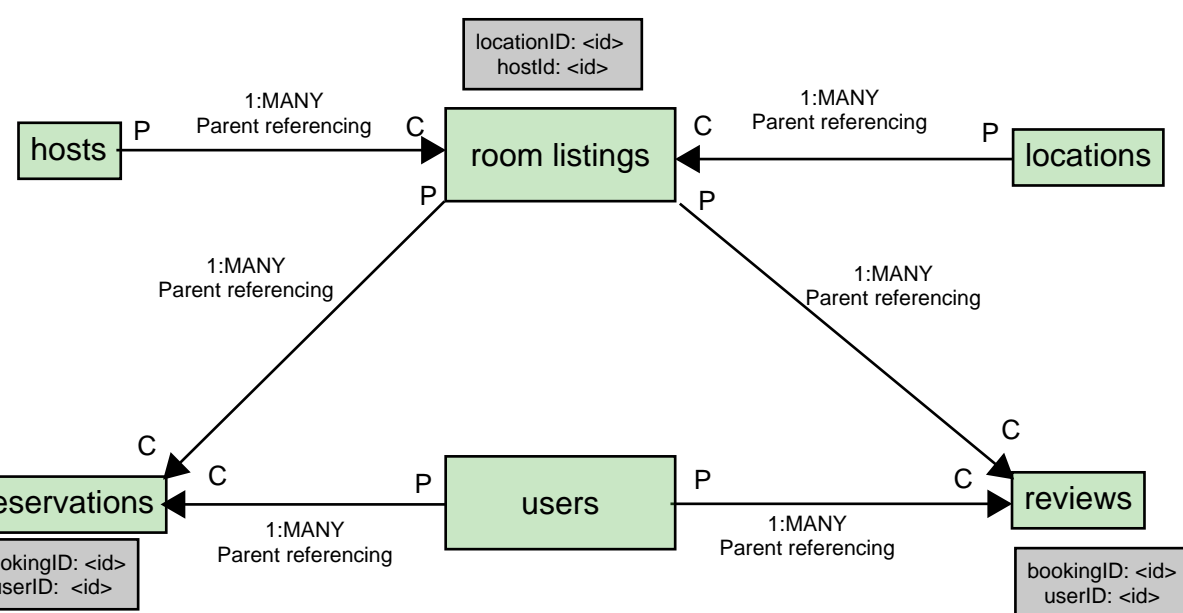
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  "reservations": [
    {
      "userId": "1159",
      "userResId": 23
    },
    {
      "userId": "1159",
      "userResId": 24
    },
    {
      "userId": "2385",
      "userResId": 40
    }
  ]
}
```

user's reservations collection

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  "id": 40,
  "bookingId": 1,
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  "endDate": "June 26th 2020",
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```
{
  "id": 23,
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  "bookingId": 1,
  "startDate": "July 1st 2020",
  "endDate": "August 17th 2020",
  "userId": "1159" // from Google Auth
}
```

mock-airbnb Data Model



Hosts Collection	
<div><div>{</div><div>"id":1,</div><div>"name": "Bill",</div><div>"userId": "1159" // from Google Auth</div><div>}</div></div>	Record
<div><div>{</div><div>"id":2,</div><div>"name": "Kathy",</div><div>"userId": "2385" // from Google Auth</div><div>}</div></div>	Record
<div><div>[</div><div>{</div><div>"id":3,</div><div>"name": "Karen",</div><div>"userId": "3832" // from Google Auth</div><div>}</div><div>]</div></div>	Record

Room Listings Collection
Room Listings Record
Room Listings Record
Room Listings Record

Reservations Collection
Reservations Record
Reservations Record
Reservations Record

Users Collection	
<div><div>{</div><div>"id":1,</div><div>"name": "Tony",</div><div>"userId": "1159" // from Google Auth</div><div>}</div></div>	Record
<div><div>{</div><div>"id":2,</div><div>"name": "Grace",</div><div>"userId": "2385" // from Google Auth</div><div>}</div></div>	Record
<div><div>{</div><div>"id":3,</div><div>"name": "John",</div><div>"userId": "3832" // from Google Auth</div><div>}</div></div>	Record

