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# Neighbor

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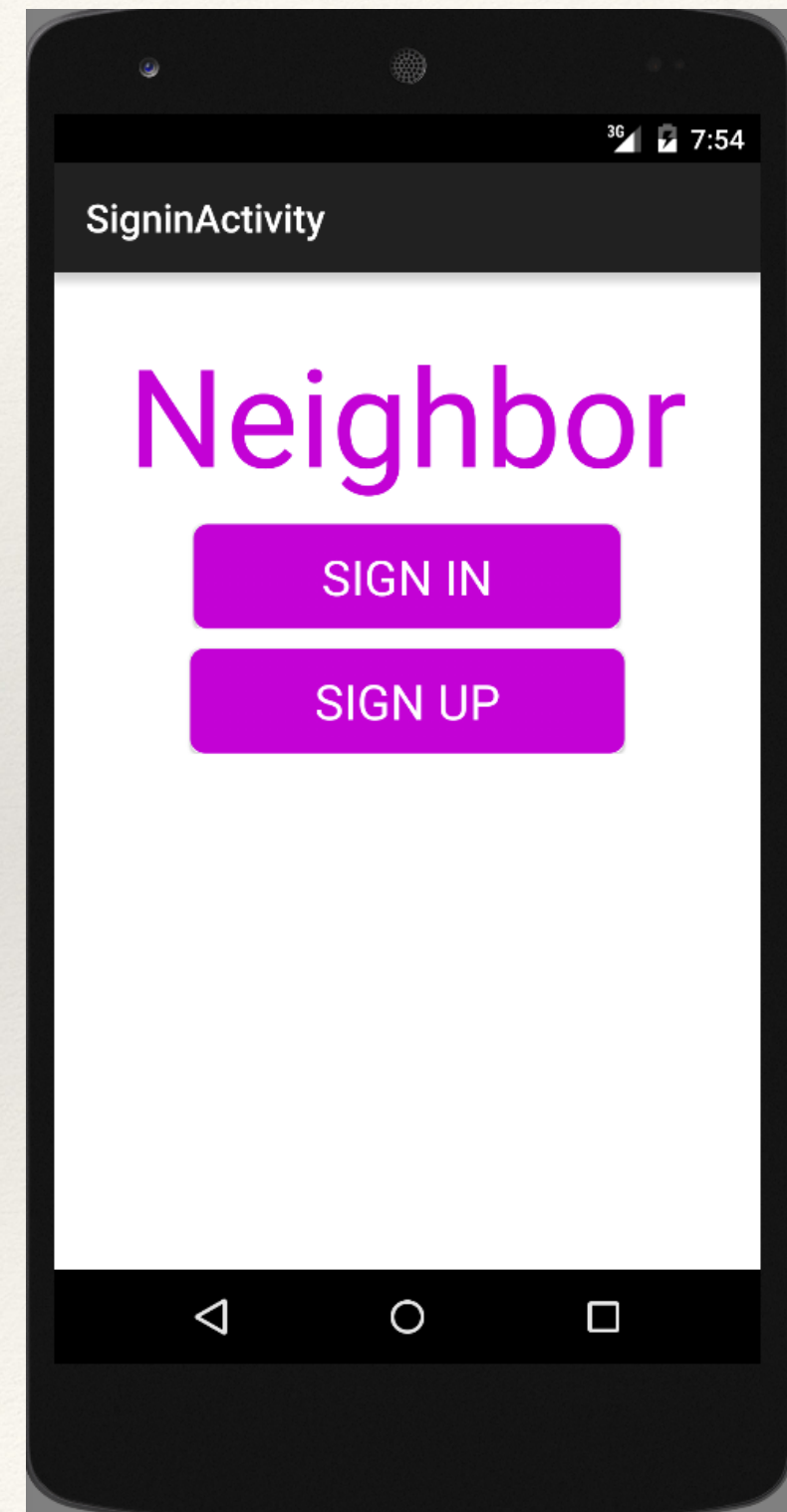
Patrick Andresen

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# Overview

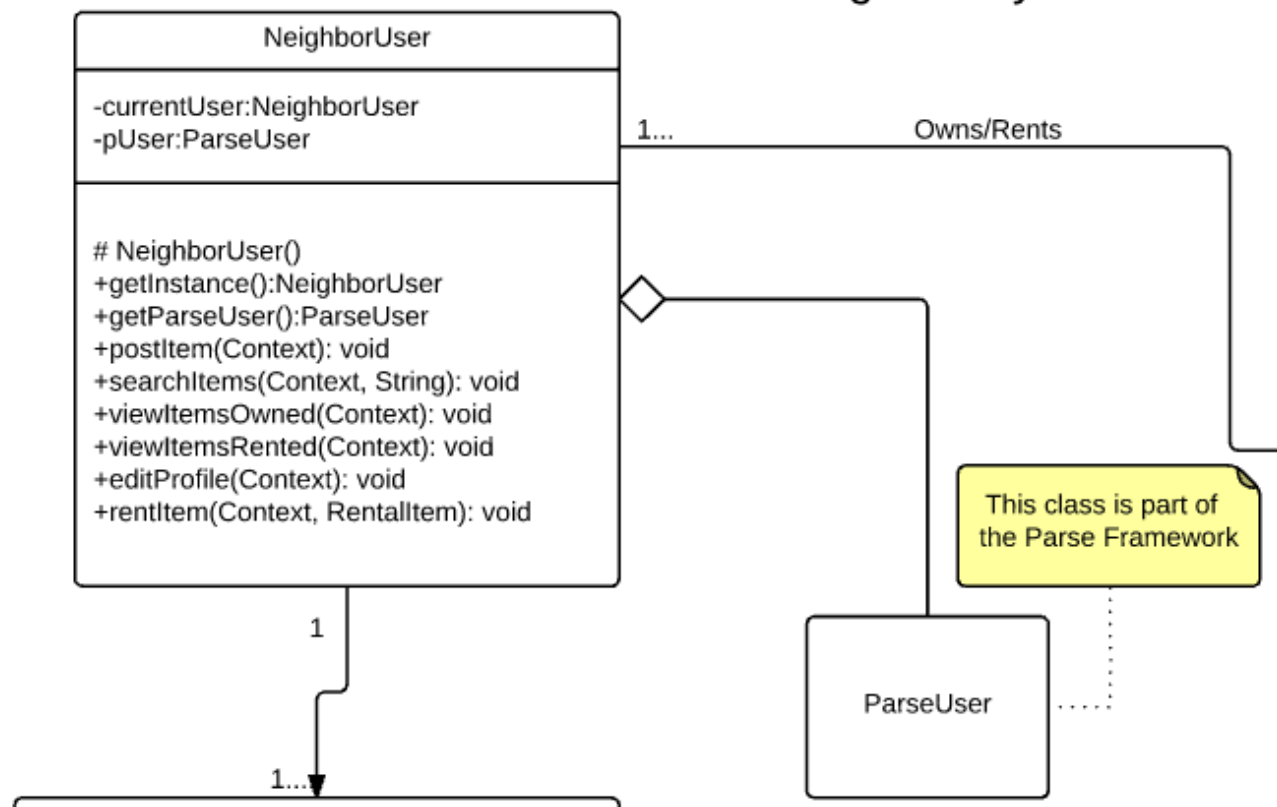
- ❖ Android Application built to enable the 'Renting' of various items.
- ❖ Client/Server Architecture
- ❖ Parse Backend Cloud Services
- ❖ The 'craigslist' of renting rather than purchasing!





# Class Diagram

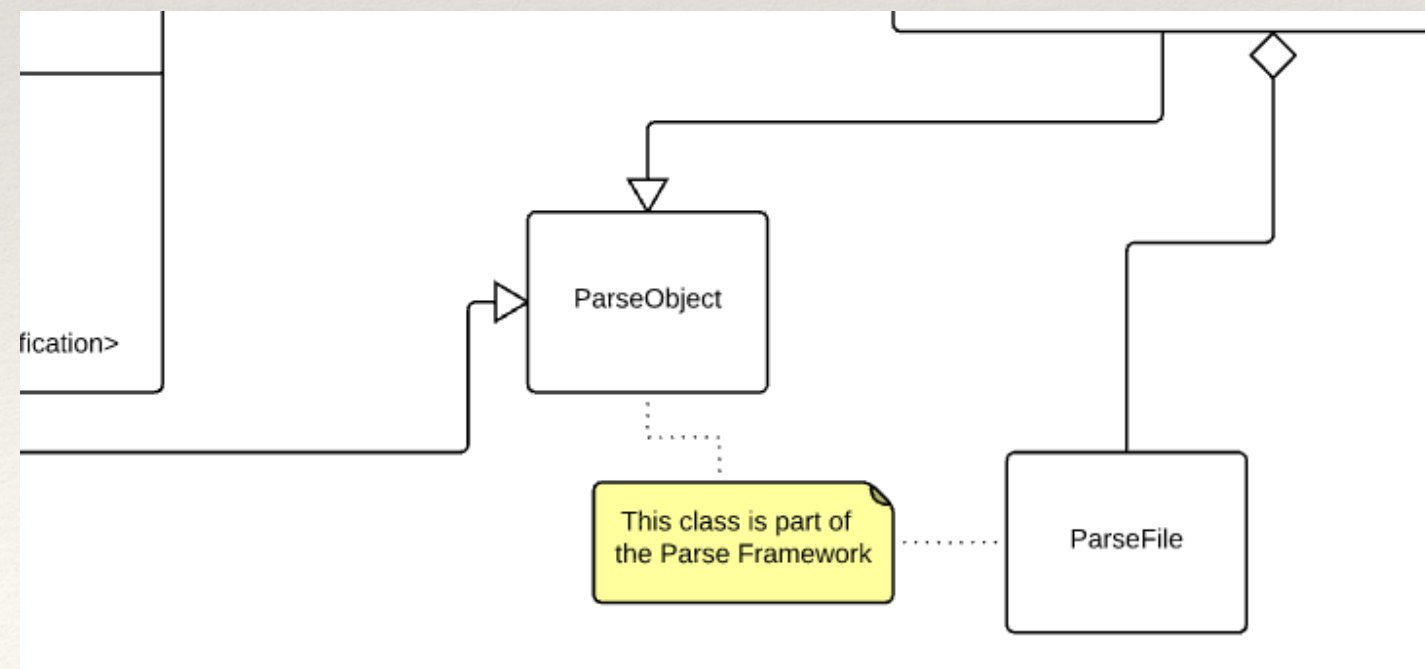
Neighbor System



ParseUser is a class provided by the Parse Framework. Our NeighborUser has an Aggregation relationship to the ParseUser.

ParseUser provides useful functions such as Log In/Log out, and the ParseUser ID acts as the primary key in the database.

Two of our other Classes extend the ParseObject superclass which is also a class in Parse. This is necessary for how the ORM for Parse works.



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# Demo!

Link to video demo: <https://www.youtube.com/watch?v=zQ0o6CS5bPQ>

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SignInActivity

# Neighbor

SIGN IN

SIGN UP



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# Design Patterns

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- ❖ Singleton implement on NeighborUser
- ❖ NeighborUser acts as a facade for ParseUser. Provides a simple interface to ParseUser.

```
private static NeighborUser currentUser = null;
private static ParseUser pUser;

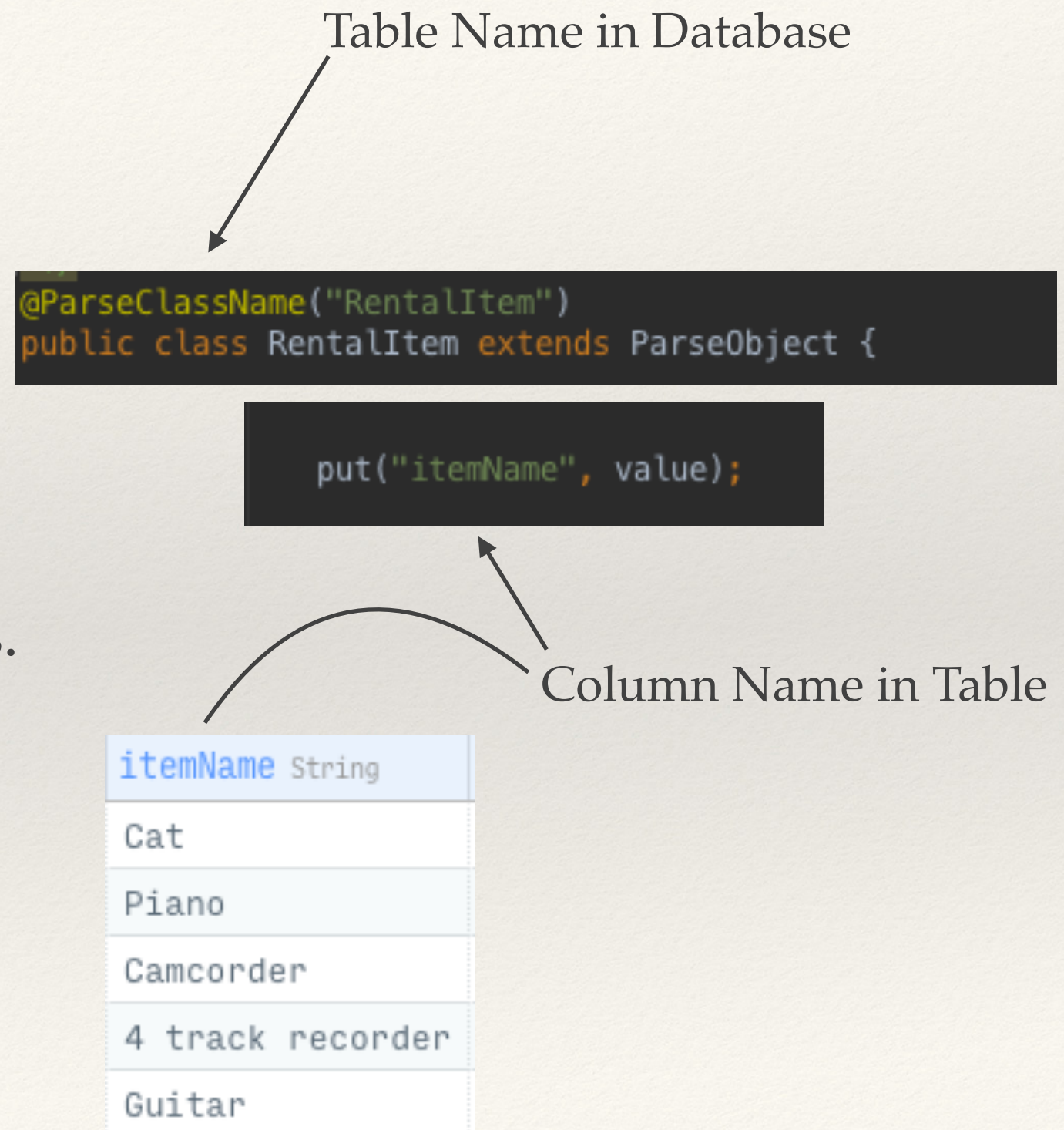
protected NeighborUser() {
    // This defeats instantiation.
}

public static NeighborUser getInstance() {
    if (currentUser == null) {
        currentUser = new NeighborUser();
    }
    pUser = ParseUser.getCurrentUser();
    return currentUser;
}
```



# Making use of an ORM

- ❖ Parse provides, alongside a cloud-based database and backend services, an ORM which allows us to map instantiations of our classes to rows inside the database tables.
- ❖ Same idea as Hibernate, but different Syntax and / or Implementation.





# Some related terminology...

- ❖ ParseFile is a specific class Parse provides which also is a data type allowed for a column inside the Parse database. This data type can hold pictures and, interestingly enough, the class implements Serializable.
- ❖ Thus, our pictures are actually stored as byte streams inside the database, under the class ParseFile.

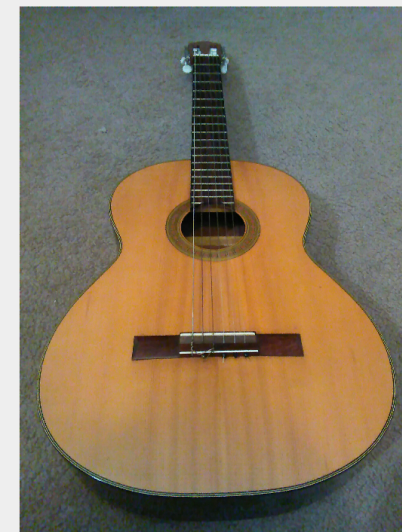
```
public void setPhoto(ParseFile image) {
```

ItemsRentedActivity

ItemsRentedActivity

Guitar

Old classical guitar.  
Amazing sound



Location: Aurora, CO  
Cost: \$20.0 per Day  
Owner: [Neil Nistler](#)

ParseFile



# Summary

- ❖ The construction of Neighbor into a full-fledged and fully functional application was a massive learning experience in which we implemented many OO concepts and topics covered in this course.

