





Firebase References

```
new Firebase: var ref = new Firebase('url'); //Firebase from given URL
child: var childRef = ref.child('child'); //Specific child of reference
root: var rootRef = ref.root(); //Root of the firebase (base URL)
```

Reading Data

```
callback: var dataCallback = function(dataSnapshot) {}
on: ref.on('type', dataCallback); //Add callback of type
off: ref.off()|off('type')|off('type', dataCallback);
off() can remove all callbacks | all callbacks of type | or named callback
```

Callback types

value child added child changed child removed child moved

Data Snapshots

```
val: var data = dataSnapshot.val(); //Get snapshot data as JSON
child: var childSnapshot = dataSnapshot.child('child'); //Get child's data
ref: var refURL = dataSnapshot.ref(); //Return base URL of firebase instance
forEach(dataCallback), hasChild('child'), hasChildren(), name(), numChildren()
getPriority(), exportVal() //Other available methods on snapshots
```

Writing Data

```
set: ref.set(JSON) //Sets the entire reference (overwrites data)
push: ref.push(JSON) //Adds new GUID with optional JSON data
update: ref.update({key1: JSON, ... ,keyN: JSON}) //Changes value(s) for key(s)
remove: ref.remove() //Removes data at given reference
Above functions have optional onComplete callbacks; success returns null, failure returns Error
```

Priority, Queries, and Limit

```
setPriority: ref.setPriority(priority) //Floating point number or string
limit: var refQuery = ref.limit(n) //Gets most recent n children by priority
startAt: var startQuery = ref.startAt(priority) //Values with higher priority
endAt: var endQuery = ref.endAt(priority) //Values with lower priority
limit(), startAt(), and endAt() can be combined and used to create queries when using priority
```

Example

```
var ref = new Firebase('https://sample.firebaseIO.com') //Create Firebase ref
var guery = ref.startAt(42).limit(100); //Query 100 values w/priority > 42
query.on('value', function(dataSnapshot){
   var data = dataSnapshot.val(); //Get the JSON data for changed reference
    alert('Data is: ' + data); //Show data to user in an alert
});
```