

# Quickly Build App without Backend

(any)Frontend + Firebase

<https://www.firebase.com>



# About Firebase

- Real Time NoSQL Database
- JSON Format
- Edit data On UI (Dashboard)
- Integrated Authentication
- Firebase Hosting
- Acquired by Google in October 2014

About Firebase

# Why I use firebase

- FIREBASE is NoSQL DB + WEBSOCKET
- Easy to use
- Can build an app without backend
- Fast to config
- Buid in auth
- Support multiple paltform
- Can manipulate(modifiy) data directly

## dazzling-fire-9014

-Jx8r94Bkk0f6bbbzyZQ

property

22-olive

address: "22 Olive avenue"

city: "North York"

postalCode: "M2N7G6"

profileURL: "22-olive"

8-the-esplanade

address: "8 The Esplanade"

✚ architect

buildingImgUrl: "https://s3-us-west-2.amazonaws.com/unlyst/V2/bu..

buildingName: "L Tower"

buildingType: "Residential Condominium"

city: "Toronto"

completed: "Under Construction"

✚ developer

id: 12345

messages

✚ -K6UyHbrmi5M7dI\_qiu2

✚ -KB-AejLSSBzHWiMkbuS

✚ -KB-BGlpsermSvLL8r35

✚ -KBfbsmZSWfDMNsls5o4

✚ -KDM2AbDLWdGXzgxh08o

✚ -KDM6SR6Lu5xi6b-j8Vg

neighbourhood: "St. Lawrence"

profileURL: "8-the-esplanade"

propertyManager: "First Service Residential"

storeys: 58

suiteCount: 591

### Legend

- Changed
- Added
- Deleted
- Moved

## Dashboard

VIEWING MY FIRST APP

Account Settings



Expand Data

Collapse Data

Import Data

Export Data

DAZZLING-FIRE-9014

## dazzling-fire-9014

-Jx8r94Bkk0f6bbbzyZQ

property

22-olive

name:  value:  + x

Cancel Add

address: "22 Olive avenue"

city: "North York"

postalCode: "M2N7G6"

profileURL: "22-olive"

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✚ -KB-BGlpsermSvLL8r35

✚ -KBfbsmZSWfDMNsls5o4

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# Simple Project


- A building message app(from one of my side project)
- Login
- Building portal
- Real time message

BeaverTo

HOME

SIGN OUT

Hi Jerry Yang



L Tower

Address: 8 The Esplanade, Toronto

Neighbourhood: St. Lawrence

Building Type: Residential Condominium

Suites: 591


Storeys: 58

Property Manager: First Service Residential


Architect(s): Studio Daniel Libeskind; Page + Steele;

Developer(s): Cityzen Development Group; Castlepoint Numa; Fernbrook Homes;


Building Status: Under Construction




What's up 8 The Esplanade




POST




Jerry Yang  
Time: Mon Feb 29 2016  
march f




Jerry Yang  
Time: Sat Dec 26 2015  
sdfsdfs Dec boxing day!




What's up 8 The Esplanade




POST




Jerry Yang  
Time: Mon Feb 29 2016  
march f




Jerry Yang  
Time: Sat Dec 26 2015  
sdfsdfs Dec boxing day!




Brandon Graham Donnelly  
Time: Sat Feb 20 2016  
hi ya



Brandon Graham Donnelly  
Time: Sat Feb 20 2016  
testing again



Jerry Yang  
Time: Sun Mar 20 2016  
hihih



# How to config?

- AngularFire
- Initialization

```
var ref = new Firebase('https://dazzling-fire-9014.firebaseio.com/-Jx8r94Bkk0f6bbbzyZQ');

getAllPropertyArray: function() {return $firebaseArray(ref.child("property")); },
getPropertyArray: function(index) { return $firebaseArray(ref.child("property").child(index)); },
getPropertyObject: function(index) {return $firebaseObject(ref.child("property").child(index));},
getMessageArray: function(index) {return $firebaseArray(ref.child("property").child(index).child("messages"));},
getMessageObject: function() {return $firebaseObject(ref.child("property"));},
initAuth: function() {return $firebaseAuth(ref); }
```

# Login && Authintication

```
$scope.auth=FirebaseService.initAuth();
```

```
$scope.auth.$authWithOAuthPopup("facebook")  
.then(function(authData) {  
    console.log("Logged in as:", authData.uid);  
    $scope.authData = authData;  
    $scope.userImgUrl = $scope.authData.facebook.profileImageUrl;  
    $scope.userName = $scope.authData.facebook.displayName;  
}).catch(function (error) {  
    console.error("Authentication failed:", error);  
});
```

```
$scope.auth.$unauth();  
$scope.authData = null;
```

# User Login & Authentication

## Authorized Domains for OAuth Redirects

For third-party authentication (Facebook, Twitter, GitHub or Google), your domain must be whitelisted below for OAuth redirects. Default authorized domains include: localhost, 127.0.0.1, dazzling-fire-

9014.firebaseio.com

Session Length ?

24

Hours

dazzling-fire-9014.firebaseio.com x

alpha.unlyst.com x

unlyst.com x

`$scope.auth.$unauth();`

Email & Password

Facebook

Twitter

GitHub

Google

Anonymous

Custom

☒ Enable Email & Password Authentication

## Configuring Email & Password

Firebase makes it easy to integrate email and password authentication into your app. [Learn more](#)



Security & Rules



Simulator



Analytics



Login & Auth



We recommend writing Security Rules for your app. View the [Security & Rules](#)

## FIREBASE RULES

```
1 {  
2   "rules": {  
3     ".read": true,  
4     ".write": true  
5   }  
6 }
```

`$scope.authData = null;`



# Load Data

- `$scope.messages = FirebaseService.getMessageArray(profileId);`
  - `$scope.propertyObject = FirebaseService.getPropertyObject(profileId);`
  - `$scope.propertyObject.$loaded()  
    .then(function (result) {  
        //do something .....  
    });`
- ```
$scope.messages.$add({  
    userName: $scope.authData.facebook.displayName,  
    userId: $scope.authData.auth.uid,  
    userImgUrl: $scope.userImgUrl,  
    body: $scope.postMessage,  
    messageImg: "some url"  
    postTime: postTime.toDateString()  
}).then(function(ref) {  
    console.log("added to message list");  
    $scope.postMessage = "";            $scope.messageImg = "";  
});
```

# More

```
// Create a connection to your Firebase database
Firebase ref = new Firebase("https://<YOUR-FIREBASE-APP>.firebaseio.com");
// Save data
ref.setValue("Alex Wolfe");
// Listen for realtime changes
ref.addValueEventListener(new ValueEventListener() {
    @Override
    public void onDataChange(DataSnapshot snap) {
        System.out.println(snap.getName() + " -> " + snap.getValue());
    }
    @Override public void onCancelled(FirebaseError error) { }
});
```

```
// Create a connection to your Firebase database
var ref = new Firebase("https://<YOUR-FIREBASE-APP>.firebaseio.com");
// Save data
ref.set({ name: "Alex Wolfe" });
// Listen for realtime changes
ref.on("value", function(data) {
    var name = data.val().name;
    alert("My name is " + name);
});
```

# Supports:

- Web (js)
- ios(objective-c)
- Android(java)
- Server side API

# Resources:

- <https://www.firebase.com/docs/>
- <https://www.firebase.com/tutorial/#gettingstarted>
- <https://thinkster.io/topics/firebase>

# Use cases

- Chat App
- Reviews component...
- Traffic app
- More....