

Unit 7.2 Highlights

(Source: <https://firebase.google.com/docs>)

Firebase - (Mobile) Backend-as-a-Service solution, owned/managed by Google, capable of providing APIs for the following services:

- Realtime Database via data binding
- Authentication
- Hosting
- Cloud Storage
- Machine Learning

Steps to use Firebase

- Create a Firebase project in the Firebase console
- From the project overview page in the Firebase console, click Add Firebase to your web app. If your project already has an app, select Add App from the project overview page
- (Initialize) Copy and paste your project's customized code snippet in the <head> tag of your page, before other script tags. See below

Initialize Firebase

Ex. 1

```
<script src="https://www.gstatic.com/firebasejs/5.3.1/firebase.js"></script>
<script>
  // Initialize Firebase
  var config = {
    apiKey: "<API_KEY>",
    authDomain: "<PROJECT_ID>.firebaseapp.com",
    databaseURL: "https://<DATABASE_NAME>.firebaseio.com",
    projectId: "<PROJECT_ID>",
    storageBucket: "<BUCKET>.appspot.com",
    messagingSenderId: "<SENDER_ID>",
  };
  firebase.initializeApp(config);
  var database = firebase.database();
</script>
```

.set() - save the data to the database, which can overwrite data at the specified location, including any child nodes.
.ref() - specify where the data will be saved

Ex. 2

```
var userId, name, email, imageUrl;
firebase.database().ref('users/' + userId).set({
  username: name,
  email: email,
  profile_picture : imageUrl
});
```

.on("value", function(){}) - Creates an "on-change" event so that the moment the page first loads or the moment the database changes, the callback is called immediately

Ex. 3

```
var starCountRef = firebase.database().ref('posts/' + postId + '/starCount');
starCountRef.on('value', function(snapshot) {
  //snapshot contains the data at the specified location in the database at the time of the event
  updateStarCount(postElement, snapshot.val());
});
```

.info/connected - Updated every time the Firebase Realtime Database client's connection state changes

Ex. 4

```
var connectedRef = firebase.database().ref(".info/connected");
connectedRef.on("value", function(snap) {
  if (snap.val() === true) {
    alert("connected");
  } else {
    alert("not connected");
  }
});
```

parseInt() - function parses a string argument and returns an integer

Ex. 5

```
var a = parseInt("10")
```