# Notes from Scrimba Firebase App Tutorial

## Firebase

* Firebase link [here](https://console.firebase.google.com/u/0/)
* Firebase is an application that will host databases you can use to share your project with everyone
* To test with the console- this is our link below:
* <https://playground-7f16f-default-rtdb.firebaseio.com/>

## How to export and combine JS for two different files.

* Use export function from the old file you are “exporting”
* Write import in your current JS and tell JS :
* What you want to add? Where do you get it from?



* To get this to work we have to add type **= “module” inside** of both scripts tag in html

### Practice

* Write a function called initializeApp
* Write a const called app that calls initalizeApp
* Give it an argument to connect the project with the database
* Run a console log to see if it works
* Write another const called database and do the challenge below:

// Challenge: Import the 'getDatabase' from

// "https://www.gstatic.com/firebasejs/9.15.0/firebase-database.js"

## Turning an Object to an Array



let scrimbaUsers = {



"00": "sindre@scrimba.com",

"01": "per@scrimba.com",



"02": "frode@scrimba.com"

}



* Use the Object type and use a method(values) to convert to an array:

console.log(Object.values(scrimbaUsers))

//to access the IDs instead use the key method and try again:

console.log(Object.keys(scrimbaUsers))

//and for both, you can use entries

console.log(Object.entries(scrimbaUsers))

CONSOLE

[["00", "sindre@scrimba.com"], ["01", "per@scrimba.com"], ["02", "frode@scrimba.com"]]

### Practice

// Challenge: Create a let variable called 'scrimbaUsersEmails' and use one of Object methods to set it equal to an array with the values

["sindre@scrimba.com", "per@scrimba.com", "frode@scrimba.com"]

// Challenge: Create a let variable called 'scrimbaUsersIDs' and use one of Object methods to set it equal to an array with the keys

["00", "01", "02"]

// Challenge: Create a let variable called 'scrimbaUsersEntries' and use one of Object methods to set it equal to an array with the both the keys and values

[["00", "sindre@scrimba.com"], ["01", "per@scrimba.com"], ["02", "frode@scrimba.com"]]

let scrimbaUsers = {

"00": "sindre@scrimba.com",

"01": "per@scrimba.com",

"02": "frode@scrimba.com"

}

// 1.

let scrimbaUsersEmails = Object.values(scrimbaUsers)

console.log(scrimbaUsersEmails)

// 2.

let scrimbaUsersIDs = Object.keys(scrimbaUsers)

console.log(scrimbaUsersIDs)

// 3.

let scrimbaUsersEntries = Object.entries(scrimbaUsers)

console.log(scrimbaUsersEntries)

## Aside: Fetching database items in realtime using onValue

### (Going along with the Book List Practice)

* Import the onValue to access the database and start using the function
* Give it the argument for the reference so it knows where to fetch the data
* Add a function which contains the snapshot



* It will print an object so we will have to turn it into an array



* Next write a for loop where you console log each book



* Now have the books list actually show up using function appendBooks inside of the loop
* **Here’s our Scrimba screen**
* import { initializeApp } from "https://www.gstatic.com/firebasejs/9.15.0/firebase-app.js"
* import { getDatabase, ref, onValue } from "https://www.gstatic.com/firebasejs/9.15.0/firebase-database.js"
* const appSettings = {
* databaseURL: "https://playground-c5b18-default-rtdb.europe-west1.firebasedatabase.app/"
* }
* const app = initializeApp(appSettings)
* const database = getDatabase(app)
* const booksInDB = ref(database, "books")
* const booksEl = document.getElementById("books")
* onValue(booksInDB, function(snapshot) {
* let booksArray = Object.values(snapshot.val())
* clearBooksListEl()
* // Challenge: Write a for loop where you console log each book.
* for (let i = 0; i < booksArray.length; i++) {
* let currentBook = booksArray[i]
* // Challenge: Use the appendBookToBooksListEl() function to append book instead of console logging
* appendBookToBooksListEl(currentBook)
* }
* })
* function clearBooksListEl() {
* booksEl.innerHTML = ""
* }
* function appendBookToBooksListEl(bookValue) {
* booksEl.innerHTML += `<li>${bookValue}</li>`
* }