We've Seen MySQL On Its Own

Now it's time for...

MySQL &

PHP

Node

Ruby

C#

C++

Java

Python

...

MySQL &

PHP

Node

Ruby

C#

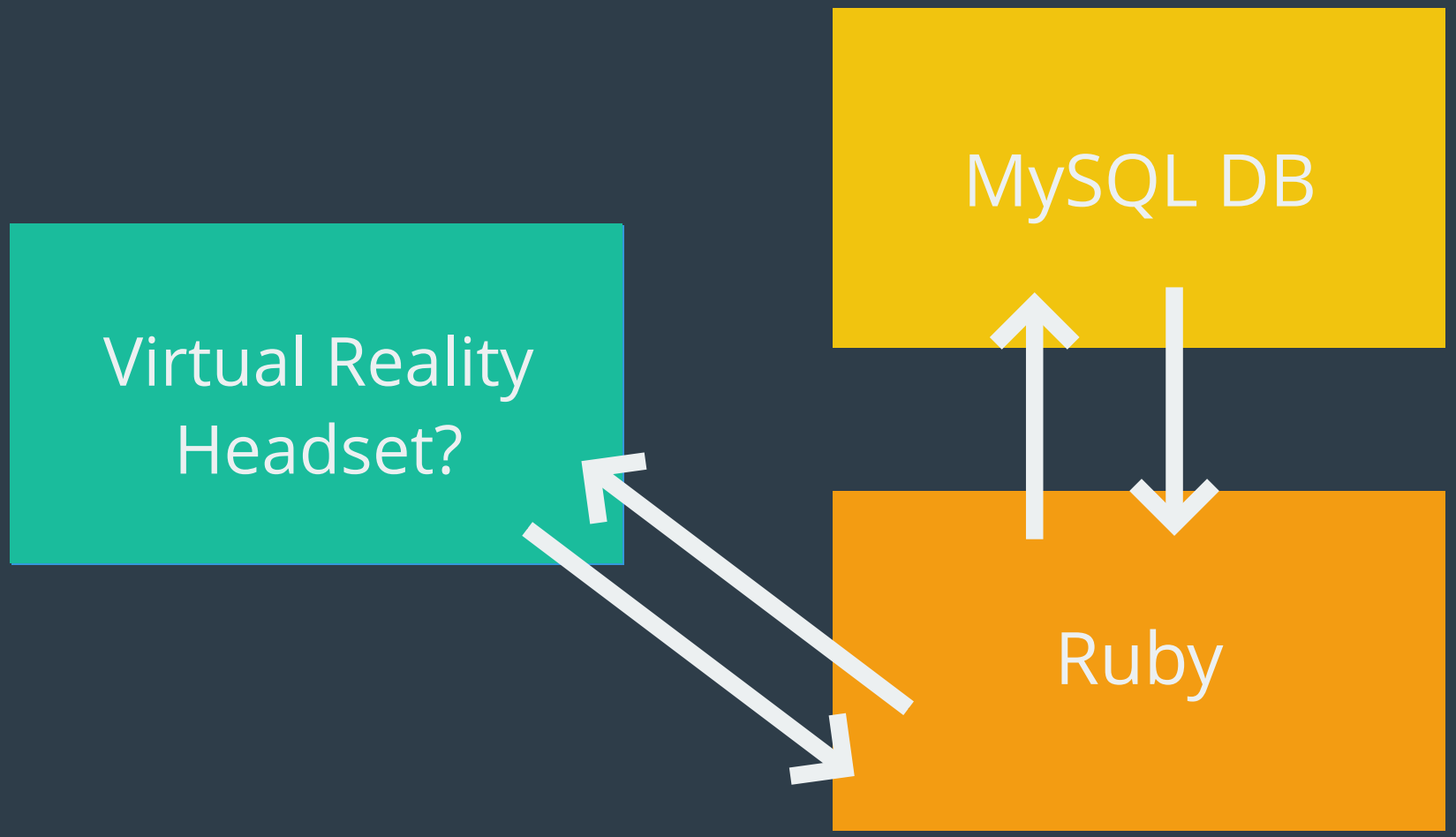
C++

Java

Python

...

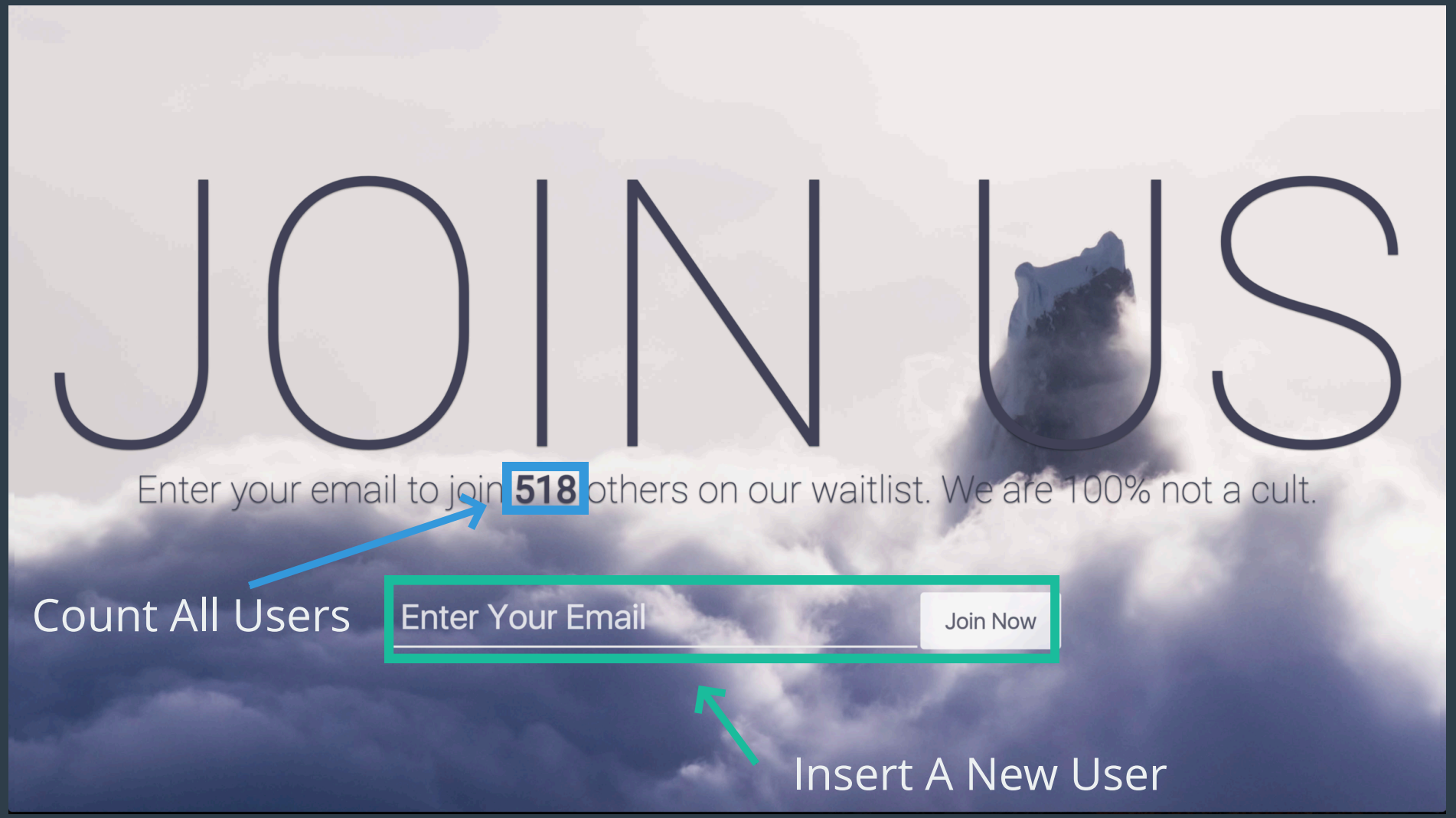
How do we interact with MySQL through external code?

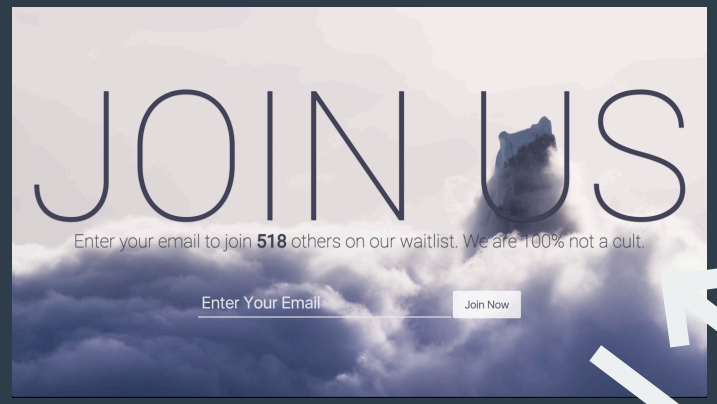

MySQL DB
Virtual Reality Headset?
Ruby

OUR FIRST PROJECT

JOIN US

A Startup Mailing List Application

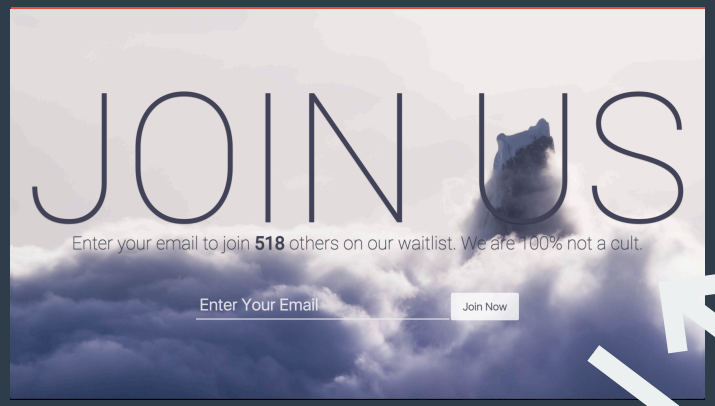

JOIN US
Enter your email to join 518 others on our waitlist. We are 100% not a cult.
Count All Users
Enter Your Email
Join Now
Insert A New User



MySQL DB

NodeJS Server

WHERE DO WE START?



MySQL DB

NodeJS Server

Our Users Table Is Super Simple

email

&

created_at

Our First Goal...

Use NodeJS to randomly generate and INSERT 500+ users into a database

SETTING UP CLOUD9

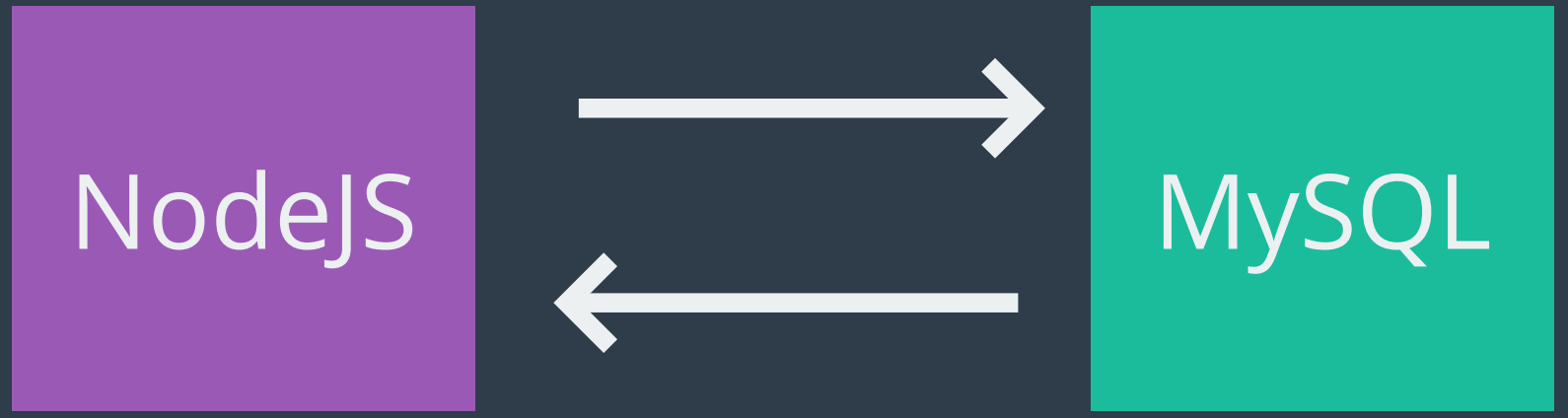
FOR NODE

A QUICK NOTE

On What This Course Is And Isn't

Seems a bit late for that...

Hello there MySQL, How Many Users Are In The Database?



Well...it looks like there are currently 518 users in here!

5 Minutes of Node

Running Files and using NPM

Write Some Code

```
console.log("THIS IS SOME CODE!");
```

Execute The File

```
node filename.js
```

Introducing FAKER

```
npm install faker
```

Our Gameplan...

Use Faker To Generate User Data For Us

```
faker.internet.email()
```

Orie23@hotmail.com

Simone.Walsh@gmail.com

Aubree_Daugherty97@yahoo.com

```
faker.date.past()
```

Tue Dec 27 2016 11:48:00 GMT+0000 (UTC)

Fri Dec 16 2016 11:13:08 GMT+0000 (UTC)

Fri Jun 24 2016 06:33:49 GMT+0000 (UTC)

WARNING THIS IS NOT REAL CODE

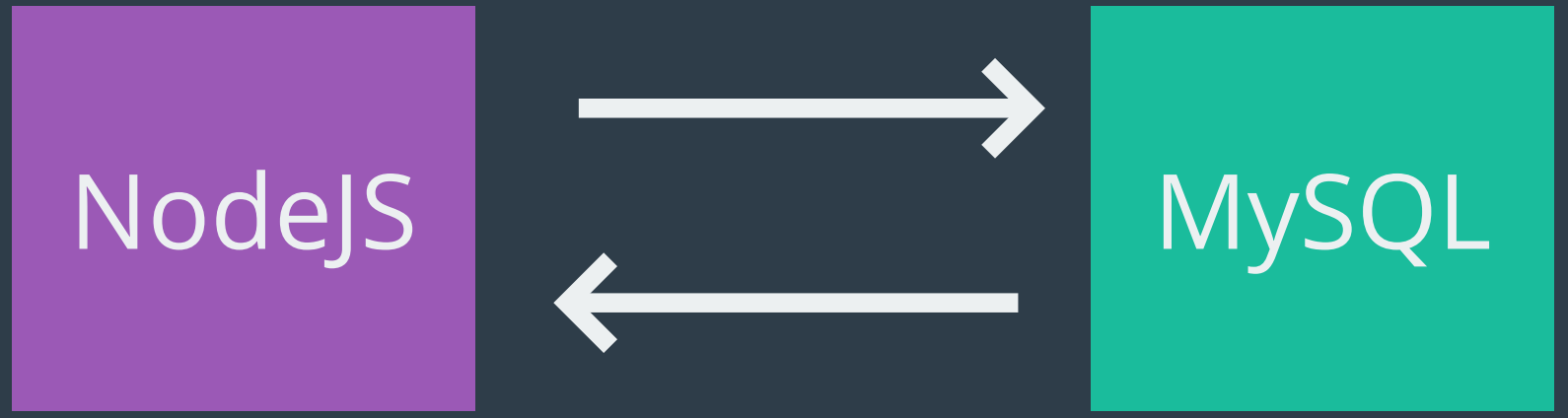
```
INSERT INTO users (email. created_at) VALUES
    (
        faker.internet.email(),
        faker.date.past()
    );
```

Do That 500 Times

Introducing MySQL

The Node Package, That Is

Hello there MySQL, How Many Users Are In The Database?



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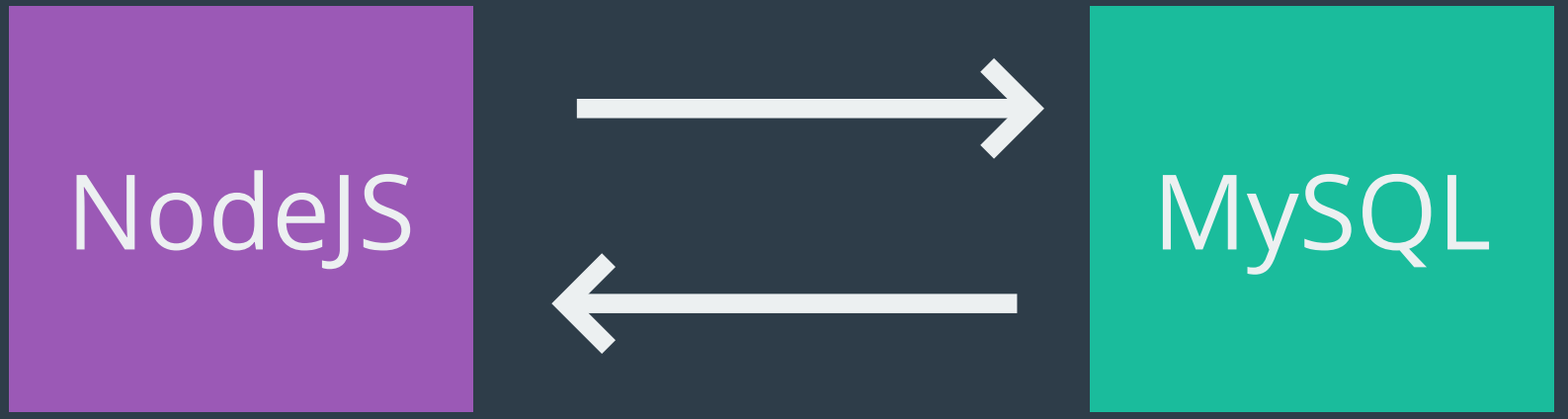

Users...I have no idea what you are talking about! I don't see a users table in here :(

Hello there MySQL, How Many Users Are In The Database?

MySQL?? Are you there???

😭 😭 😭 😭 😭 😭 😭 😭

Step 1: Connect To MySQL

```
var mysql    = require('mysql')

var connection = mysql.createConnection({
  host     : 'localhost',
  user     : 'some_username',
  database : 'some_database'
});
```

Step 2: Run Queries

```
var q = 'SELECT 1 + 1 AS solution';
connection.query(q, function (error, results, fields) {
  if (error) throw error;
  console.log('The solution is: ', results[0].solution);
});
```

Don't worry, we'll go over this in detail!

WAIT I HAVE A QUESTION

How do you know what code to type?

Creating Our Schema

Nice And Simple

```
CREATE TABLE users (
    email VARCHAR(255) PRIMARY KEY,
    created_at TIMESTAMP DEFAULT NOW()
);
```

To Select All Users

```
var q = 'SELECT * FROM users';
connection.query(q, function (error, results, fields) {
      console.log(results);
});
```

To INSERT a user

```
 var person = {email: 'Jenny467@gmail.com'};
 connection.query('INSERT INTO users SET ?', person, function(err, result) {
  if (error) throw error;
  console.log(result);
});
```

INSERTING multiple users

```
var data = [
    ['blah@gmail.com', '2017-05-01 03:51:37'],
    ['ugh@gmail.com', '2017-05-01 03:51:37'],
    ['meh@gmail.com', '2017-05-01 03:51:37']
];

var q = 'INSERT INTO users (email, created_at) VALUES ?';

connection.query(q, [data], function(err, result) {
  console.log(err);
  console.log(result);
});
```

Quick Exercises

Find Earliest Date A User Joined

```
+-----------------+
| earliest_date |
+-----------------+
| May 2nd 2016  |
+-----------------+
```

Find Email Of The First (Earliest)User

email	created_at
Friedrich_Kulas@hotmail.com	2016-05-02 20:28:18

HINT: SUBQUERY

Users According To The Month They Joined

month	count
November	51
January	49
May	48
December	47
July	46
June	43
April	41
October	41
September	40
March	40
August	40
February	32

Count Number of Users With Yahoo Emails

```
+--------------+
| yahoo_users  |
+--------------+
|          166 |
+--------------+
```

Calculate Total Number of Users for Each Email Host

provider	total_users
gmail	190
yahoo	166
hotmail	159
other	3