#eLBXLive

Who is James Kingsley?

Combiner of tech

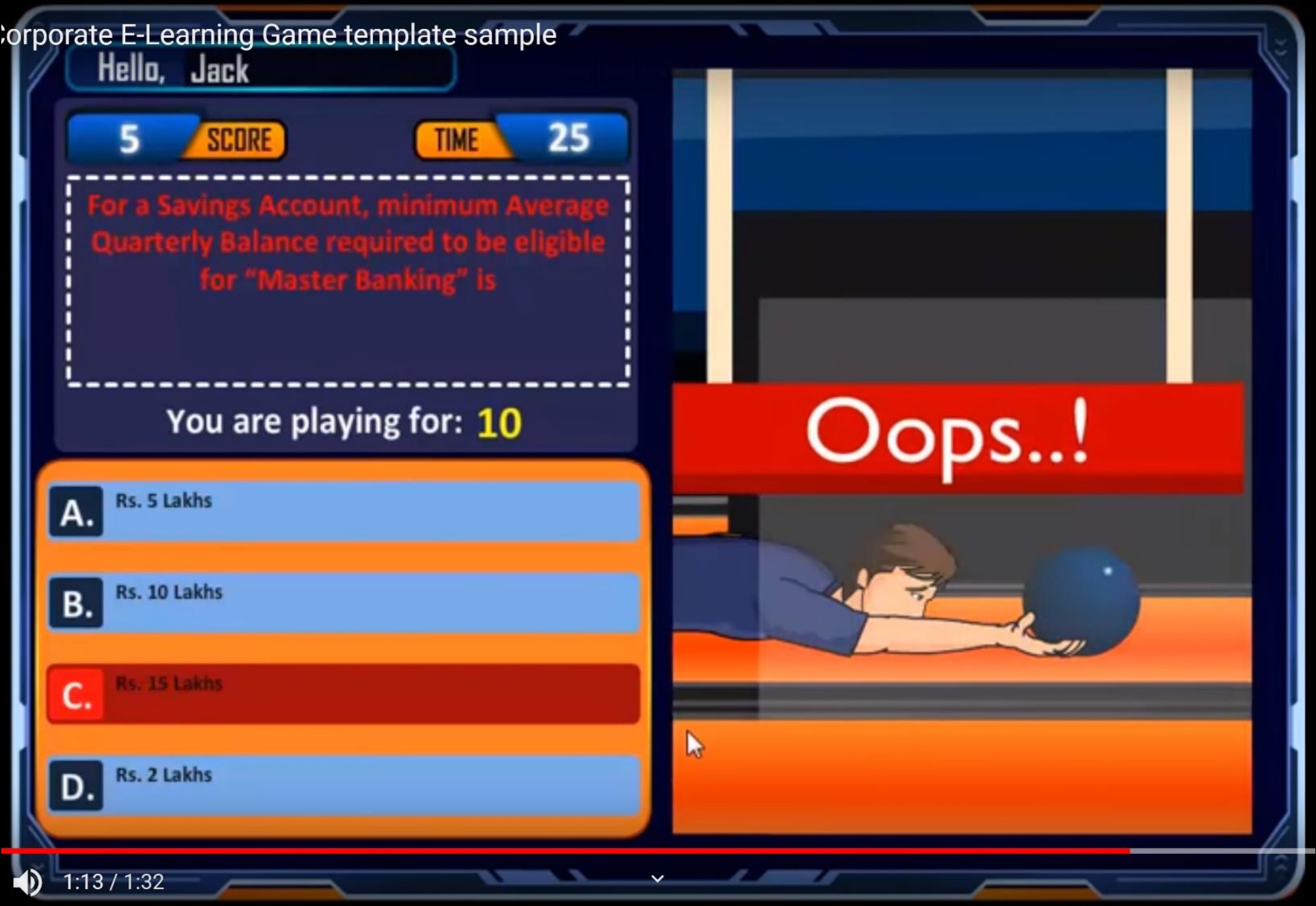
ReviewMyElearning.com

CoursePortfolios.com

eLearning Brothers
https://elearningbrothers.com/blog/author/jkingsley/

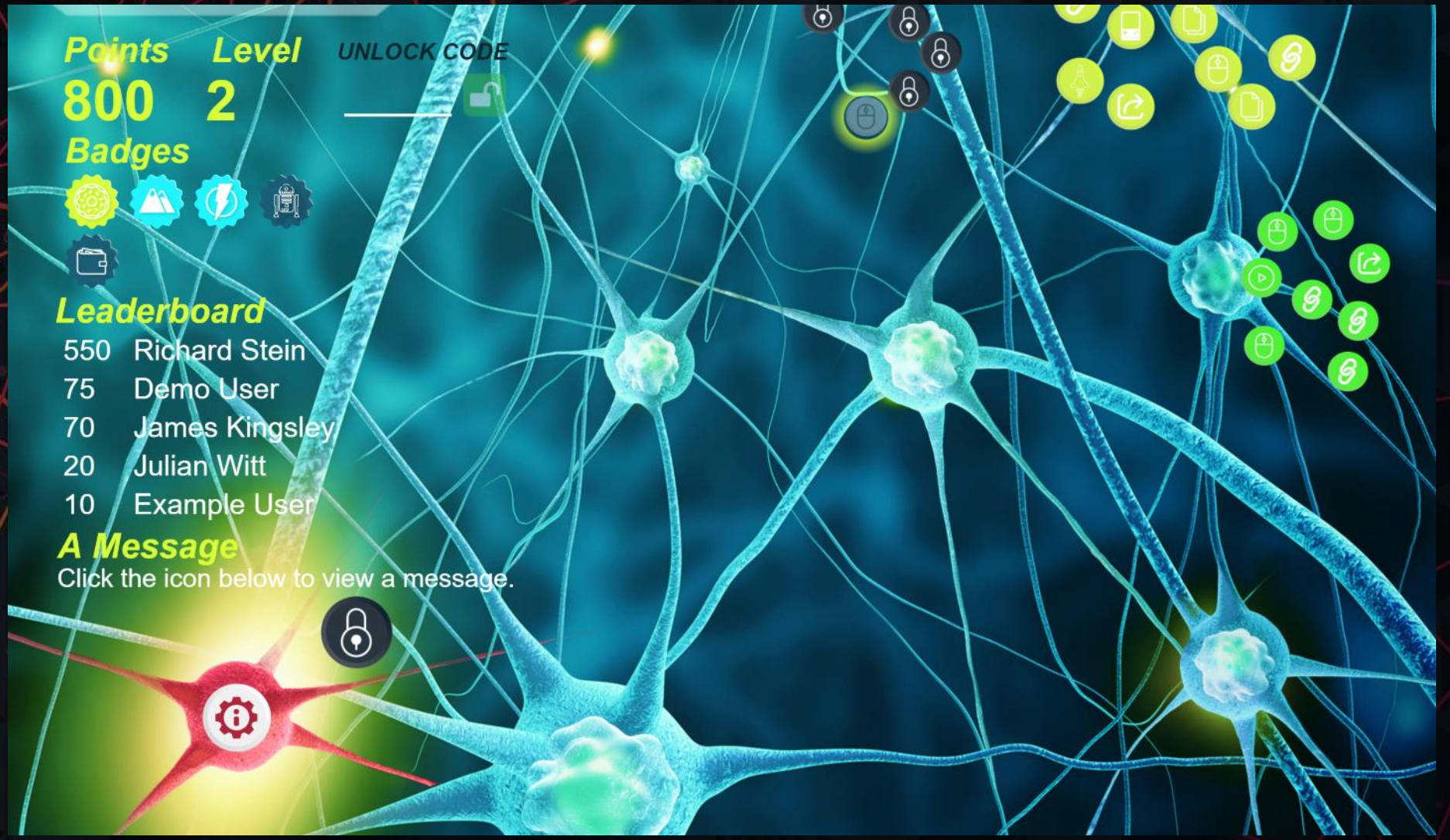
GForce Learning Solutions

Corporate E-Learning Game template sample



the

1:13 / 1:32



SAP Gamified Company Knowledge

- Limited instructions
- Time traveler
- Guided Exploration
- Grouped by subject
- Links to existing content
  - Courses
  - Forums
  - Videos
  - Internal Wikis
- Points / Levels /Badges *
- Leaderboard *
- Games
- F2F interactions (codes)
- Uses SAP's own APIs

* Displayed on internal social profile

Other considerations

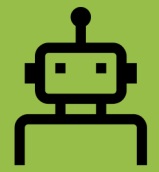
- Follow up notifications (email, sms, etc.)
- Analytics
- Security / Privacy
- Connecting to other systems (HR, Forums, etc.)
- Printing
- Certificates
- Leaderboard availability outside the course

How do we achieve Gamification?

With technologies such as

- JavaScript
- jQuery
- APIs
  - Firebase
  - Airtable
  - Others/Internal
- Google Apps Script
  - Sheets

JavaScript



First… my pet peeve…

“JavaScript” !== “Java”

Your courses are built on it.

Ever-growing number of open source libraries

jQuery

Still the most popular JS library

Most course development tools already include it.

A bunch of developers wrote code for you!

Cross browser support

https://jquery.com/

To use an API you must post/get data from it.

jQuery greatly simplifies this process.

Database

You will need a database to store learner scores and data

You will need a way (via JS) to post/get data from it

Databases are hard

New “Database as a Service” options make this easier

Access to these services is via an API

APIs: Firebase

Began as “real-time database service”

Expanded into full serverless infrastructure

    Including static hosting

Other features beyond DB are pretty geeky

Example: demo

Pricing / Limits

https://firebase.google.com/

APIs: AirTable

Friendlier user interface

Only data

Prebuilt web views

Documentation not as strong

Branding :-/

Pricing / Limits

Example: scores sheet

Google Apps Script (GAS)

Turns any Google doc into a web application

Almost just like JavaScript

Use Google Sheet as a database

Create Slides/Docs for certificates and notes

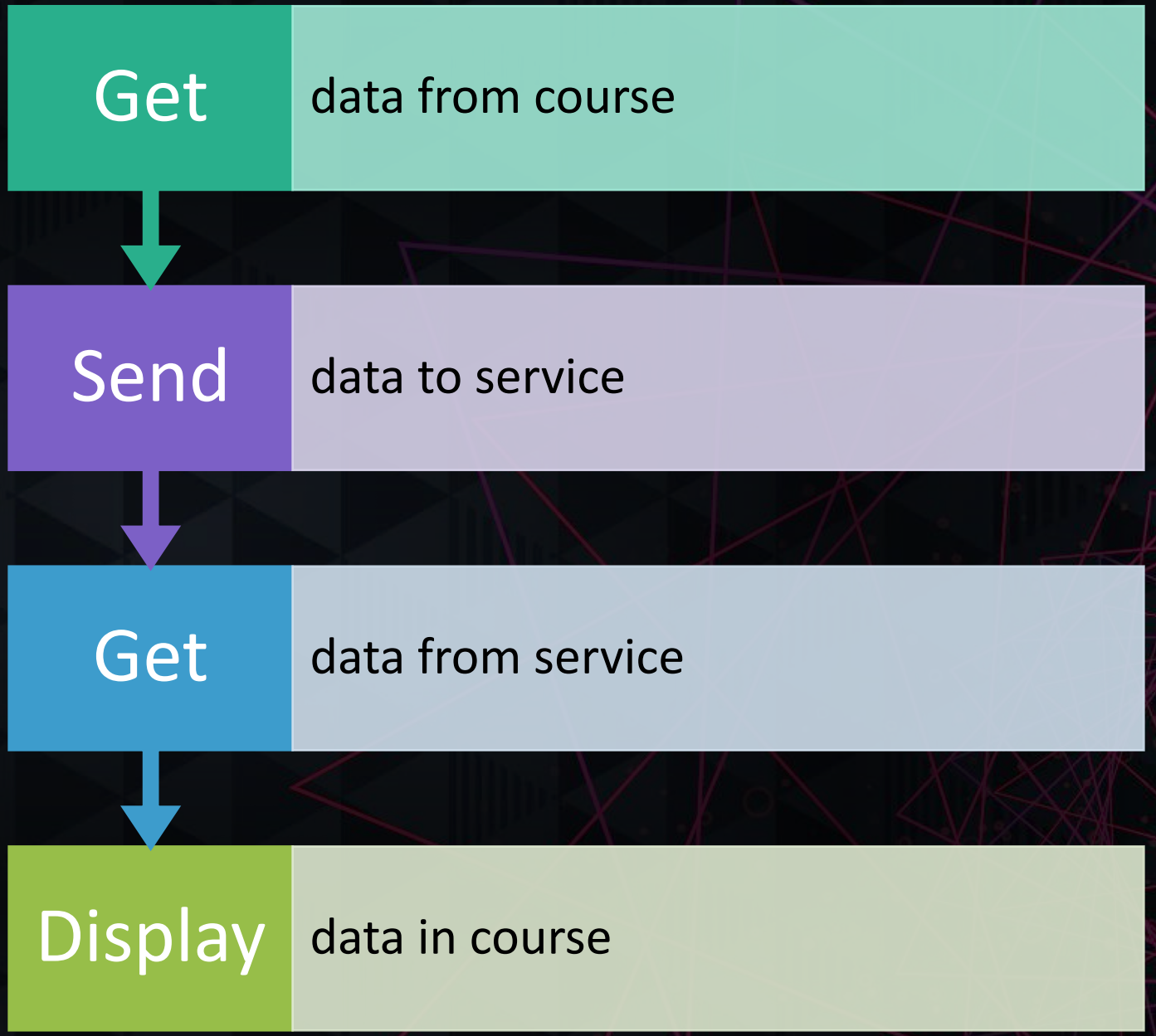
You have to write backend and front end code

I have examples on eLB blog

Pricing / Limits

https://developers.google.com/apps-script/overview

The process


Get
data from course
Send
data to service
Get
data from service
Display
data in course

Get data from course [Storyline]

```
var learner_score = GetPlayer().GetVar('score')
var learner_name = GetPlayer().GetVar('name')
```

Send data to service [Airtable]

```
var Airtable = require('airtable');
var base = new Airtable({apiKey:'xxx'}).base('xxxx');

base('all scores').create({
   "Name": learner_name,
   "Score": learner_score
}, function(err, record) {
    console.log(record.getId());
});
```

Get data from service [Airtable]

v
b


```
{
  "id": "recfEfHkKzw31yBGC",
  "fields": {
    "Score": 100,
    "Name": "James Kingsley"
  },
  "createdTime": "2019-06-06T18:34:53"
}
```

Push data into course [Storyline]

```
GetPlayer().SetVar('score', learner_score)
```

More realistically...

You will probably want

to get the top learners

You will need to loop through each record and push into the course :-/

Or...


```
{
    "records": [
        {
            "id": "recfEfHkKzw31yBGC",
            "fields": {
                "Score": 100,
                "Name": "James Kingsley"
            },
            "createdTime": "2019-06-06T18:34:53.000Z"
        },
        {
            "id": "rectzFGDcqBHxlv3f",
            "fields": {
                "Name": "Todd Cummings",
                "Score": 88
            },
            "createdTime": "2019-06-06T18:34:53.000Z"
        },
        {
            "id": "recOp1vDbuUGYiBrH",
            "fields": {
                "Name": "Rich Vass",
                "Score": 77
            },
            "createdTime": "2019-06-06T18:34:53.000Z"
        }
    ]
}
```

Embed HTML5 page

To display the leaders it is often best to create a custom web page.

The page will include all the JS to get the leaders and display them

You can embed the page into your course

The same page can used external from the course

#	Diver	Score	Time
1	KEDAR NATH PODDAR	6	0:07
2	TAIWAN	6	0:16
3	JENN DANIELLE GARGAR	6	0:23
4	WJ	5	0:02
5	WJ	5	0:04
6	WJ	5	0:13
7	MARIAN DIMABUYU	5	0:30
8	SAWSSAN ALI	5	1:50
9	ABU SUFIYAN	4	0:07
10	TH	4	0:40

Summary

Creating a game is better then adding a “game”

JavaScript is your friend

jQuery makes JS easier

You need a database but they're hard

DBaaS are a lot easier