

# IRONHACK

## QUALITY ANALYSIS

SQL PROJECT - WEEK 2  
DATA ANALYTICS BOOTCAMP  
JUNE 2021



# IRONHACK

## QUALITY ANALYSIS



01

Give a striking overview of the business analysis

02

Elaborate on the technical skills used for the analysis

03

Discuss the implications of the Quality Analysis in the Ironhack environment





# 04

Describe the difficulties found along the process

# 05

Room-for-improvement

# 06

Ironhack - Quality Analysis Recap

# IRONHACK

QUALITY ANALYSIS



**QUALITY**

**IRON  
HACK**

**ANALYSIS**



# Ironhack Channel

| Channel                       | COUNTA o   |
|-------------------------------|------------|
| Course Report/Switch up/Quora | 15         |
| Google                        | 85         |
| Ironhack Event                | 10         |
| Landing jobs                  | 7          |
| Linkedin                      | 9          |
| Newspaper/magazine            | 19         |
| other                         | 42         |
| Referral                      | 93         |
| Social Media                  | 34         |
| <b>Grand Total</b>            | <b>314</b> |

# TECHNICAL SKILLS

- Understand the script
- Add schools
- Clean data
- Create the database - ironlise
- Populate database - sqlalchemy
- Create EEG Diagram
- Data Analysis (Python):
  - relevant n° of comments
  - relevant time frame
  - comparison between Ironhack ratings and Similar & Lisbon groups of schools



# GROUPS OF SCHOOLS



## SIMILAR

Schools identified by the Switch Up as being similar to Ironhack

- App Academy
- Springboard
- Metis
- Practicum by Yandex

## LISBON

All schools that offer programmes in Lisbon

- Le Wagon
- Academia deCodigo
- React GraphQL Academy



# Key Metrics

Assumption: comments are representative  
of satisfaction of cohort



## 5335 comments

`comments_table.shape`

## Mostly 4 & 5s rating

Redefine quality

## 2017-2020

Relevant timeframe

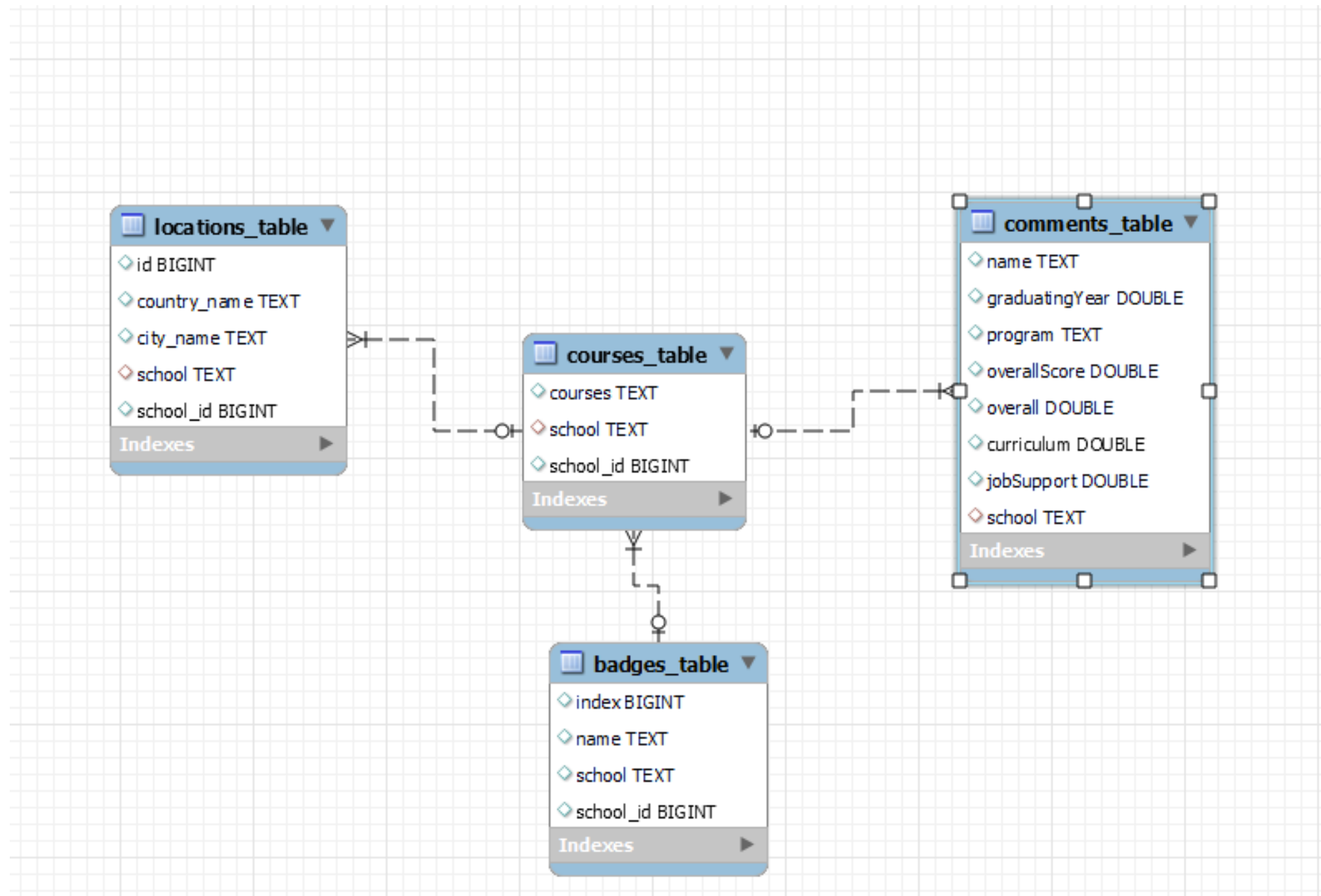






# EEG DIAGRAM

School  
School\_id





### Mean Ratings : Year & School

| Graduating Year | school                | Overall Score      | Overall           | Curriculum         | Job Support        |
|-----------------|-----------------------|--------------------|-------------------|--------------------|--------------------|
| 2017.0          | academia-de-codigo    | 4.933333333333334  | 4.933333333333334 | 4.933333333333334  | 4.933333333333334  |
| 2017.0          | app-academy           | 4.631896551724141  | 4.655172413793103 | 4.685344827586207  | 4.0905172413793105 |
| 2017.0          | ironhack              | 4.871717171717172  | 4.914141414141414 | 4.732323232323233  | 4.752525252525253  |
| 2017.0          | le-wagon              | 4.949226006191954  | 4.993808049535604 | 4.95046439628483   | 4.585139318885449  |
| 2017.0          | metis                 | 4.854285714285715  | 4.942857142857143 | 4.771428571428571  | 4.542857142857143  |
| 2017.0          | react-graphql-academy | 5.0                | 5.0               | 5.0                | 5.0                |
| 2017.0          | springboard           | 4.6                | 4.791044776119403 | 4.731343283582089  | 3.462686567164179  |
| 2018.0          | academia-de-codigo    | 4.983333333333333  | 5.0               | 5.0                | 4.666666666666667  |
| 2018.0          | app-academy           | 4.671921182266011  | 4.704433497536946 | 4.714285714285714  | 3.374384236453202  |
| 2018.0          | ironhack              | 4.871197411003239  | 4.906148867313916 | 4.789644012944984  | 4.792880258899676  |
| 2018.0          | le-wagon              | 4.946466809421844  | 4.982869379014989 | 4.944325481798715  | 4.342612419700214  |
| 2018.0          | metis                 | 4.882352941176471  | 4.882352941176471 | 4.9411764705882355 | 3.6470588235294117 |
| 2018.0          | react-graphql-academy | 4.966666666666667  | 5.0               | 4.888888888888889  | 3.3333333333333335 |
| 2018.0          | springboard           | 4.5736040609137065 | 4.680203045685279 | 4.573604060913706  | 3.182741116751269  |

Sample Table of Mean Ratings per Year & School (2017-2018)

|  |
|--|
| <div>2017</div> <ul style="list-style-type: none"> <li>Higher mean overall score than Similar group</li> <li>Lower mean overall score than Lisbon group</li> </ul> |
| <div>2018</div> <ul style="list-style-type: none"> <li>Higher mean overall score than Similar group</li> <li>Lower mean overall score than Lisbon goup</li> </ul>  |
| <div>2019</div> <ul style="list-style-type: none"> <li>Higher mean overall score than Similar group</li> <li>Lower mean overall score than Lisbon goup</li> </ul>  |
| <div>2020</div> <ul style="list-style-type: none"> <li>Higher mean overall score than Similar group</li> <li>Lower mean overall score than Lisbon goup</li> </ul>  |

|  |          | overallScore | overall  | curriculum | jobSupport |
|--|----------|--------------|----------|------------|------------|
| graduatingYear   | bootcamp |              |          |            |            |
| 2017.0   | Lisbon   | 4.937500     | 4.937500 | 4.937500   | 4.937500   |
|  | Similar  | 4.648802     | 4.712575 | 4.703593   | 4.011976   |
|  | ironhack | 4.871717     | 4.914141 | 4.732323   | 4.752525   |
| 2018.0   | Lisbon   | 4.977778     | 5.000000 | 4.962963   | 4.222222   |
|  | Similar  | 4.634053     | 4.700240 | 4.657074   | 3.294964   |
|  | ironhack | 4.871197     | 4.906149 | 4.789644   | 4.792880   |
| 2019.0   | Lisbon   | 4.818367     | 4.857143 | 4.714286   | 4.000000   |
|  | Similar  | 4.525408     | 4.673660 | 4.487179   | 3.969697   |
|  | ironhack | 4.765438     | 4.801843 | 4.700461   | 4.774194   |
| 2020.0   | Lisbon   | 4.937500     | 4.937500 | 4.937500   | 4.937500   |
|  | Similar  | 4.518868     | 4.641509 | 4.464837   | 4.319039   |
|  | ironhack | 4.728804     | 4.820652 | 4.777174   | 4.527174   |
| 2021.0   | Lisbon   | 4.984211     | 5.000000 | 5.000000   | 4.947368   |
|  | Similar  | 4.678070     | 4.785088 | 4.574561   | 4.434211   |
|  | ironhack | 4.815000     | 4.950000 | 4.800000   | 4.700000   |
| Comparison Table of Mean Ratings per Year & Group of Schools (2017-2021) |          |              |          |            |            |

2017

- Lower mean overall than Lisbon group
- Lower mean curriculum than Lisbon group
- Lower job support than Lisbon group

2018

- Lower mean overall than Lisbon group
- Lower mean curriculum than Lisbon group
- Higher job support than Lisbon group

2019

- Lower mean overall than Lisbon group
- Lower mean curriculum than Lisbon group
- Higher job support than Lisbon group

2020

- Lower mean overall than Lisbon group
- Lower mean curriculum than Lisbon group
- Lower job support than Lisbon group

|  |          | overallScore | overall  | curriculum | jobSupport |
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# Comments

Hypothesis: bad rating meant a bad review



## Overall

“However, a nine-week program cannot quite prepare you for a software engineering role without continuous self-studying.”

Petra Spirkova, 2017

## Curriculum

“Even though they claim to update their CURRICULUM according to industry trends it hasn’t really changed much.”

Thomas, 2017

## Job Support

“When it came to job placement there is barely any. Be prepared to be on your own and in a sea of competing designers. ”

Anonymous, 2019

# QUALITY TRENDS

In the timeframe studied, Ironhack mean overall scores were always higher than the mean overall scores of Similar Schools.

- Ironhack's quality is higher than that of Similar Schools
- Switch Up's AI - "You may also like" - is not correctly providing alternatives to Ironhack's programmes.



GOOD NEWS FOR IRONHACK!



# QUALITY TRENDS

In the timeframe studied, Ironhack's mean overall scores were always lower than the mean overall scores of Lisbon Schools.

- Ironhack's mean curriculum rating tends to be lower than that of Lisbon Schools.
- .Ironhack's mean job support rating tends to be lower than that of Lisbon Schools.

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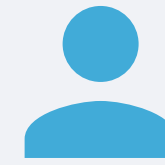
Job Support rating had been increasing for Ironhack until 2020  
(COVID pandemic & scarcity of employment offers)

Curriculum rating has always had a comparatively high difference in  
comparison with Lisbon Schools

**PROBLEMATIC DIMENSION : CURRICULUM**



# POSSIBLE SOLUTIONS



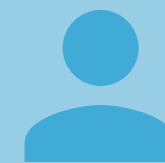
## **1:1 SESSIONS**

Students & Teachers



## **COMMUNICATION**

Between campuses & Ironhack



## **ADAPTABILITY**

Curriculum updates & adaptations





# IRON HACK

## DIFFICULTIES

- Data Cleaning
- Creation of an "All Schools" group
- Web Scrapping - gather alternative KPIs

## IMPROVEMENTS

- Analysis of Ratings & Influence on Student Intake
- Quality Analysis by Specific Programme & Country

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