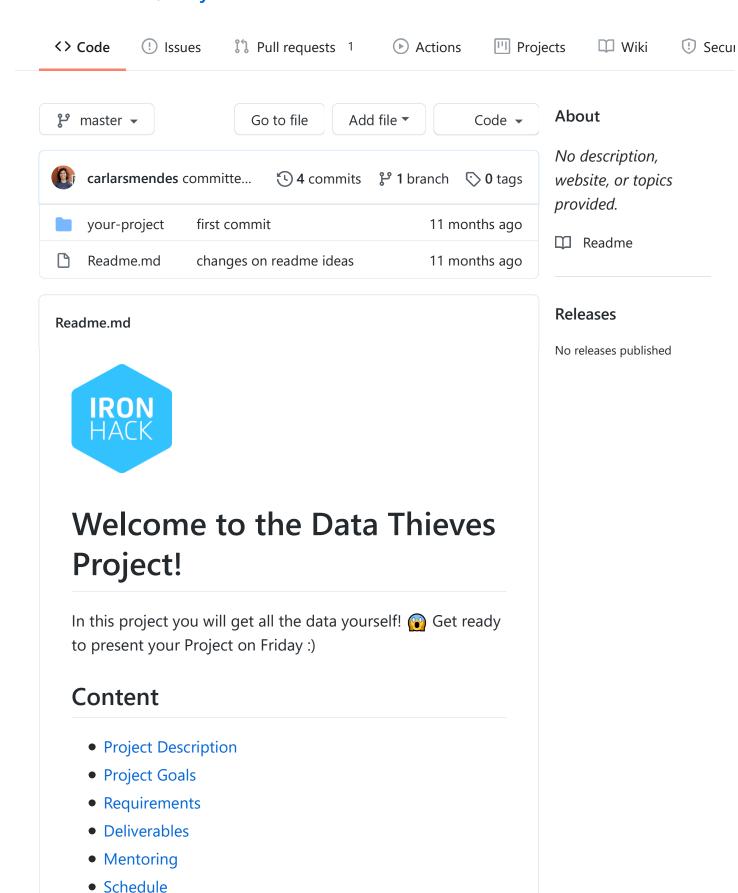
## ☐ ta-data-lis / Project-Week-3-Data-Thieves



- Json Structure
- Presentation
- Tips & Tricks
- Resources

# **Project Description**

In this project, you will choose a topic and find all the relevant data yourself from Kaggle. Afterwards, you should enrich it by connecting to an API, find a dataset or scrape data from the web. You then must organize, clean and analyse the data you find and present your findings in a presentation (you may use plots!).

# **Project Goals**

- Learn how to develop an interesting question and find the data to answer it.
- Learn how to obtain data from different sources, including APIs, open source datasets and/or scrape data from the web.
- Build a database from the data you find for the whole team to use.
- Explain more complex arguments with plots.

## Requirements

- You must plan your project. That is why creating a Kanban or Trello Board is mandatory. You have a template for Trello here.
- You CAN'T CODE until you project is planned.
- Create a .gitignore file and include it in your repository.
- Your project must include data from (at least) 2 different data sources (APIs & web, dataset & APIs, ...)

### **Deliverables**

You are required to turn in the following:

- 1. Link to your profile on Kaggle.
- 2. Link to your GitHub Repository and README.
- 3. Documentation as talked about in class.
- 4. Access information to your database with a description of each table and how they relate.
- 5. Links to the data you are using (sources) and your organization (trello).
- 6. Slides for your presentation.

## Mentoring

Either a TA or the Lead Teacher will be your mentor! Your mentor will:

- Follow your project in general, will be the second person that knows more about the project, after you.
- Check if you are following the tasks, your blockers, etc
- Help/support you in specific questions.

Your mentor is NOT meant to:

- Know everything.
- Be your manager. You have to be the responsible person to do the tasks!

### Schedule

Tuesday & Wednesday

- Look for an interesting topic and make some hypothesis or think about some questions to answer about it.
- Investigate which data sources are available for that topic.
- Reach some best practices agreements as a team.
- Plan your project and organize. Think about some risks you can expect.
- Start working on your database.

#### Thursday

- Start working on your analysis and plots. Think about the plots you want to create and the structure of your presentation.
- Finish your analysis.
- Start working on your presentation.

#### Friday

- Adjust your presentation.
- Presentation!!

### **README File structure**

The README will be your paper and it is meant to have all the (analysis) information about your project.

The structure should be:

- 1. Title of the project
- 2. Introduction to your project.
- 3. Data you are using (and comments, main challenges, strengths & weaknesses, etc...)
- 4. Questions you want to answer (maybe divided by different topics). Each question should include a conclusion written in a markdown cell.
- 5. Conclusions after your analysis.
- 6. Further questions.

### Presentation

You will have 10 minutes to present your project. The below are some ideas for slides you could include in your presentation; those marked with an **(M)** are mandatory!

- (M) Title of the project
- (M) Your topic. Why did you choose it?
- (M) Presentation of the team

- Main challenges & strengths
- (M) Team. Did you follow your workflow plan? Did you add something after starting the project? Did you follow your best practices agreements? Did you think about the risk management?
- About your data: useful sources, incomplete data, data that would have been great to have, etc.
- Data cleaning: how and why you cleaned your data the way you did.
- (M) Main insights: one slide per insight!
- Questions you couldn't answer.
- Something funny that happened during the project.
- Things you learned during this project.
- If you could start from scratch, what would you do differently?

# **Tips & Tricks**

- First, choose your topic and look for sources available.
- Before you start coding and integrate more data, propose some interesting questions you could answer with the data you have.

### Resources

### Lists

**AnyAPI** 

Top 50 Most Popular APIs on RapidAPI 18 Fun APIs For Your Next Project

### Some Ideas

WeatherBit

Strava

GitHub

**Twitter** 

LastFM

**Spotify** 

**NYTimes** 

News

Reddit

Medium

**Twitch** 

**IGDB** 

**OMDB** 

**GIPHY** 

StackExchange

YouTube

TheSportsDB

**NBA API** 

## **Paper Examples**

Data Analysis with Python

The Best Mario Kart Character According To Data Science

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