CAPSTONE PROJECT

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Filipe Falcão

SCHEDULE

1. Introduction:

- The problem to be solved.

2. Data Section:

- Data requirements and Sources.

3. Methodology section:

- Data processing, data analysis and/or inferential statistical testing performed, and/or machine learnings used.

4. Results section:

- Presentation of the results/finding.

5. Discussion section:

- Observations & recommendations

6. Conclusion section:

- Answers & conclusions.

1. INTRODUCTION

Hello everyone,

My name is Filipe! Welcome to Oporto, my sweet hometown.

1. INTRODUCTION

Oporto is a historic place.

It is a charismatic city, with proud residents.

Filled with beautiful monuments and breathtaking landscapes, as well as home of one of the most famous football clubs in the world (FC Porto), it is not surprising that the "undefeated city “ is a popular destination for tourists worldwide.

1. INTRODUCTION

- The problem to be solved:
Given the growing wave of tourism in Oporto, a hotel building group is interested in opening a hotel in the city. They want to know what would be the best place in the city to open a hotel.

- **About Oporto:**

Oporto is made up of 15 locations:

Aldoar	**Massarelos**
Bonfim	**Miragaia**
Campanhã	**Nevogilde**
Cedofeita	**Paranhos**
Foz do Douro	**Ramalde**
Lordelo do Ouro	**Santo Ildefonso**
São Nicolau	**Sé**
Vitória	

1. INTRODUCTION

- **What do we need?**

We need to choose the best Locality in Oporto to Build a hotel.

- **The ideal place to open a city hotel should take into account the following characteristics:**

- Low amount of competition (other hotels)
- Presence of several nearby restaurants
- Near nightlife establishments
- Near the city's monuments and other art and leisure sources
- Easy subway access for tourists to move around the city in peace

- **Who would be interested in this project (Target Audience):**

- Hotel investors
- Tourists
- Traders.
- Residents

2. DATA SECTION

- The data we need:
The localities of Oporto and their coordinates (latitude, longitude).

- Venues of the localities we need from Foursquare:

- Hotels
- Restaurants
- Nightlife establishments
- Art and Leisure Sources
- Subway stations

3. METHODOLOGY

1) I collected, for each locality, all hotels, restaurants, night establishments, art and leisure places and subway stations venues data from Foursquare.

2) Then, i computed, for each locality, the sums of the hotels, restaurants, night establishments, art and leisure places and subway stations

3) For each category, a weight (or penalty) has been defined according to what we think is important for a hotel to be successful:

Category	Weight
Hotels	-1.0
Restaurants	1.0
Night Establishments	1.0
Sybway stations	1.5
Art and leisure	1.5

4) At last, i computed a score for each locality as the weighted sum of the number of venues in each of the categories above.

THANK YOU FOR YOUR ATTENTION.