

# PropertEase – A Unified Property Listing Manager

Team Size: 4-5

## Advisors

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## Motivation

PropertEase is driven by the need to address the complexities faced by property owners managing listings across multiple hosting platforms. The challenge of synchronizing calendars, setting competitive prices, and efficiently managing listings is prominent in the current rental landscape. The project aims to simplify these processes, improve operational efficiency, and maximize revenue through an innovative solution. The resurgence of tourism plays a critical role in driving demand for rental properties, as travelers increasingly seek unique and personalized accommodation experiences beyond traditional hotels. Therefore, solutions like PropertEase come of need. They can help property owners capitalize on the booming travel market by streamlining their operations and optimizing their listings to meet the diverse needs and preferences of tourists.

## Goals

PropertEase is thought as a way to establish a unified and intelligent control panel aimed at simplifying the management of property listings for owners. This system is designed to amalgamate and synchronize calendars from many hosting platforms, thereby mitigating the risk of overlapping bookings and enhancing operational procedures efficiency. A pivotal component of this is the deployment of an algorithm dedicated to the dynamic adjustment of rental prices. This algorithm is tasked with the continual assessment of market dynamics and demand fluctuations, enabling the automatic recalibration of prices in accordance with real-time data. The interface of PropertEase is envisioned to be intuitive, accommodating users possessing a wide range of technical expertise.

In addition to these features, PropertEase is set to incorporate a suite of tools designed for the analysis of the market. These tools are intended to provide users with insights into demand trends and a comparative analysis of competitors. This aspect of the platform is particularly significant for property owners looking to optimize their pricing strategy and operational decisions based on market conditions.

The dynamic price adjustment feature is of key importance in PropertEase, enabling property owners to maximize revenue through the strategic setting of rental prices. This is achieved by analyzing internal demand signals as well as comparing with other properties that share similar characteristics, ensuring that pricing decisions are both competitive and aligned with market expectations.

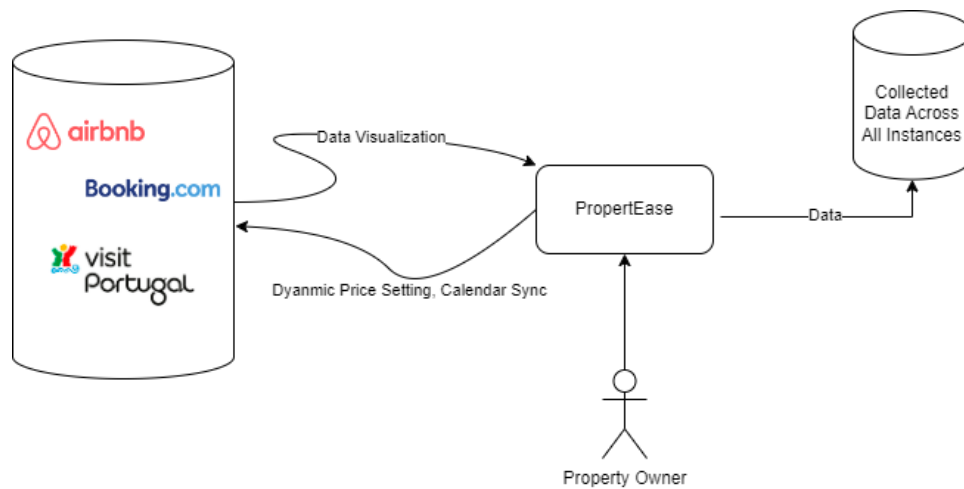


Figure 1: Conceptual Diagram for the PropertEase system

The calendar synchronization functionality ensures seamless operation across different platforms, preventing scheduling conflicts and enhancing the user experience for both owners and guests.

The data analysis capability offers a robust framework for understanding market dynamics, equipping property owners with the knowledge to make informed decisions about their listings.

Furthermore, the data collected across all instances of this system will aid stakeholders such as municipalities, Destination Management Organizations and land developers make better informed decisions.

## Tasks

1. Problem definition
2. State of the Art
3. Analysis and requirements gathering
4. Evaluation of existing APIs and general platform accessibility
5. Design of the architecture for platform implementation
6. Implementation of a prototype
7. Testing and validation