
PROJECT TOPIC:

**PREDICTING INTEREST LEVEL OF
RENTAL LISTINGS**

AIML Group No.: 19

Project Group Members:

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Introduction:

In the dynamic landscape of real estate, predicting the interest level of rental listings has become a pivotal challenge, necessitating advanced analytical tools and methodologies. The ever-expanding array of rental options, coupled with diverse tenant preferences, demands a nuanced understanding of the factors influencing interest levels. This synopsis delves into the intricacies of developing a predictive model that harnesses data-driven insights to gauge the appeal of rental listings. By exploring key features such as location, amenities, and pricing, this study aims to unveil patterns and trends that can be leveraged to anticipate the level of interest a property might generate. As the rental market evolves, the ability to forecast interest levels becomes invaluable for property managers, landlords, and real estate professionals, offering them a strategic edge in optimizing listing performance and enhancing the overall tenant experience.

Motivation:

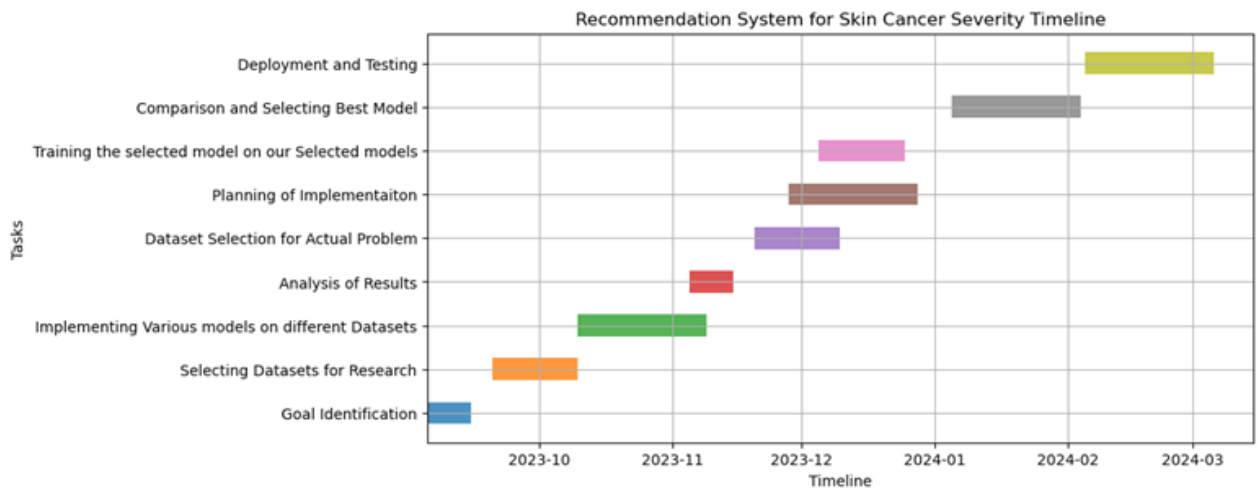
In an increasingly competitive rental market, understanding and predicting the factors that drive interest in listings is vital for landlords and tenants. This research seeks to empower stakeholders by developing a robust predictive model. By unraveling the nuances of what influences interest levels, we aim to streamline the rental process, making it more efficient and informed. This study is motivated by the potential to revolutionize decision-making, creating a win-win scenario for both property owners and prospective tenants.

Project Planning:

The project plan for predicting the interest level of rental listings involves a systematic approach. It begins with data collection, encompassing diverse features like location, amenities, and pricing. Subsequently, the dataset undergoes rigorous preprocessing to ensure quality and relevance. The application of advanced analytics and machine learning algorithms follows, aiming to identify

patterns and correlations within the data. Model training, validation, and fine-tuning are pivotal stages, culminating in the development of a robust predictive framework.

Chart:



Tools required:

Hardware Requirements: CPU: A modern multi-core processor (quad-core or higher) for handling computational tasks efficiently.

GPU or TPU: For deep learning tasks, having a powerful GPU (NVIDIA GeForce or Quadro series) or TPU (Tensor Processing Unit) can significantly speed up model training and inference for image-related tasks.

RAM: Sufficient memory (16GB or higher) to handle large datasets and computational tasks effectively.

Software Requirements: Google colab, VS Code, Jupyter, kaggle.

Signature of Project Supervisor: _____