**Jira Tickets Report: Price Prediction Project**

During the course of the project, several Jira tickets were created to manage and track the tasks involved in developing the machine learning model for price prediction. Here is a summary of the Jira tickets and their contributions to the overall project:

1. **Ticket ID: ML-001**
   * Description: Data Preprocessing
   * This ticket involved handling missing values, converting the price column to numeric format, and extracting text embeddings from the 'area\_embedding' column. It ensured the data was prepared for further analysis and model training.
2. **Ticket ID: ML-002**
   * Description: Text Embedding Generation
   * This ticket focused on implementing the text preprocessing steps and integrating the OpenAI API for generating text embeddings. It addressed challenges related to API response handling and extracting the correct embedding values. The successful completion of this ticket was crucial for incorporating textual information into the machine learning model.
3. **Ticket ID: ML-003**
   * Description: Model Training and Evaluation
   * This ticket covered the splitting of data into training and testing sets, training a linear regression model using the numerical features and text embeddings, and evaluating the model's performance using mean squared error (MSE). It ensured that the model was trained and assessed accurately to provide price predictions.
4. **Ticket ID: ML-004**
   * Description: Model Performance Optimization
   * This ticket involved exploring alternative models, feature engineering techniques, and hyperparameter tuning to improve the performance of the price prediction model. It contributed to enhancing the accuracy and reliability of the predictions by fine-tuning the model's parameters.
5. **Ticket ID: ML-005**
   * Description: Documentation and Reporting
   * This ticket focused on creating the necessary documentation for the project, including markdown cells for the project introduction, data preprocessing, model training, and a final report summarizing the results and insights. It ensured the project was well-documented and presented in a clear and organized manner.

Each Jira ticket played a vital role in different stages of the project, addressing specific tasks and requirements. Collectively, they contributed to the successful development of the price prediction model by covering data preprocessing, text embedding generation, model training and evaluation, performance optimization, and documentation aspects. The Jira tickets helped track the progress of the project and ensured that all essential tasks were completed in a systematic and organized manner.

A screenshot of a computer

Description automatically generated