**README**

**EASYLIBPAL README**

**Simplifying Classic AI Algorithms with Easylibpal**

Easylibpal is a Python library revolutionizing the utilization of classic AI algorithms by providing a user-friendly interface. It abstracts away the complexities inherent in popular AI libraries, offering a unified platform for developers and data scientists to seamlessly integrate algorithms like Linear Regression, Logistic Regression, SVM, Naive Bayes, and K-NN. By simplifying the process of algorithm selection and implementation, Easylibpal bridges the gap between intricate AI methodologies and accessibility, empowering users regardless of their expertise level.

**Features**

- Streamlined Integration: Easylibpal offers a simplified integration process for classic AI algorithms, enabling users to focus on problem-solving rather than algorithm implementation details.

- Unified Interface: With Easylibpal, users can instantiate algorithms, fit models with training data, and make predictions with minimal configuration, thanks to its unified interface.

- Enhanced Productivity: This streamlined approach enhances productivity and facilitates experimentation, enabling rapid prototyping and deployment of AI solutions.

- Democratized Access: By democratizing access to classic AI algorithms, Easylibpal accelerates innovation and empowers users to unlock the potential of artificial intelligence in various domains.

**Installation**

You can install Easylibpal using pip:

```bash

pip install easylibpal

```

**Quick Start**

```python

# Import Easylibpal

import easylibpal as elp

**# Instantiate Linear Regression**

lr\_model = elp.LinearRegression()

# Fit model with training data

lr\_model.fit(X\_train, y\_train)

**# Make predictions**

predictions = lr\_model.predict(X\_test)

```

**Classic AI Algorithms Supported**

**- Linear Regression**: Predicting a continuous outcome variable based on one or more predictor variables.

**- Logistic Regression**: Binary classification problems, predicting the probability of an instance belonging to a particular class.

- **Support Vector Machines (SVM):** Effective in high-dimensional spaces and best suited for classification and regression analysis.

- **Naive Bayes:** A probabilistic classifier based on applying Bayes' theorem with strong independence assumptions between the features.

- **K-Nearest Neighbors (K-NN)**: A non-parametric method used for classification and regression. It classifies new instances based on a similarity measure (e.g., distance functions).

**Contributions**

Contributions are welcome! If you have suggestions, feature requests, or want to report a bug, please open an issue or submit a pull request on [GitHub](https://github.com/your\_username/easylibpal).