

---

# Car Rental System - Your Ultimate Rental Adventure!

Welcome to the **Car Rental System**, a vibrant Python-powered command-line interface that brings car rental management to life! Built with a passion for object-oriented design and the clever Singleton pattern, this system ensures a seamless, one-of-a-kind experience. No tedious manual setups here—just pure driving fun! We’ve included a `requirements.txt` to get you rolling in no time.

## How to Hit the Road

1. **Gear Up:** Make sure you’ve got Python 3.10 or higher (tested on Python 3.13) installed on your system.
2. **Fuel Up:** Install the dependencies with a quick `pip install -r requirements.txt`.
3. **Start the Engine:** Launch the adventure by running `python main.py` from your command line.
4. **Drive On:** Follow the on-screen prompts to explore the system like a pro!

## What’s Under the Hood

- **main.py:** The heart of the action! This file kicks off the user interface and menu, guiding you through every step.
- **system.py:** The brain behind the operation, managing users, vehicles, and rentals with flair.
- **models.py:** Showcases our object-oriented skills with classes like `User`, `Admin`, `Customer`, `Car`, and `Rental`—a true design masterpiece!
- **utilities.py:** Packed with handy tools like input validation and screen clearing to keep things smooth.
- **database.py:** Powers all database magic using SQLite, keeping your data safe and sound.
- **base\_cars.json:** A treasure trove of initial vehicle data to kickstart your rental fleet.
- **requirements.txt:** Your dependency roadmap—simple and effective.

## Quick Start Tips

- Hop in, register new users, or manage your fleet—the choice is yours!

## License Terms

This project zooms under the **MIT License**. Feel free to use, copy, modify, distribute, or sublicense it—just give a shoutout to the team for the ride!



## Bug Check

---

After thorough test drives, we're proud to report **no known bugs**—but if you spot any bumps, let us know, and we'll patch them up!



## Credits

---

Crafted with ❤️ by **Junbin Xu**, Master of Software Engineering, Yoobee Colleges, Auckland. Thanks for joining the journey!