

# Your Rental Community Platform



- One and only rental community platform
- Freely lend and rent any items you want
- Various items ranging from toys to cars



# JYX

Your rental community platform

## About Us

JYX(借一下) is a rental community platform supported on the web and app. The users can freely list the objects they would like to rent and select the objects they would like to rent. The rentee will first be able to read the contract renter has written for renting the object. The renter can contact to negotiate with the rentee through the chat system in JYX. During the negotiation, the renter and rentee will decide the rental price, and the object receiving/returning method. When the contract is signed, depending on the rental object receiving method, the rental object will be delivered to the rentee. After the rental period, the object will be returned to the renter.

## Motivation

There are many renting platforms for cars and houses, but why do we limit ourselves to only those two items? I believe that any item with value can be rented. In the past, it was inefficient to rent objects with a small value, or for a short period of time because the return from renting the objects could not reach the break-even point. That is because in the past the cost of writing the contracts, such as time and effort, was much larger compared to the return. However, with the development of recent technologies, the process of writing a contract only takes a few minutes. Thus, the renter can list their renting objects on JYX by filling out the template contract within a few minutes.

## Economic Impact

JYX will play a key role in shifting the current economy to the sharing economy. In the sharing economy, one item can be shared among a group of people, so users will be able to use a specific item for a lower price. Sharing of items will result in fewer users to purchase those items, which leads to a decrease in demand for that product. When the demand decreases, the company will reduce the amount of produced items, thus, saving resources used for making the item. Saving resources will increase the abundance of resources that decreases the price of those resources. As a result, production costs will decrease, and selling prices will decrease.

## Environmental Impact

JYX will bring a positive environmental impact to society by reducing greenhouse gas emission in all parts of the production cycle. As discussed in the economic impact, if the amount of produced items decreases, the company will not be running as many factories. A decrease in the number of running factories, although the specific amount may vary, will overall decrease the total amount of greenhouse gasses produced during the production in the factory. Moreover, less transportation, such as truck, vessel, and plane, will be required to transport the raw materials used for production because of the decrease in demand. A decrease in usage of transportation will reduce the amount greenhouse gas emitted from those means of transportation. Therefore, JYX will be able to reduce the overall carbon footprint produced by the producer.

## Technology & Implementation Plan

In the beginning stage, the website will be developed and the application will be a hybrid application utilizing the website. In the future, the applications will be changed to native application for more stable and faster performance. The front-end of the website will be developed using a framework from ReactJS called NextJS and also using TailwindCSS for the design of the website. The back-end will be implemented using a serverless database hosted by PlanetScale which will be connected using Prisma as the ORM(Object-Relational Mapping). The serverless functions will be implemented using the API from Vercel. Additionally, Cloudflare Images will be used as the CDN(Content Delivery Network) for storing and transferring image data to the website. In the future, when developing the native application Swift will be used for the iOS development, and Kotlin will be used for Android development. Lastly, the utilization of smart contract in blockchain technology for the contract between renter and rentee is also considered in the future development.