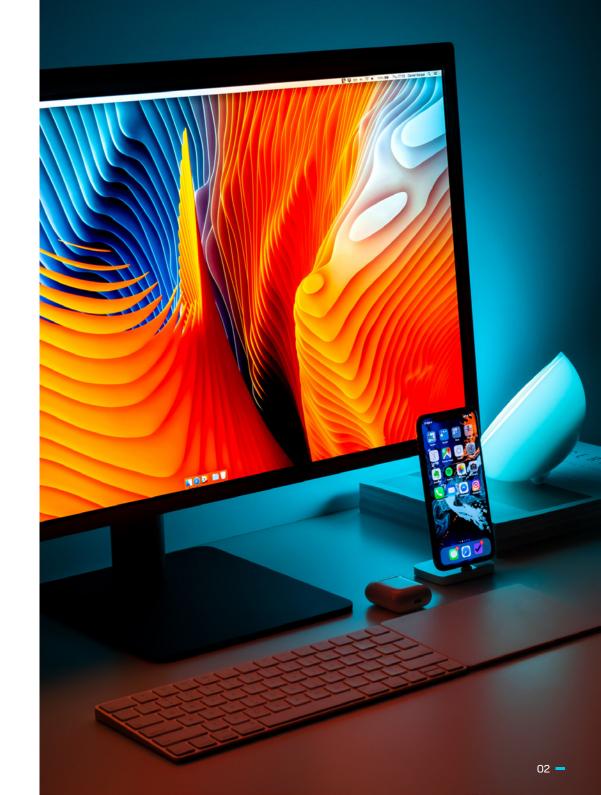




#### **Table Of Contents**

Blockchain & Game Develoment	05
Mobile App Development	31
Software Development	67
Web Development	91



# Blockchain & Game Development



### Blockchain POC App with Web & Mobile Wallet

A blockchain project where we were responsible for the operation of a blockchain infrastructure, source code and Proof of Capacity (PoC) development. It also involved mining and plotting tool, explorer, web wallet, mobile wallet, etc.

Service Domain

Software Development Finance

Platform Technology Stacks & Dependencies

Web & Mobile (Android / iOS)

(g) (php)





Type Keywords

Blockchain PoC App

#### **App Features**

- Node: A file built to act as a node in the blockchain network.
- Web Wallet: A digital wallet on a web platform.
- Mobile Wallet: A digital wallet in a form of a mobile app.
- Scan Web: An explorer that provides an easy way to search for blockchain information.
- Pool: A mining space that allows users to mine cryptocurrency blocks
- Grower: A mining tool.



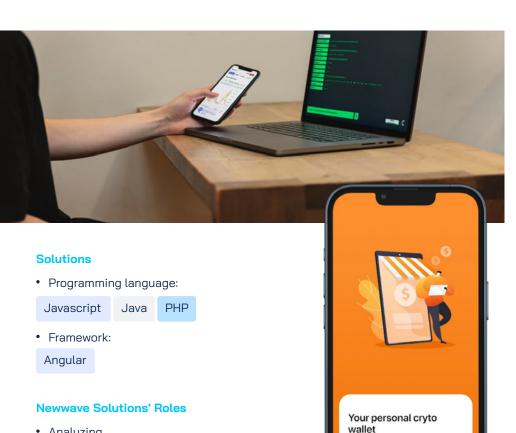
 Our client was still building their system, so they frequently changed plans. So, we had to regularly communicate with the client to get updated with their new requirements or changes.



#### **Technical Challenges**

 Proof of capacity (PoC), a consensus mechanism algorithm used in blockchains for mining devices, is more challenging to build and operate than traditional systems. Therefore, we had to research and learn from similar systems to find the best solution for our client.

<del>-</del> 05



- Analyzing
- System Design
- Management
- Development
- Test

#### The Result

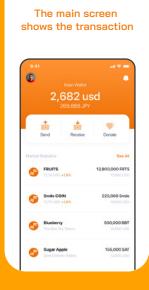
• The initial PoC was rapidly put into production and provided the customer's first consumer-facing responsive website, including features such as online consumer payments.

Its secure and support near about hundred

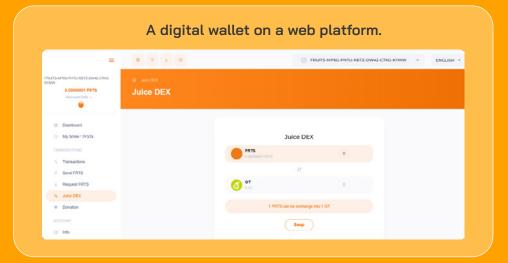
cryto currencies

• There are more than **50.000 downloads** and **1.000 reviews** on iOS & Android.











#### An Easy-to-Follow Digital Wallet App That is Profitable

EJS Staking Application provides staking pools for users to carry out stake transactions and earn profits by claiming rewards on betting pools.

Users need to connect with blockchain wallets or use WalletConnect to connect to other wallets before carrying out steps like stake/staking more/unstake/restake/claim reward.

Service	Domain
Software Development	Finance
Platform Web & HTML Game	Technology Stacks & Dependencies
	Java React JS Ether JS
Туре	Keywords
Blockchain	Digital Wallet App

#### **App Features**

- · Allow users to log in with blockchain wallets.
- Display staking pools with many types of tokens.
- Allow users to stake into a pool to get profits.
- Allow users to restake into another pool.
- Allow users to claim rewards or unstake from pools.



• The team does not have experience in tackling staking flow with smart contract



- The NFT game requires an open-source protocol for digital wallet connecting.
- We used WalletConnect, a popular but very complex third-parties tool that supports and secures games with all digital wallets.
- The team had to research and discuss with our clients many times to successfully implemented WalletConnect into the app.



• Programming Language:

Javascript

• Framework:

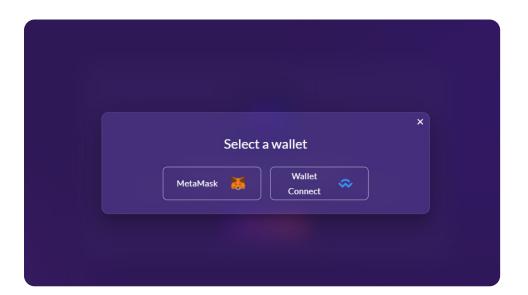
NodeJS ReactJS

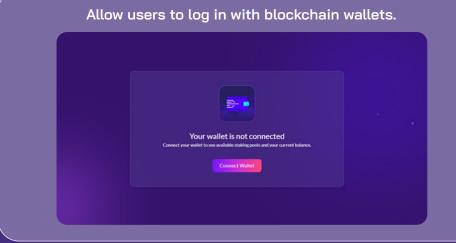
#### **Newwave Solutions' Roles**

- UI/UX Design
- Development

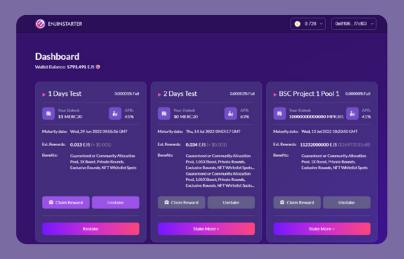
#### The Result

- Our clients left very positive feedbacks on top review site for us.
- Within 120 days, Newwave Solutions finished this project and the digital wallet has currently **13.000 users** at the moment.
- Our team supports the client 24/7 and solve their issues in real-time, so the number of arising issues went down and our client was able to reduce their budget for support services by 50%.





The dashboard shows that users can claim rewards or unstake from pools.



→ View More

**-** 11 12

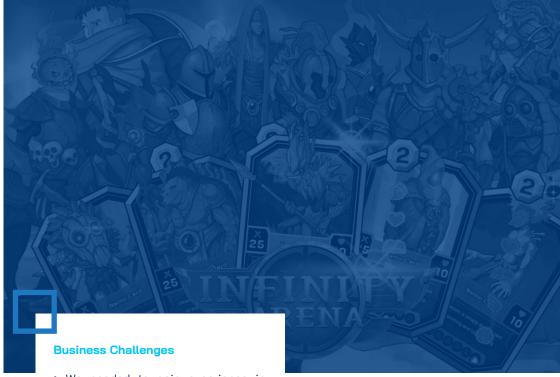
#### Fantastic NFT Card Game for Entertaining & Mining

Infinity Arena is a metaverse game built with various functions such as Game Mining, Game Card Battle, Lottery Game and Staking System. With NFT, you can enter the game to mine Zeronium and fight to earn token and valuable NFT products. Token and NFTs in game can be exchanged, bought and sold by gamers to convert into real money.

Service	Domain
Software Development	Entertainment
Platform	Technology Stacks & Dependencies
Web & Mobile (Android / iOS)	mongoDB nest & kafka TRUFFLE SOLIDITY
Туре	Keywords
Blockchain	NFT Game, Blockchain Game

#### **App Features**

- Having its token to operate the ecosystem in the game.
- Game Mining: Using NFT Land, Machine to mine tokens in the game.
- Game Battle: Using the NFT Guardian Card to complete the Quest, compete with other players to earn rewards in the game.
- Lucky Arena: Including many mini-games for players to play daily to earn rewards for lucky people.
- Staking Arena: Players can stake tokens to earn more profits at Return on Fixed Capital or to get tickets to play mini-games.
- Training Arena: Players can upgrade existing NFTs with higher rarity and value.
- Marketplace: Players can buy, sell and exchange NFTs with each other there.



- We needed to gain experience in raising funds, building communities, and working in marketing when it comes to blockchain.
- As a result, the team had to hire and cooperate with other blockchain experts to ensure that we completed our project on schedule.



#### **Technical Challenges**

- Make sure the system has minimal security errors and large withdrawals.
   Figure out a more efficient way to control data sync between on-chain and off-chain transactions.
- Avoid making the same mistakes that other blockchain projects did, like missing ROI.
- We are building new communities in the field of blockchain from scratch.
- Cooperating with many Blockchain experts to ensure the project is finished on schedule.

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• Programming language:

Typescript Solidity

Framework:

Nestjs Colyseus Openzeppelin

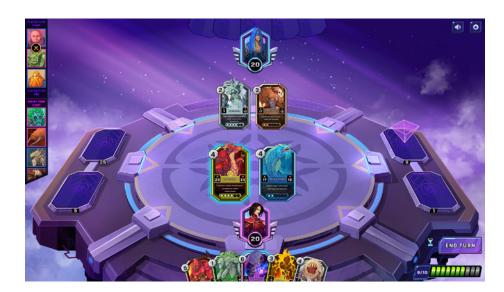
Cocos2d-JS Cocos Creator

#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development
- UI/UX Design

#### The Result

- The system has been launched and there are **no security issues** until now.
- It includes the monitor system to detect and support players when the system makes the game interrupted.
- There were more than **1.000 users** as soon as the game was released after one week.



Battle: Gamers use the NFT Guardian Card to complete the Quest and compete with other players to earn rewards in the game.



Lucky spin includes many mini-games for players to play daily to earn rewards for lucky people.



→ View More

#### An Easy-to-Follow Digital Wallet App That's Profitable

It is an online game with the aim of the user to achieve the highest core than any player else in the day to get awards and players can enjoy the game on any device that has a web browser.

Players must choose similar and close items to identify the target level with monsters in one round. The more extended connection, the more lethal level, and the players' scores are.

Defeating all monsters in one round will move you on to the next level with more difficulty and higher monsters' attack & defense. Therefore, players will need to connect items more wisely and as quickly as possible.

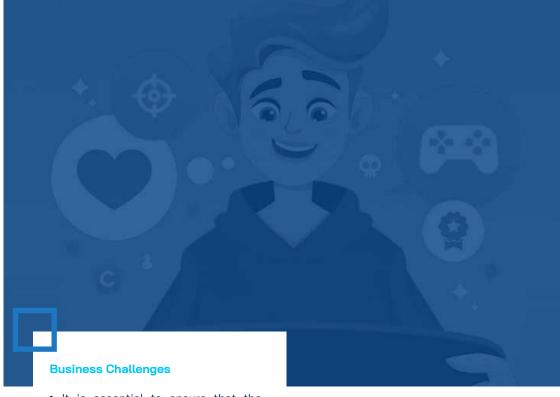
Service	Domain
Software Development	Entertainment
Platform	Technology Stacks & Dependencies
Web	node series PostgresQL
Туре	Keywords

NFT Game, Blockchain Game

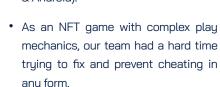
#### **App Features**

**NFT Game** 

- The online game has the function of managing the player's account.
- · Save history game and rank player's position by day.
- There is a reconnect mechanism when the player suddenly has no connection and is out of the game.
- There is an Authoritative Server mechanism to prevent players from cheating. The server will authenticate all player actions on the client.
- Top players can get awards from the game, which is run a calculation by a fixed time every day.



- · It is essential to ensure that the game information and data that our client provided are always correct and not misleading players.
- Creating a community and social media for the NFT game.





**Technical Challenges** 

• Ensure the game loading speed is fast enough while also producing a stable performance on all mobile devices (iOS & Android).

mechanics, our team had a hard time trying to fix and prevent cheating in any form.



• Programming Language:

Typescript

Javascript

• Framework:

Cocos Creator

Cocos2d-js

#### **Newwave Solutions' Roles**

- Analyzing
- Development
- Art Design

#### The Result

- The game has been completed and appeared on the customer's web game system.
- Up to now, there have been no issues related to player cheating. The solution is now a highly secure application that provides high and stable performance. As a result, the performance was increased dozens of times and attracted 15.000 new gamers.



Save history game and rank player's position by day.



Gameplay: Chainfighter



→ View More

**-** 21 22 **-**

## A 2D NFT Game Connects to Crypto Currency Wallets

It is a 2D NFT Game which is a kind of fighting game connecting to cryptocurrency wallets.

**Service** 

Software Development

Platform

Web, Desktop, & Mobile (Android / iOS)

Type

NFT Game

Domain

Entertainment

**Technology Stacks & Dependencies** 









#### Keywords

NFT Game, Blockchain Game

#### **App Features**

- Select cards, decks, and heroes.
- Play in casual mode, event mode, and ranked mode.
- · Daily quest to get awards.
- Have an admin page and statistic page Friend chat, Friend's challenges.



 The game has multiple rules to tackle and the original interaction between each type of hero was very complicated.

#### **Technical Challenges**

- The app performance had a bit of trouble when loading data from the blockchain during the development process so we changed to Colyseus game server to fix the issue.
- We also wrote and balanced the game's complicated rules and card abilities in battle many times to achieve the right balance and fair for all players.



**-** 23 24 **-**

• Programming Language:

Typescript

• Framework:

Colyseus

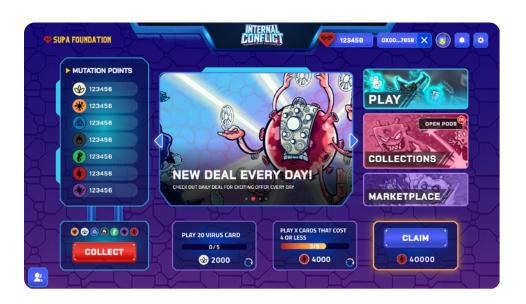
Cocos creator

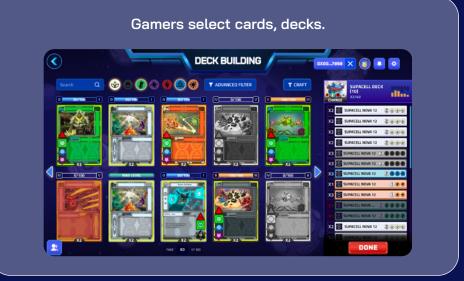
#### **Newwave Solutions' Roles**

- Funtional Specification
   Definition
- UI/UX Design
- Game Art Design
- System Design
- Development
- Management

#### The Result

• The game attracts more than **30.000 players** and contributes to an increase of **30% in revenue** for our client.





Users play in casual mode, event mode and ranked mode.



**-** 25 26 **-**

#### Earning Billions in an Immersive 3D **Game with Spatial Sound**

A 3D game with in-game voice chat for multiple players.

Service

Domain

Game Development

Entertainment

Platform

**Technology Stacks & Dependencies** 

Mobile (Android / iOS)

VIVOX

Type

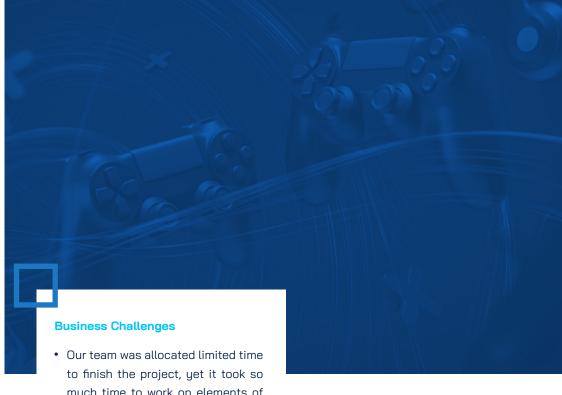
Keywords

Native App

3D Game, Mobile Game

#### **App Features**

- Creates an online virtual space for fans.
- · Players can easily interact with each other through voice chat, talk events, dress-up, mini-games, etc.
- Players can support the company through gacha events.



- much time to work on elements of the app.
- · We decided to arrange weekly meetings with our clients so that we could clearly understand what they wanted and comply with their requirements, avoiding having to edit many times.



#### **Technical Challenges**

- The client wanted a game with simulates the 3D positional voice that is indistinguishable from the real world.
- Our development team had to test a variety of techniques and tools like Vivox Voice Communication Service to come up with the best solution to achieve the perfect in-game voice chat.

• Programming Language:

C/C++

Framework:

UE4

Vivox SDK

#### **Newwave Solutions' Roles**

• Development

#### The Result

- Thousands of players visit the game every week.
- **95% of players** are satisfied with the UI/UX design.





#### Gameplay: Brex Atheletic Rage







View More

**-** 29 30 **-**

# )2

## Mobile App Development



### This App Can Help You Make Better Medication Decisions

An app that provides users with information on pharmaceutical drugs.

**Service** 

Mobile App Development

Mobile (Android / iOS)

Pharmaceutical

Domain

**Platform** 

**Technology Stacks & Dependencies** 







Type

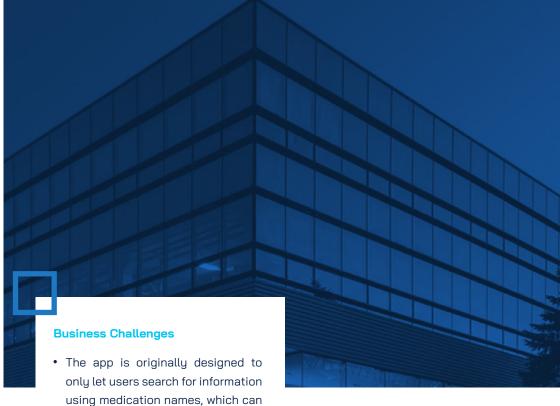
Cross Platform

Keywords

Medication Apps

#### **App Features**

- Users can browse information like ingredients or side effects of more than 12.500 types of OTC drugs and 22.000 types of prescription drugs.
- Users can browse using drug names, barcodes or QR codes.



#### Technical Challenges

- Newwave Solutions team had to maintain and update new features while ensuring system stability.
- We wrote testing source code to ensure correctness throughout the maintenance process and successful new features updating.



sometimes be inconvenient. There-

fore, our team suggested and

search methods like scanning barcodes and QR codes to improve

developed

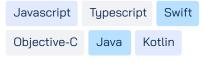
successfully

the search feature.

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• Programming Language:



• Framework:

React-native Ignite

#### **Newwave Solutions' Roles**

Development

#### The Result

- User can search over 12,500 OTC drugs and over 22,000 prescriptions on the app.
- Hundreds of thousands of people have installed and used the app on iOS and Android.





Ingredients include banned substances.



Ingredients do not include banned substances.



View More

**−** 35 36 **−** 

#### **Save More with Advanced Apartment Search**

An app that allows users to access rental information in Japan.

Service

Domain

Mobile App Development

Ecommerce

**Platform** 

**Technology Stacks & Dependencies** 

Mobile (Android / iOS)







Type

Keywords

Native App

**Apartment Rental Apps** 

#### **App Features**

- Helps users save time with many search filters.
- Provides users with information about rentals.



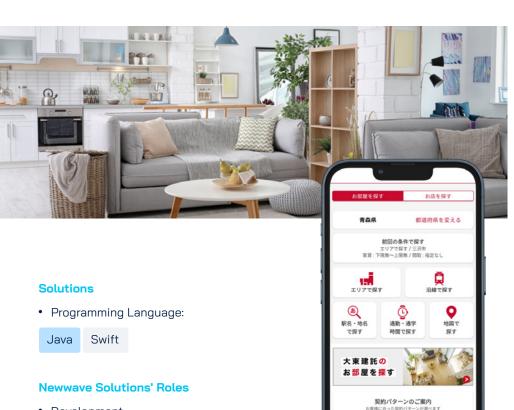
- Our software development team did not have much information about the house rental market in Japan, so it was nearly impossible for us to understand what our clients really wanted.
- We spent a lot of time learning about the rental market in Japan to understand what the local people need and were struggling with when trying to find houses for rent.



#### **Technical Challenges**

- We optimized the filter feature so users can search and locate a specific location easily and accurately based on categories such as stations, rentals, or factories.
- Since the database was massive we had to use a new method to collect and display all rental information.
- Our team conducted a survey to gather user opinions in Japan to understand what they truly want from a real estate app so we can ours.

<del>-</del> 37



Development

The Result

 The time a bot takes to augment the searching process has been reduced to 57% less than searching on the Internet. 



→ View More

#### T-shirt Business App Adoption Leads To 57% Increase In Revenue

A platform where the whole supply chain happens, where anyone can create printable designs for items like T-shirts, bags, phone cases, printing and selling the items.

#### Service

#### Domain

Software Development

Fcommerce

#### **Platform**

#### **Technology Stacks & Dependencies**

Web & Mobile (Android / iOS)







#### Type

#### Keywords

Native App

E-commerce Apps

#### **App Features**

- Allows users to create and sell their own designs with the help of the system to print and ship out orders.
- Users can buy final products or T-shirts as materials from suppliers.
- Users can create their own shops to sell their products.



- The business requires many complex steps, from creating a design to shipping the final product out to the customers.
- Our team had to learn about the market to understand all the steps involved in the process to be able to develop a platform that meets all stakeholders' expectations.



#### **Technical Challenges**

- We adopted AWS services (RDS, EC2, ELB, Route53, Cloudfront, etc.) to ensure the app's stable performance under high traffic and stressful loads.
- To keep all of the user data safe, our team needed to come up with a long-term plan to ensure the systems are constantly and securely monitored.
- We immediately supported our client to solve any problems that occurs after the app is released.

<del>-</del> 41 42 <del>-</del>



• Framework:

ReactJS CakePHP Android

Java Swift

• Programming Language:

Javascript PHP Java

#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

#### The Result

- Newwave Solutions delivered significant performance improvements across all the Up-T sites under its management, with scores on Google Page Speed Insights ranging from 90- 95.
- The page speed is **below 1.1 seconds**.
- Increase in around 35% organic traffic in the Japanese market.

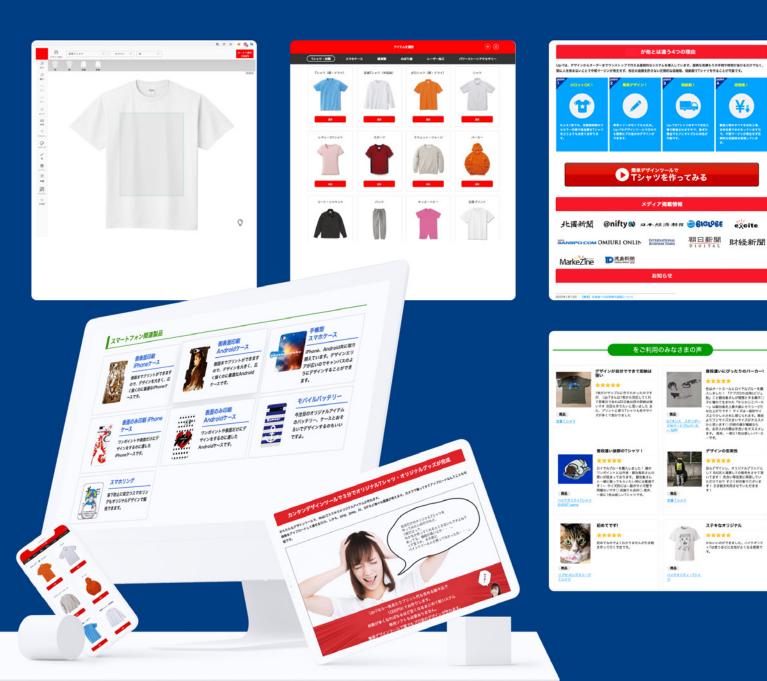












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## The Most Helpful and Free App for Any Parking Space Search

A parking lot sharing service that makes effective use of vacant space.

Service

Mobile App Development

**Platform** 

Mobile (Android / iOS)

Type

Cross Platform

Industry

Ecommerce

**Technology Stacks & Dependencies** 







Keywords

Parking App

#### **App Features**

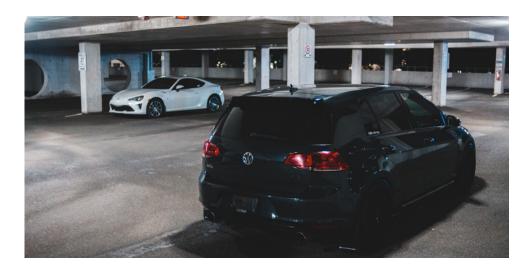
- Owners who have vacant parking spaces anywhere can post on the app.
- Parking space renters can search for the desired parking lot in the app, make a reservaction and online payment.



 We did many research and surveys to understand what drivers in Japan had to go through so we can create an app that has the right features to help them register and find parking lots easier.

#### **Technical Challenges**

 We enhance the app connectivity to make sure the real-time feature works all the time perfectly.



<del>-</del> 47 48 •



• Programming Language:

Dart

• Framework: Flutter

Flutter

#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development



#### **Results & Benefits**

- This e-commerce site can accommodate ever-increasing sales as it expands across global markets.
- The platform has **70.000+ registered vehicles** until now.

 Reduce time spent on finding parking lots by 30%.







→ View More

**-** 49 50 **-**

## Best Live Streaming Software App for Professional Streaming

A new generation livestream platform in Japan.

#### **Service**

Mobile App Development

#### Platform

Web & Mobile (Android / iOS)

#### Type

Native App

#### Domain

Social Network

#### **Technology Stacks & Dependencies**









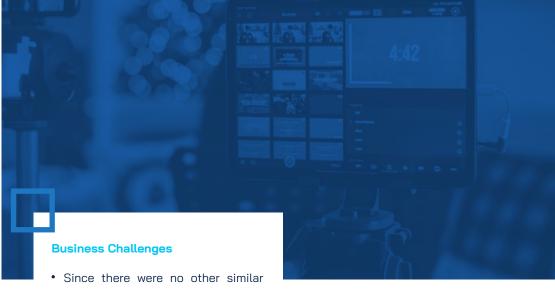


#### Keywords

Livestream Apps

#### **App Features**

- Users can interact and communicate with streamers through voice chat and comment functions.
- Streamers can make money legally through the reward system.
- The app provides streamers with unique filters and stickers.

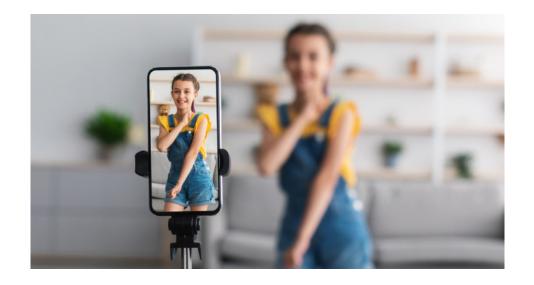


 Since there were no other similar systems to learn from, it took much work for our designers regarding UI/UX and gameplay design.

 Our design team had to connect with famous streamers in Japan to ask for their opinions.

#### **Technical Challenges**

 Our development team had to develop a unique library to optimize the system performance so the stickers and filters feature doesn't take up a lot of system resources and cause overheating for the device.



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• Programming Language:

Swift Kotlin Python

• Framework:

NestJs ReactiveX

Realm.io

Android Studio Profiler

Xcode Instrument

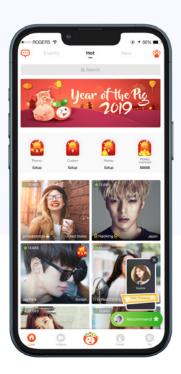
#### **Newwave Solutions' Roles**

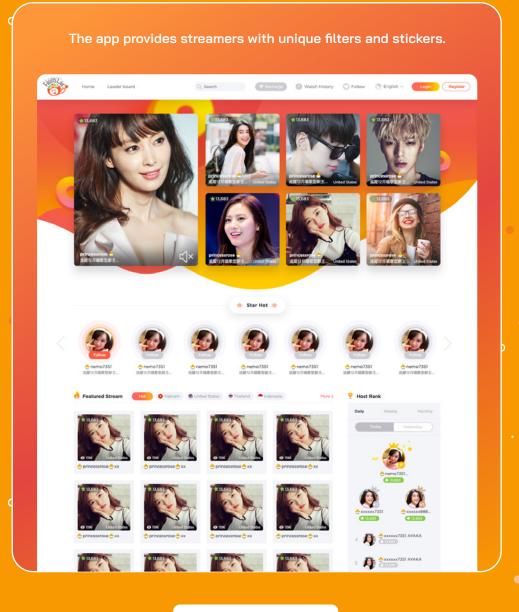
- Analyzing
- Management
- Development

#### The Result

- Interaction functions not only increase user engagement and the number of new users but also boosts the app's retention rate.
- More than 4.000 registered users already have had over
   1.000 interactions and around
   1.5000 meetings.

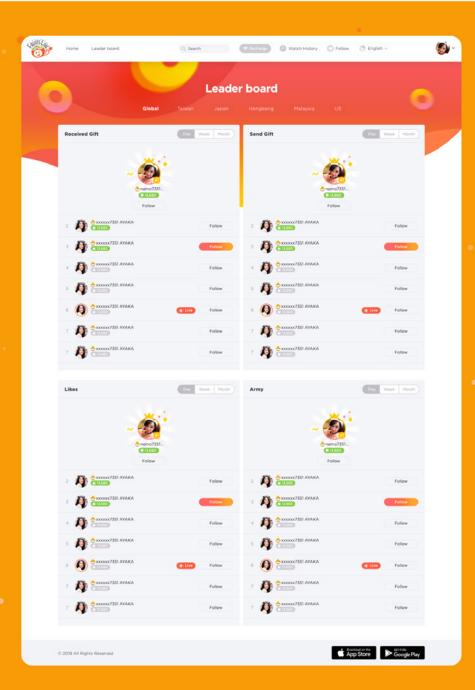


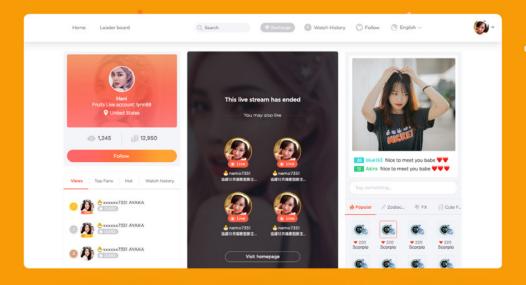


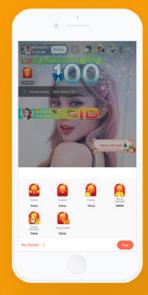


View More

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## Ultimate Playground for Basketball Fans to Hang Out

Created a system that's strong enough to manage a large amount of data in a short period of time (at least 2000 daily active users over a total of 10000).

Optimize the app Data Synchronization to handle massive connections to create the most user-friendly experience.

Service Domain

Mobile App Development Social Network

Platform Technology Stacks & Dependencies

Mobile (Android / iOS)

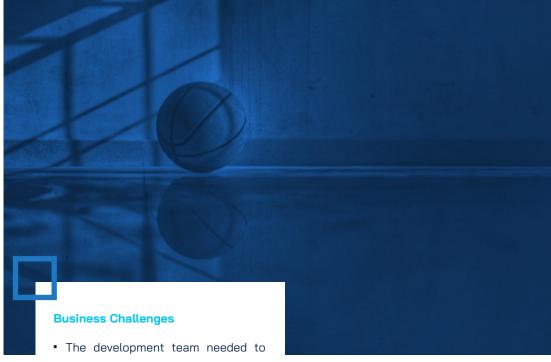
Keywords

Cross Platform Basketball Fan App

#### **App Features**

Type

- Provides their users with many features exceptionally suitable for basketball teams' activities.
- Helps teams connect with each other easily as a social networking platform.



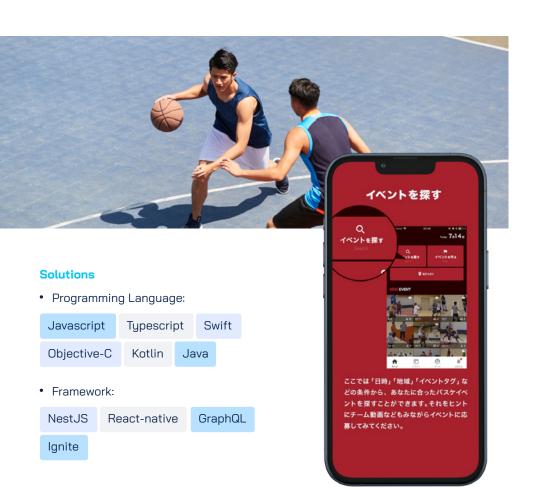
- The development team needed to provide the infrastructure that can respond fast enough to meet the increasing connectivity among users.
- The project requires various research and multiple methods had been tested to find the best solution.

#### Technical Challenges

- Created a system that's strong enough to manage a large amount of data in a short period of time (at least 2000 daily active users over a total of 10000).
- Optimize the app Data Synchronization to handle massive connections to create the most user-friendly experience.



<del>-</del> 57 58 <del>-</del>



#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

#### **Results & Benefits**

- The initial version was released to production within **8 months** from the project's start.
- The existing user base was migrated to the new platform stage by stage in a few months without any glitches.









**-** 59 60 **-**

#### Your Go-to Destination for Trailer Rental

A platform to connect trailer renters and owners.

Service

Domain

Mobile App Development Transportation

Platform

**Technology Stacks & Dependencies** 

Mobile (Android / iOS)

Ì







Type

Keywords

Native App

Trailer Rental Apps

#### **App Features**

- Enables person-to-person trailer rental by putting unutilized trailers to good use.
- Renters can easily search for trailers near them, complete booking process and sign rental agreements completely on phone.
- Trailer owners can upload trailer's information via phone and sign rental agreements completely on phone.

#### **Business Challenges**

- The store still applied old methods for maintenance, purchasing, and transfer making it more challenging to develop and utilize all of these features in a modern app.
- Since the majority of users are elders, designing an interface that is clear and easy to use yet still has to display a lot of information was a big challenge to our developers and the designers.

#### **Technical Challenges**

- This is a serverless app so everything is located in the mobile source code, therefore, our team needs to figure out a software architectural model that is suitable for the app while also being easy to maintain and test.
- All data must be organized and stored in one place for easy management and access while also maintaining great performance and a reasonable mainance cost.



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• Programming Language:

Java

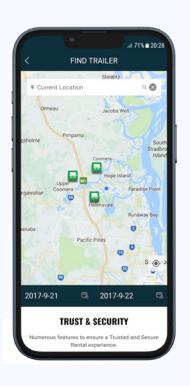
Kotlinz

#### **Newwave Solutions' Roles**

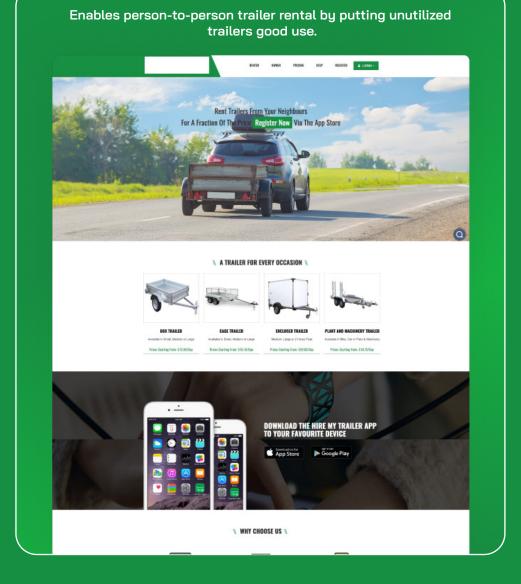
Development

#### The Result

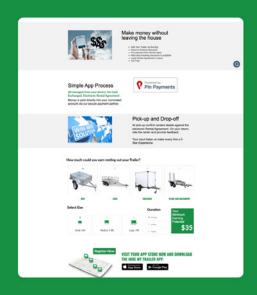
 There were 23,300 app downloads in 2020 during the first week. This number increased up to 70,000 after 2 years of release.



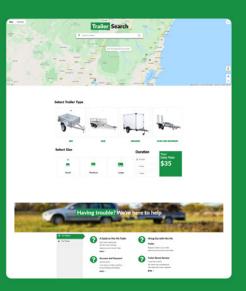


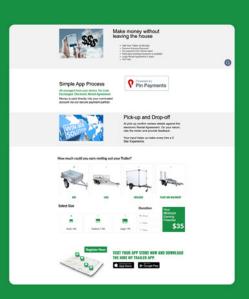


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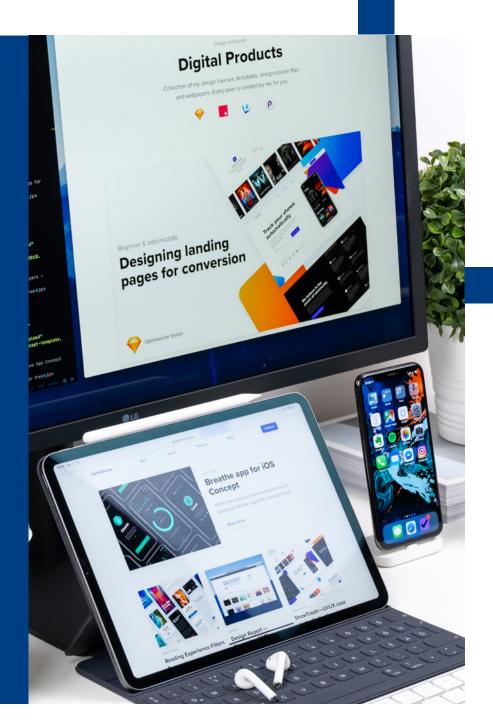




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13

## Software Development



## Homes For Real Estate Sale, MLS Listings, Brokers

An app that creates a professional and stable community for brokers, and at the same time creates an ideal environment for brokers to have a successful career.

Service Domain

Software Development Real Estate

Platform Technology Stacks & Dependencies

Web & Mobile (Android / iOS)

e mongoDB MAP WOWZA ROC

Type Keywords

Cross Platform Real Estate App

#### **App Features**

- Brokers can actively reach out to new projects and clients without having to be dependent on anyone.
- Brokers can streamline transactions, nurture clients anytime, anywhere.



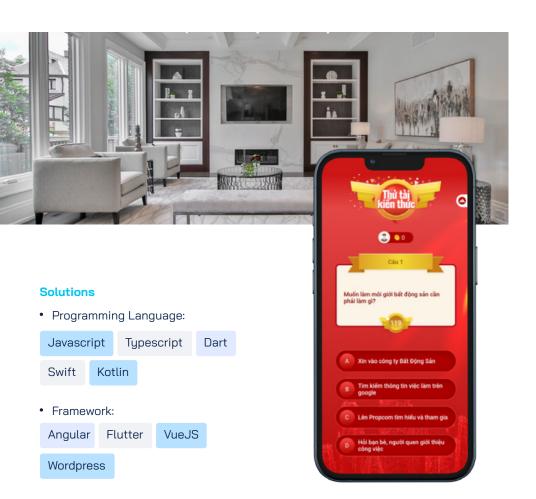
 It was not easy to create a Real estate app that can meet the expectations of all users in the real estate, technology, and finance industry.
 So, our team had to communicate regularly with our clients to deeply understand what they really want.

#### **Technical Challenges**

- Create a learning management system to create online courses.
- Build a new trading system
- Create a real estate community on social media.
- Build a continuous digital transaction system.
- Create a Play-to-Earn game system within the app.
- Apply advanced technology platforms such as Microservice, Message queue,
   & Container orchestration (Amazon ECS).



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#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

#### The Result

- The program has provided the client with a firm foundation for their core systems so they can continue to build.
   The software IP is owned by the client a nd they can reduce their reliance and spend with 3rd party provided as a result.
- The company has been hitting an exponential growth curve for years after the system implementation, its turnover increased by 50% after using our product.



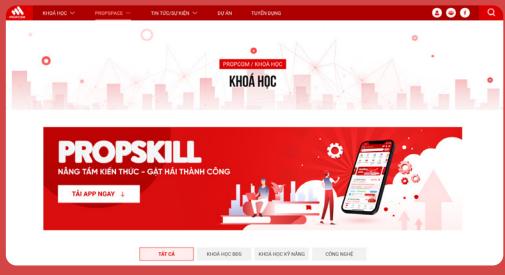


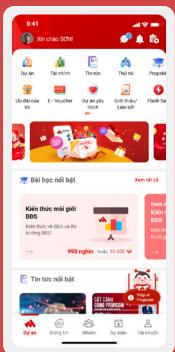


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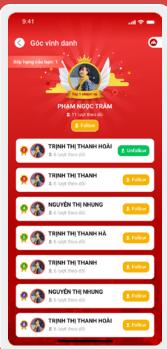
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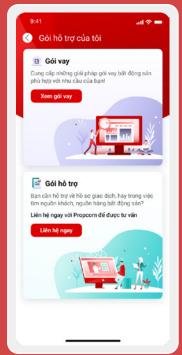














# Easy-to-use Real Estate App that **Supports Remote Homebuyers**

An app that allows real estate businesses to manage from A to Z.

Service Domain

Software Development **Business** 

**Technology Stacks & Dependencies** Platform

Web & Mobile (Android / iOS)











Type Keywords

Cross Platform Real Estate Apps

#### **App Features**

Real estate businesses are able to:

- Manage projects and investors.
- Manage all product ranges (shophouses, apartments, villas, etc.).
- Manage customers and staff with online calling and chatting.
- Manage contracts, invoices and assets.
- Manage social media groups.
- · Manage customers' requests.



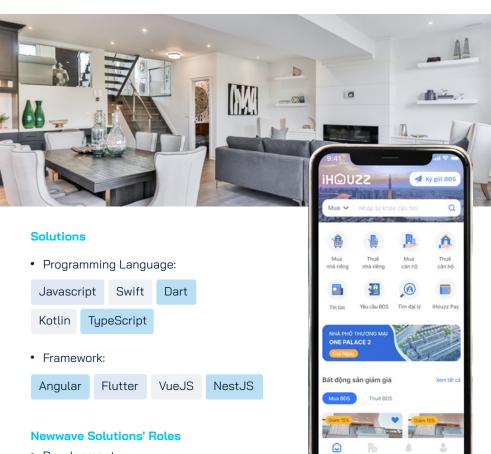
- stakeholders.
- Newwave Solutions team had to do some research into the market to clearly understand the multi-layered business model.



#### **Technical Challenges**

· We utilized AWS services to help the app operate stably 24/7 and also create a decent real-time transaction system.

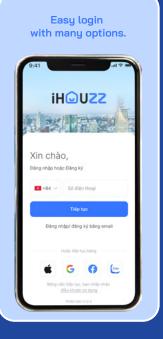
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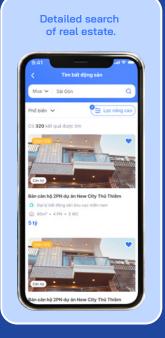
• Development

#### The Results

 The website and app was successfully transformed to be optimized for mobile, with an improved user experience, and greater security for all users in 2019.  When our client uses the product, they were able to generate more than 17.000 leads in the platform lead generation campaign.







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## **Online Service for Sharing Property Rights & Information**

An online utility that helps ensure sound account management through the sharing of information on products between sellers on Amazon.co.jp.

#### Service

Software Development

#### **Platform**

Mobile (Android / iOS)

#### Type

Cross Platform

#### **Domain**

Ecommerce

#### **Technology Stacks & Dependencies**









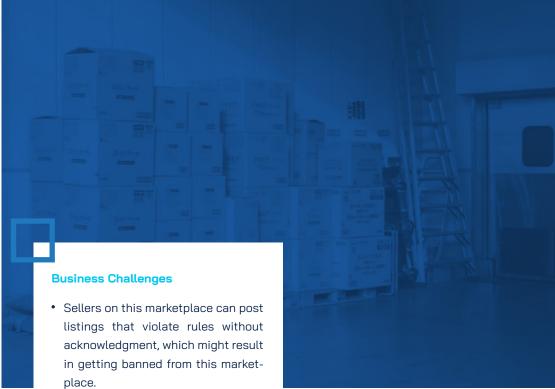


#### Keywords

Retail Apps

#### **App Features**

- · Shares information on products.
- · Displays brand and manufacturer intellectual property information for each product, helping avoid violations of rules before they happen.
- Analyzes listings and informs sellers of products that may violate any applicable rules.
- Suggests retail price for sellers.



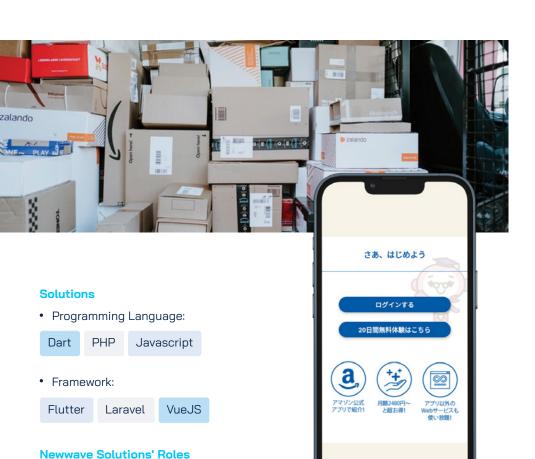
- Newwave Solutions collected and analyzed the marketplace's rules, then we developed a platform to automatically warn sellers when their listings violate any rules.



#### **Technical Challenges**

- · Our team had to effectively optimize pricing data in the cache to speed up query execution.
- We also developed a method to support scanning multiple barcodes at once and improve accuracy when they are too small or unclear.
- · The development team analyzed the Amazon API Gateway to create the best IT solution to scan barcodes accurately and improve the reading speed.

**-** 79 80 -





Development

According to the client's report, \$212k
 in upsell revenue was generated in the
 first year of using this e-commerce app
 in one user's store, although they
 weren't even the top user.









**–** 81 82 **–** 

# Home Service App to Connect and **Hire Domestic Helpers**

An app that connects families and helpers.

Service

Software Development

Platform

Mobile (Android / iOS)

Type

Cross Platform

Domain

Social Network

**Technology Stacks & Dependencies** 









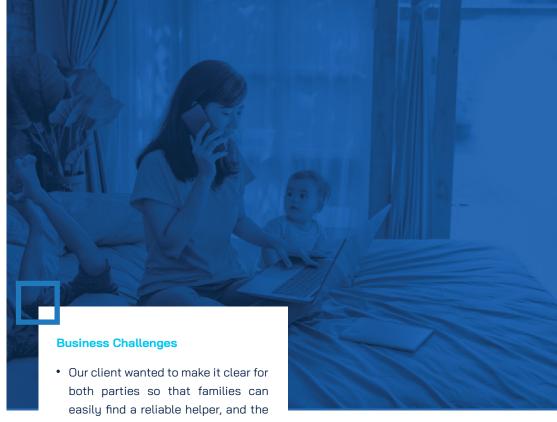


#### Keywords

Home Service Apps

#### **App Features**

- Families and helpers can post or find jobs.
- Users can make payment, chat, video call and manage history in the app.



helpers can make money in a safe

environment.

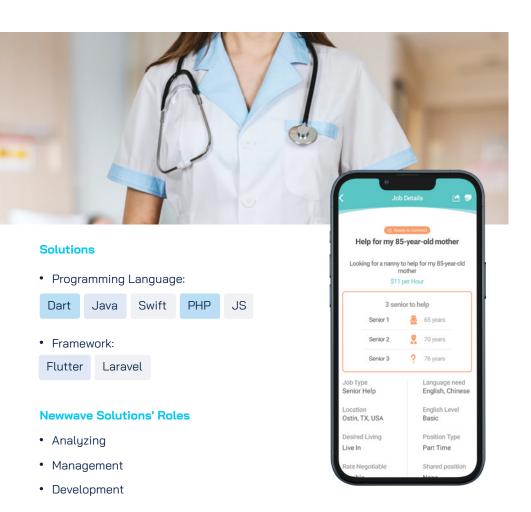
· Newwave Solutions' team suggested developing a background check feature to make the app even more trustworthy to both parties.



#### **Technical Challenges**

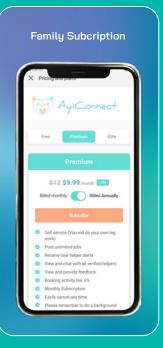
- To prevent users' private data from being leaked, our team used Twilio Voice and Twilio SMS to avoid any data breach.
- The team also utilized Geocoding and Google Maps to ensure accurate distance calculation.

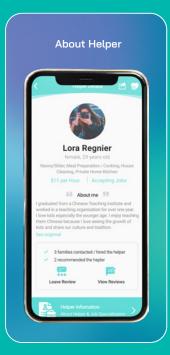
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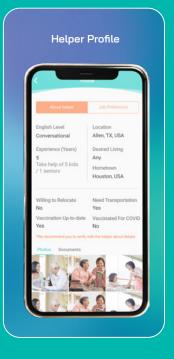


#### The Results

- Worked directly with the client's Newwave Solutions to quickly understand and evaluate the platform and create a plan for developing the remaining features for production.
- Assembled a team and wrapped up the frontend portion of the platform within
   12 months.
- Continuously work with the client's team supporting the live platform and adding features and functionality.







→ View More

**-** 85 86 **-**

### The Best Virtual Mailbox Service You Will Ever Need

A virtual digital mailbox service that allows customers to view and manage postal mail and packages right on their phones.

Service

Domain

Software Development

Social Network

**Platform** 

**Technology Stacks & Dependencies** 

Web & Mobile

(Android / iOS)







Type

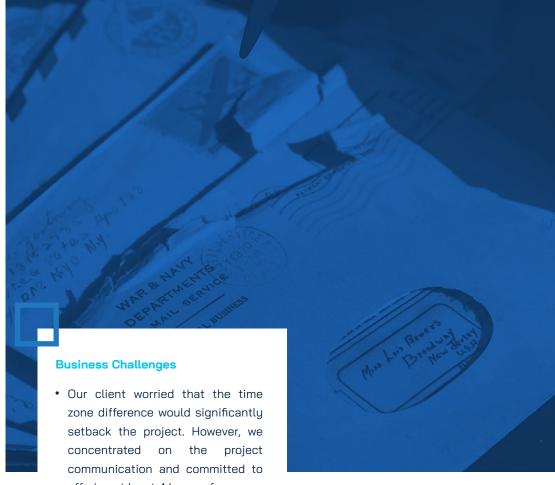
Cross Platform

Keywords

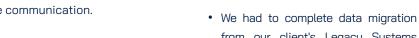
Digital Mailbox Apps

#### **App Features**

- Customers can access to mail 24/7.
- Customers can view and manage mail anywhere with cloud-based platform.
- The company can manage the whole process with a digital system.



offering at least 4 hours of overlapping time ensure real-time communication.



from our client's Legacy Systems (more than 1 million lines of code) after carefully analyzing the system's current state and identifying every problem.

**Technical Challenges** 



**87** 88



• Programming Language:

C#

• Framework:

.Net

#### **Newwave Solutions' Roles**

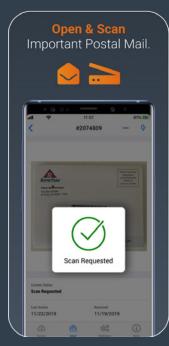
Development

#### The Results

- Our client has received over 50 new customers per day, bringing in over \$600 of revenue each month.
- Offering virtual mailboxes innovative provides new recurring revenue while efficiently using time and existing resources.





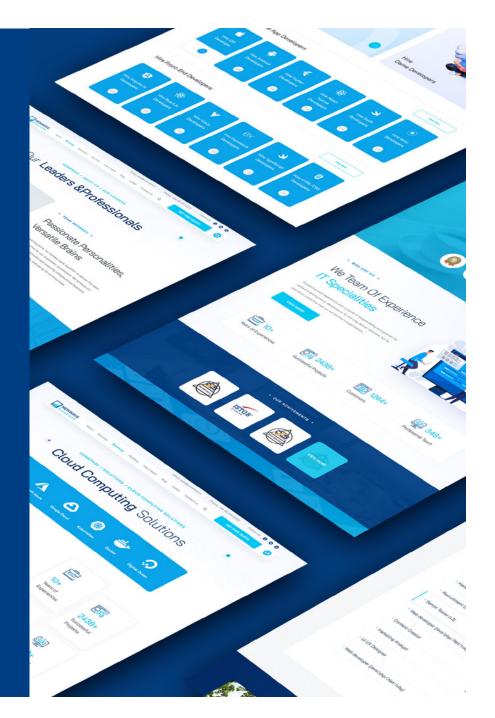






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# Web Development



# Internal Web to Get Updated with The Latest Events

A homepage for a Singapore based start-up co-working space and community.

Service Domain

Web Development Utilities

Platform Technology Stacks & Dependencies

Web

NEXT. mongoDB

Keywords

Web System Event Websites

#### **App Features**

Type

- Users can browse, create and promote local events which take places in the working space.
- Users can buy tickets to events and subscribe to membership.
- The company can manage working spaces, events and ticketing.



- Managing a shared space is full of challenges, so our client wanted to utilize a few tools that fit their need for managing a flexible shared space.
- Newwave Solutions team dug deep to understand our client's requirements and put forward a solution that includes all of our client's demands.

#### **Technical Challenges**

 We utilized various third-party APIs (Event Brite, Klavio, Stripe, and Xero) to meet our client's expectations and ensure the deliver time.



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• Programming Language:

JavaScript

• Framework:

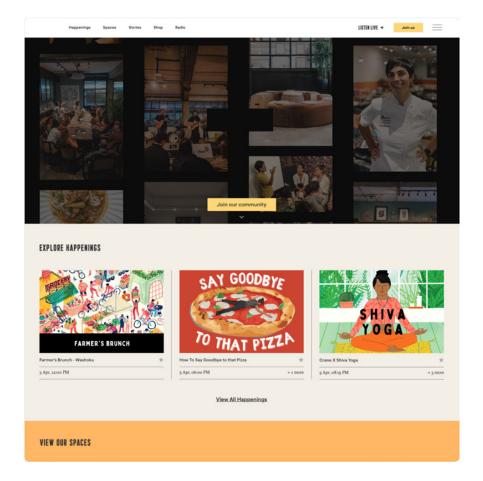
ReactJS NextJS

#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

#### The Result

- Helping our client save 30% of time in inputting information into their system.
- There are more than 1.000 orders every week.



#### The company can manage working spaces, events and tickets.





# Streamline Your Company's Internal Communication

A web-based app for internal communication in a company.

Service

Web Development

Platform

Web

Type

Web System

Domain

Utilities

**Technology Stacks & Dependencies** 









#### Keywords

Corporate Websites

#### **App Features**

- Users can join different channels and communicate with each other.
- Users can organize schedules for themselves or for the team.



 Our team had to deliver the project on a tight deadline. So, we create a system to track the process and frequently communicated with the client to prevent missing any detail.

#### **Technical Challenges**

- Our development team applied Firebase to ensure the project run effectively and cost-efficiently.
- We optimized the infrastructure by adopting more advanced tools to maintain the system performance when dealing with a large number of users.



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• Programming Language:



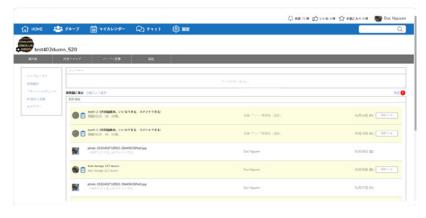
Framework:

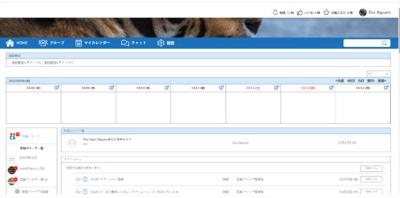


#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

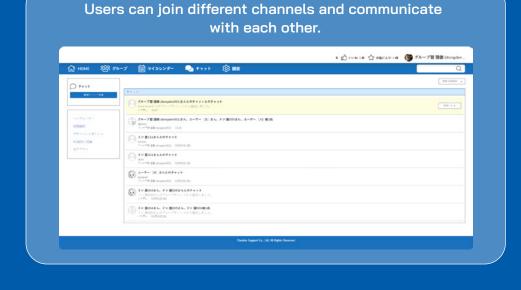
- The Result
- Our clients left positive feedback about its quality and schedule.
- Tasks are created and aprroved via intenal app. As a result, the product helps our client optimize management process, reduce their time and energy by 45% to manage their tasks.





Users can organize schedules for themselves or for the team.

Output



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### **E-Commerce Website Optimized** for Customer Conversion

A web-based e-commerce app of a Japanese upmarket grocery store chain.

Service

Web Development

**Platform** 

Web

Type

Web System

Domain

Ecommerce

**Technology Stacks & Dependencies** 











#### Keywords

**Ecommerce Websites** 

#### **App Features**

- Users can choose stores and buy products from them online.
- Users can make payment through Paygent
- The company can manage stores, products, orders and users.



- e-commerce app, where users can search for the needed product.
- Newwave Solutions was responsible for setting up, developing, and maintaining all product data and providing it to clients in the most effective way.



#### **Technical Challenges**

- We had to utilize Paygent, a payment gateway in Japan, which is very difficult to use and has no introduction document.
- We designed a Master Database Client Database that not only matches the system requirements but also synchronizes with other sub-databases.
- The configuration for synchronization between databases was very complicated, requiring many testing and high accuracy.

**- 101** 102 -

• Programming Language:

PHP Javascript MySQL

• Framework:

Laravel Vue2

#### **Newwave Solutions' Roles**

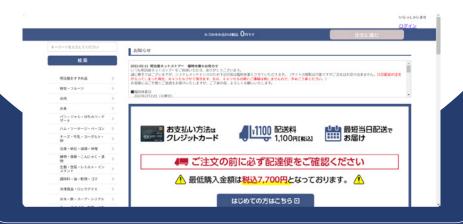
- Analyzing
- Management
- Development

#### The Result

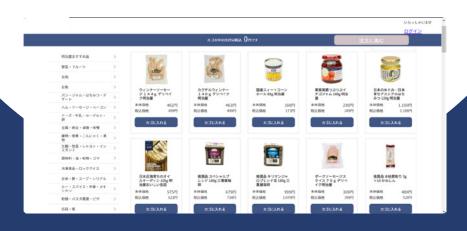
 Human error on store management has been reduced by 26% during the gathering and comparing of the data. This equates to an average daily saving of one hour of staff time.



The company can manage stores, products, orders and users.



Users can choose stores and buy products from them online.





# Highly Secure CMS Website Utilized Payment Services

CMS website is used to manage the merchant list, and provide a payment module to integrate into the merchant's website registered in the system.

Service Domain

Web Development Ecommerce

Platform Technology Stacks & Dependencies

Web



Type Keywords

Ecommerce Payment Websites, CMS Websites

#### **App Features**

#### Admin CMS:

- Manage merchant information.
- Manage customer information.
- · Manage payment information.

#### Merchant CMS:

- · Manage customer information.
- · Manage merchant information.
- · Manage booking information.



 Despite having a robust analytical system, the customers believed that it would not be able to satisfy their company's future needs. So, we had to improve the system so it can cope with the continuously growing amount of data, analyze big data faster, and enable comprehensive advertising channel analysis.



#### **Technical Challenges**

- Developing two-factor authentication while also ensuring that payment data is encrypted when transmitted between terminals, servers, or devices.
- Utilizing scalable cloud infrastructure, technological modules, and microservices.

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• Programming Language:

PHP

• Framework:

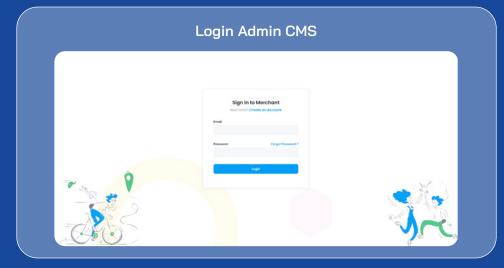
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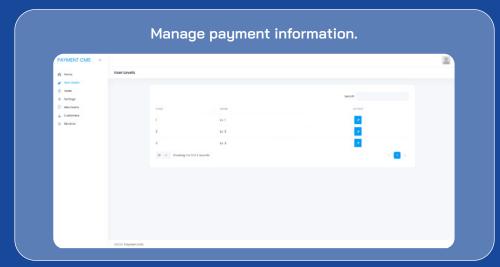
#### **Newwave Solutions' Roles**

- System Design
- Management
- Development

#### The Result

- Our clients left a lot of positive feedback about the website's quality and schedule.
- The app drew positive feedback from its end users thanks to its ease of use.
- The pay gateway delivers frictionless checkout on the website.
- 3.000 users access the website per day.







### **ERP Business Application Integration**

An ERP system of a turtle & tortoise museum in Singapore which includes a WordPress site, a gamification app and an ERP management site.

Service	Domain
Web-app Development	Travel
<b>Platform</b> Web	Technology Stacks & Dependencies
	Java axelor WordPress Vue.js
Туре	Keywords
Web System	ERP Websites

#### **App Features**

• A system that includes an E-Commerce site, a gamification app and an ERP system, which are beautifully designed and easy to use.



 We were aiming for developing a visually appealing and easy-to-use system, yet our client's system was quite complex with a lot of data.

 Our team had to spend a few days analyzing the system to come up with an effective solution, which really impressed our client.

#### **Technical Challenges**

- The project is an open-source ERP (Enterprise resource planning) solution that is extremely complicated and hard to understand.
- Filling the canvas with color in JavaScript is a difficult technique but we managed to get it done on time thanks to our experienced developer team.





• Programming Language:

Java WordPress HTML
CSS JS

Framework:

Spring Framework VueJS

Axelor Open Source

#### **Newwave Solutions' Roles**

- Analyzing
- Management
- Development

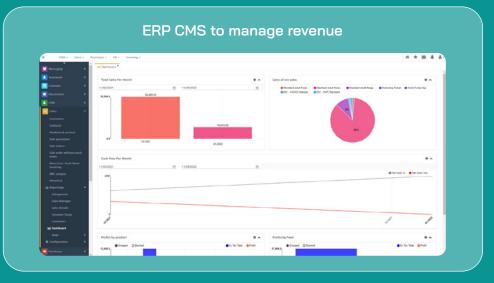
#### The Result

- Newwave Solutions achieved remarkable results in this ERP project, optimizing the performance of ERP components and reducing system support costs.
- Increased Java code flexibility allowed for software functionality enhancement and assured smooth workflow.
- This system always maintains its performance of 100% uptime. With a smooth web
  experience, our client can retain and attract their audience. Therefore, their website's
  session duration improves remarkably, increasing SEO rank.











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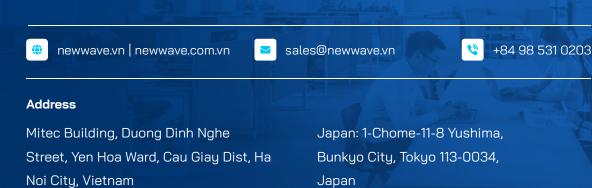
44

2021 marks the 10th birthday of Newwave Solutions as the region's preferred provider in IT outsourcing. Our heartfelt THANK YOU to all of you — our customers, colleagues, and believers - throughout the last decade. Let's follow us and celebrate everything we have accomplished together in 2031.

#### CEO

Mr. To Quang Duy

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