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# Gym management system

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# Witaj w aplikacji

This page introduces the **Gym Service System App** focused on design patterns and SOLID principles for efficiency.

# User Roles in the Gym

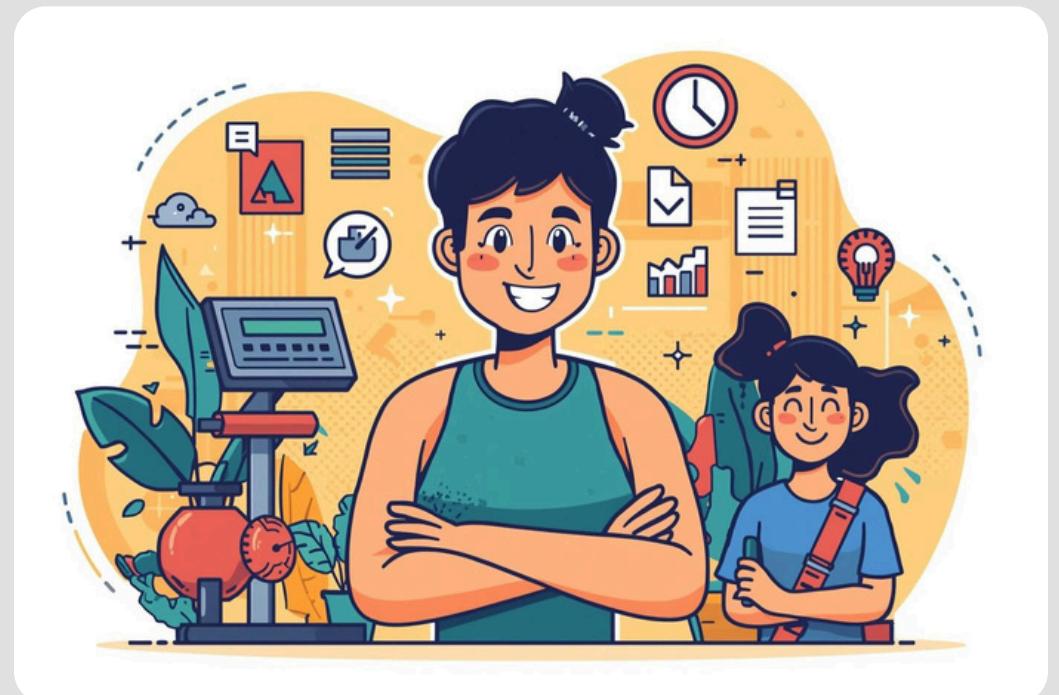
## Client

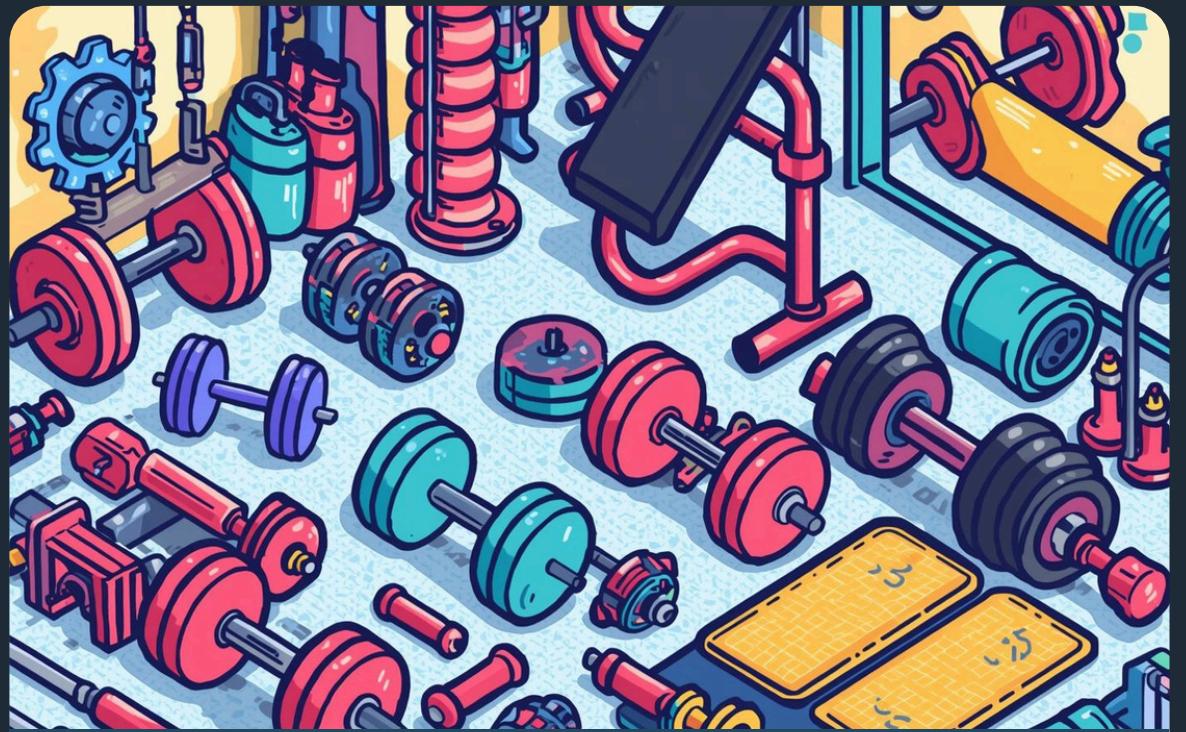
Clients choose services and complete purchases easily.



## Employee

Employees receive real-time notifications about bookings and manage timetables.





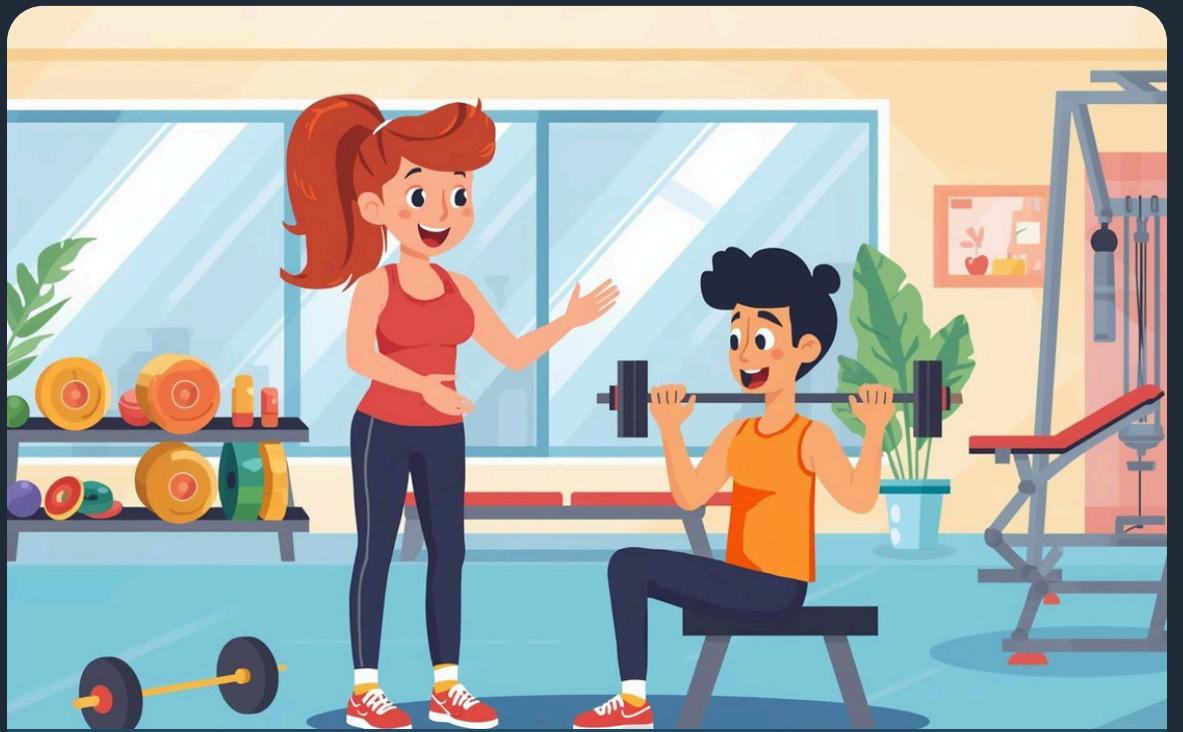
Flexible Gym  
Options for  
Everyone

Explore Now



Join Our Exciting  
Group Classes  
Today

Sign Up Now



Personalized  
Training Just for You

Book a Session

# Dynamic Pricing Made Easy

## Normal Pricing

Standard rates apply for all regular clients, ensuring fairness and transparency.



## Student Discounts

Special rates for students help make fitness accessible while they study and grow.



# UI Independence Central Role Explained

The **GymSystemController** plays a vital role in managing service interactions, state changes, and UI communication. By utilizing the Factory Pattern, the UI remains agnostic to the specific services, allowing for easy expansion and adaptability—perfect for a system that keeps **growing without hassle!**

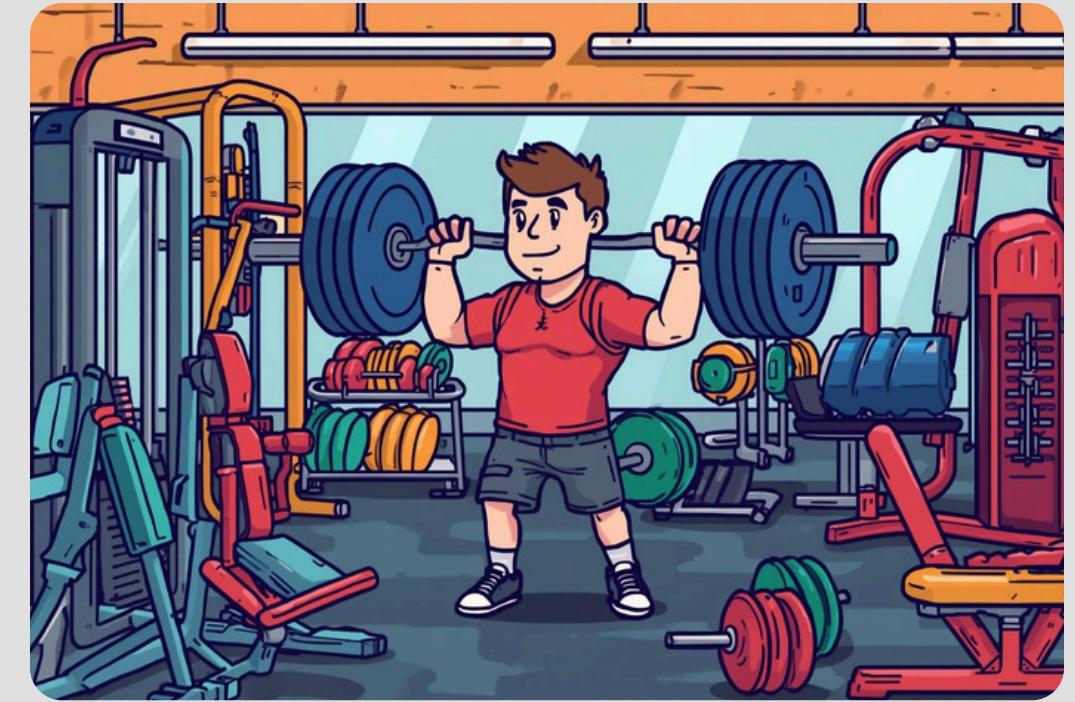


# Builder Pattern in Action

## Stepwise Configuration

Configuring gym services **made easy** with the Builder Pattern's stepwise approach.

add additional sauna or pool privilege to your workout!



## Tailored Packages

Build your **perfect workout** package, selecting options that suit your preferences.



# Flexible Pricing & Notifications

## Adapting to Needs

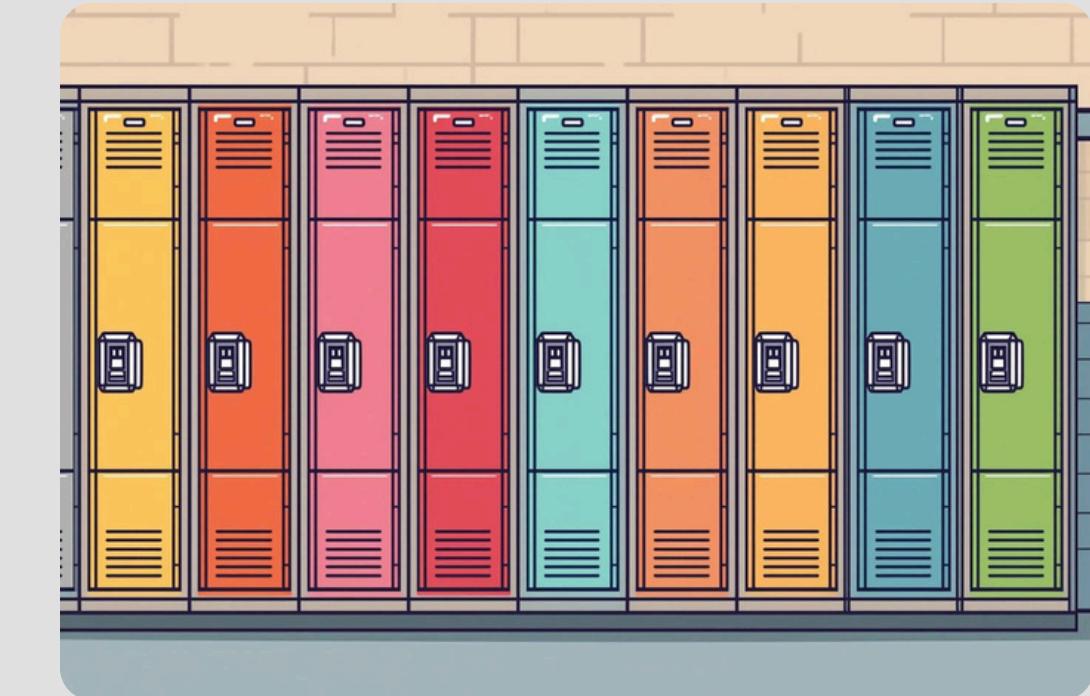
The Strategy Pattern enables **dynamic pricing options**, allowing clients to receive tailored discounts based on their status, whether regular, student, or senior. Meanwhile, the Observer Pattern guarantees that trainers are instantly notified of new personal training signups, ensuring they are always prepared for their next session.



# SOLID Principles and Architecture

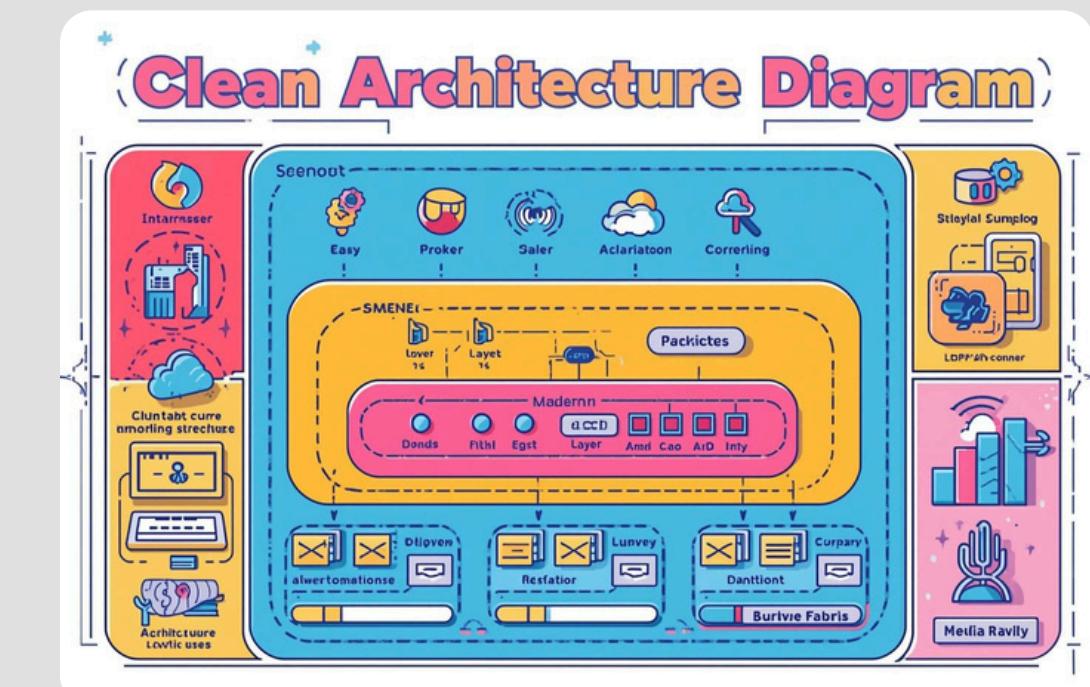
## Separation of Concerns

Each module handles specific tasks, enhancing flexibility and reducing complexity.



## Clean Architecture

Clear structure allows for easier maintenance and scalability of the application.



Dziękujemy za uwagę!