

# OPTIMIZING GYM UTILIZATION AT GOODLIFE

| *Enhancing Client Satisfaction and  
Profits through Data-Driven Insights*

# INTRODUCTION

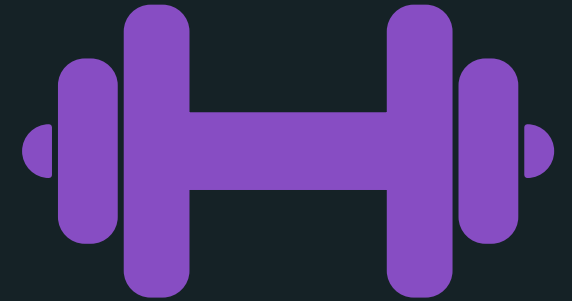
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## Problem A: Optimizing Group Fitness Class Utilization

- GoodLife offers classes with capacities of 25 and 15, some of which are fully booked but have low attendance.
- The goal is to predict attendance to optimize class space and increase availability.

## Problem B: Optimizing Gym Equipment Utilization

- GoodLife measures gym occupancy every 10 minutes.
- The goal is to predict gym crowding to manage traffic and optimize equipment usage.



# TACTICAL DECISION

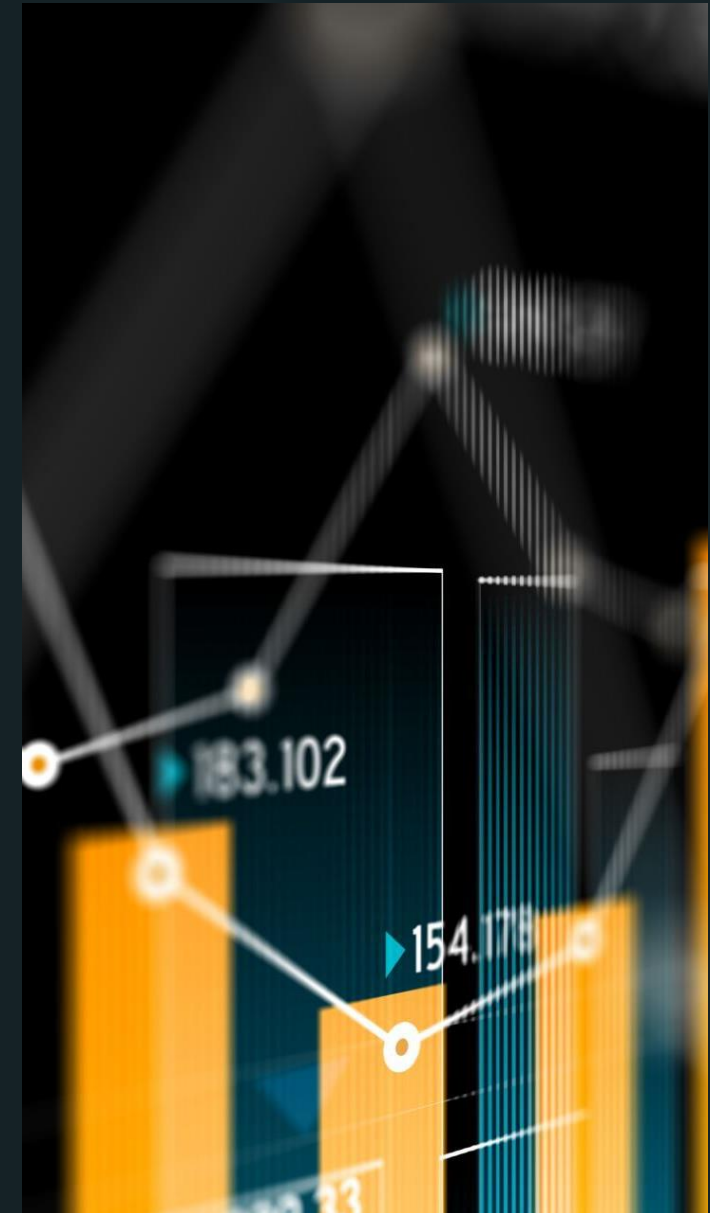
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## Data Preprocessing:

- Standardize time-series data and incorporate features like weather conditions and holiday schedules.
- Accurate pattern recognition and improved prediction accuracy.

## Feature Engineering:

- Create new features such as historical attendance rate and engagement level.
- More accurate predictions about a member's likelihood of attending a class.



# STRATEGIC DECISIONS

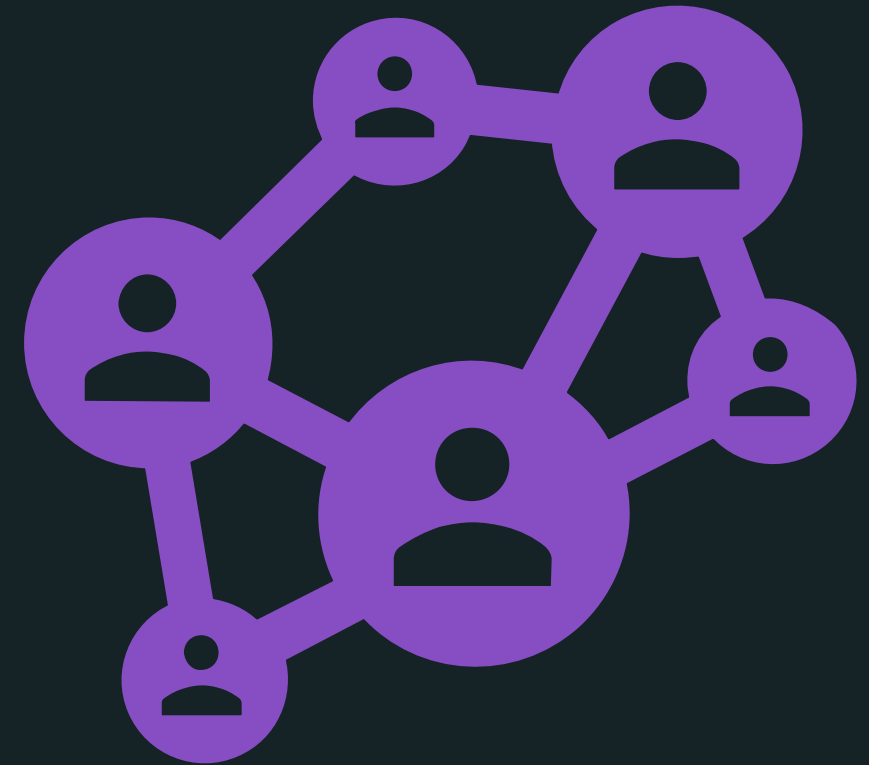
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## Personalized Member Engagement:

- Send reminders or incentives to members predicted to have low attendance.
- Increase attendance rates and ensure effective class utilization.

## Dynamic Scheduling and Promotions:

- Implement a dynamic scheduling system with promotions for off-peak hours.
- Balance gym usage, improve equipment availability, and enhance member experience.







**Enhanced Member Satisfaction:**  
Better class and equipment management lead to higher satisfaction and loyalty.



**Increased Operational Efficiency:**  
Proactive resource management reduces wastage and maximizes utilization.



**Proactive Decision Making:** Data-driven insights enable informed and strategic decisions

# SPRINT PLAN

Brief Description	Task	Assignee	Story Points
Data Collection and Preprocessing	Collect and preprocess data for both class bookings and gym usage	Harsh	1
Exploratory Data Analysis (EDA)	Conduct EDA to understand booking and gym usage patterns and trends	Vishv	4
Feature Engineering	Identify and develop key features for predicting class attendance and gym crowding	Harsh	4
Model Development	Develop initial prediction models for class attendance and gym crowding	Vishv	6
Model Optimization	Optimize both models for better accuracy and performance	Harsh	5
Personalized Engagement Strategy Research	Research strategies to increase class attendance and optimal gym usage	Riddhi	3
Capacity and Scheduling Adjustment Plan	Develop plans to adjust class capacities and gym schedules dynamically	Riddhi	3
Feedback Loop Implementation Plan	Plan implementation of a feedback loop for continuous model refinement	Riddhi	2
Documentation and Reporting	Document findings and prepare reports	Riddhi	2





THANK YOU

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