# GYM MANAGEMENT SYSTEM



Under the Guidance of:
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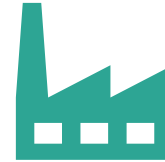# CONTENT

# ABOUT COMPANY

UNIFIED MENTOR
YOUR SKILL, SUCCESS & JOURNEY

NAME – UNIFIED MENTOR

LOCATION - DLF Forum, Cybercity, Phase III, Gurugram, Haryana 122002

IT PROVIDES INDUSTRIAL TRAINING AND INTERNSHIP.

IT WORKS ON REAL WORLD PROBLEM AND SOLUTION

# INTERNSHIP DETAILS

TOPIC – GYM MANAGEMENT SYSTEM

ROLE – SOFTWARE DEVELOPER (FULL STACK DEVELOPER)

START DATE – 01/01/2025

END DATE – 01/07/2025

DURATION - 6 MONTH

# INRODUCTION

A gym requires an efficient system to manage memberships, payments, and notifications.

Traditional manual record-keeping is prone to errors, loss of receipts, and inefficiency.

The GYM Management System is a digital solution designed to streamline operations.

# OBJECTIVE

TO DEVELOP A **DIGITAL SYSTEM** FOR GYM MANAGEMENT.

TO ENSURE **SECURE USER AUTHENTICATION** FOR ADMINS AND MEMBERS.

TO ENABLE **AUTOMATED MEMBERSHIP TRACKING AND FEE NOTIFICATIONS**.

TO PROVIDE A **USER-FRIENDLY ADMIN PANEL** FOR MANAGING GYM MEMBERS.

TO REDUCE **MANUAL WORK** AND IMPROVE **EFFICIENCY** IN GYM OPERATIONS.

# PROBLEM STATEMENT

Paper-based receipts are difficult to maintain and prone to loss.

Manual notifications for gym schedules are time-consuming.

Need for centralized online system for gym management

# PROPOSED SOLUTION

A web-based platform for managing gym members and fees.

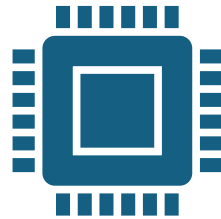Automatic notifications for due payments and gym updates.

Secure storage of digital receipts using firebase.
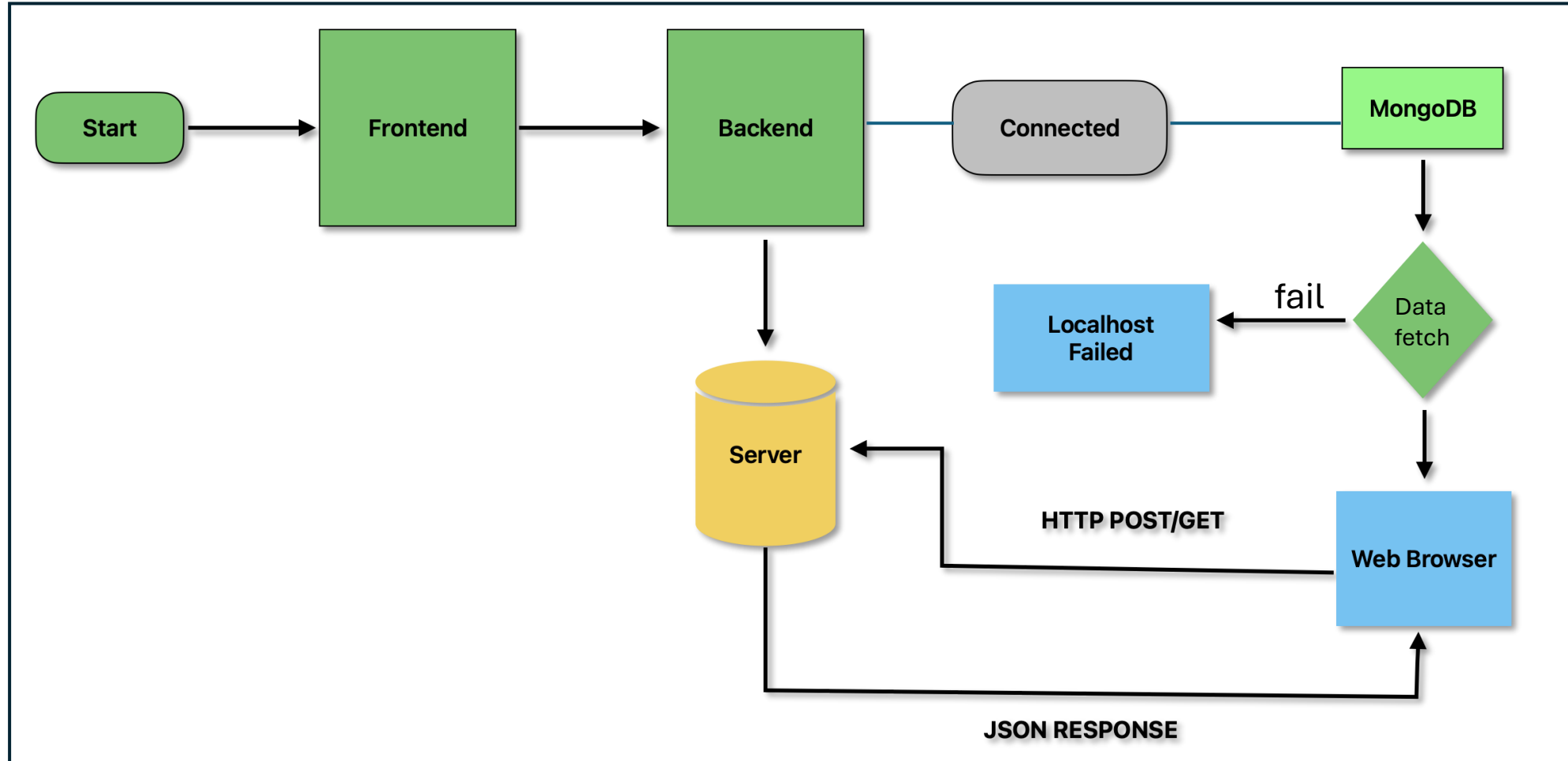
# TECHNOLOGY STACK

**Frontend:** HTML, CSS, JavaScript

**Backend:** Node.js , Express.js (Authentication, Hosting)

**Database:** MongoDB

# FLOW DIAGRAM

# SYSTEM MODULE

**Admin Panel:**

- Login, Add/Update/Delete Members
- Create and manage billing
- Assign Fee Packages & Notifications
- Generate reports and export data

**Member Panel:**

- Login and view billing details
- Get automated fee notifications

**User Panel:**

- View gym details and search for records

# SYSTEM WORKFLOW

User login authentication

Admin manages members and payments

Notifications sent to members for fees

Data securely stored in MongoDB

# KEY FEATURES AND FUNCTIONALITIES

SECURE USER AUTHENTICATION

DIGITAL PAYMENT RECEIPTS (FUTURE SCOPE)

MONTHLY FEE REMINDERS VIA NOTIFICATIONS

SUPPLEMENT STORE & DIET PLANS (FUTURE SCOPE)
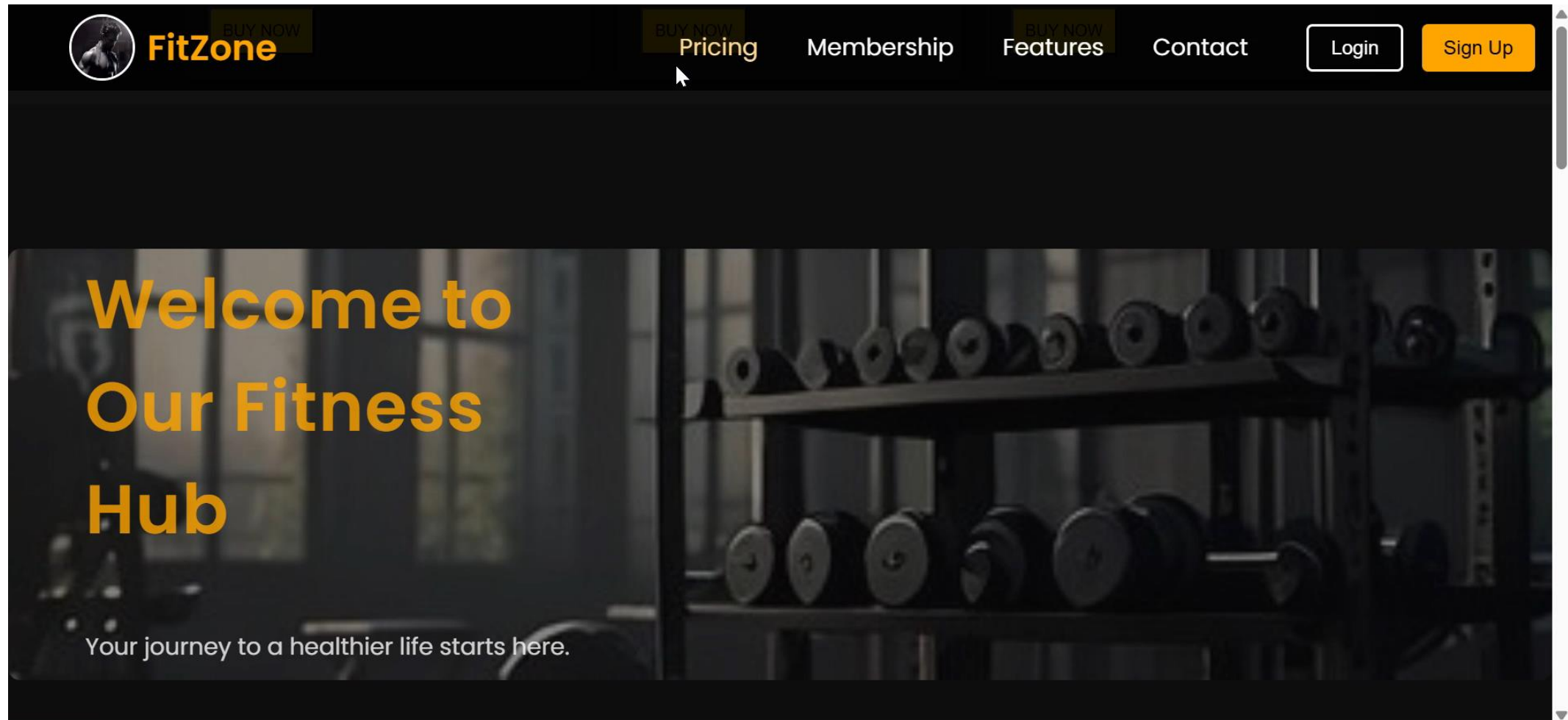
# CURRENT PROJECT PROGRESS

**Completed:**

User authentication and login system

Admin dashboard for managing members

MongoDB setup for member records

Automated fee tracking implementation

**Pending :**

Full payment integration system

Supplement store feature

Advanced analytics for gym usage

# PROJECT DEMO

# Backend

```javascript
// Connect to MongoDB
mongoose
  .connect(mongoURL, { useNewUrlParser: true, useUnifiedTopology: true })
  .then(() => console.log("Connected to MongoDB"))
  .catch((err) => console.error("MongoDB connection error:", err));

// User Schema
const UserSchema = new mongoose.Schema({
  username: String,
  password: String,
});

const User = mongoose.model("User", UserSchema);
```

Server → Connection request → [database] → Connection status → Server

# CHALLENGES FACED

**Challenge:** Implementing real-time database updates

**Solution:** Firebase Realtime Database with event listeners

**Challenge:** Secure authentication & data protection
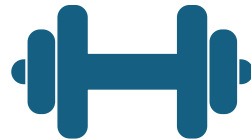
**Solution:** Firebase Authentication & Firestore rules

# FUTURE SCOPE

AI-based personalized fitness plans

Integration of online workout sessions

Payment gateway for online transactions

# Thank You