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**Project Tittle: LEVEL UP** 



LEVEL UP

by

**GROUP 6** 

### **Project**

Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor in Computer Engineering

Department of Electrical & Computer Engineering Faculty of Engineering

Supervised by

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Position and title

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The Project Defense Committee for Group 6 Certifies that this is the approved version of the following project

### LEVEL UP

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# **Project Description**

# **Project Overview**

The project at hand is a web platform where users connect with certified personal trainers, nutritionists, and therapists in order to achieve holistic health. The web platform strives to enable users to book sessions; keep track of their progress; and receive personalized guidance, while providing professionals with a means to expand their clientele. Another facility on the platform is that of a community whereby users can post about problems they may be experiencing, connect with other users, partake in activities, and support a cause by either donating funds or joining in donation campaigns. By merging physical fitness, nutritional support, mental health services, and community engagement, such a platform will be addressing the demand for holistic health care solutions.

The project is a revolutionary web platform that connects users to certified personal trainers, nutritionists, and therapists to promote holistic health. It provides seamless experience in booking sessions, progress tracking, and personalized guidance for users and also serves as a base for professionals to further develop their clientele. The platform further provides a community where individuals can express their ills, meet other individuals, participate in activities, and contribute to charitable causes through donations and campaigns. By incorporating fitness, nutrition, mental health services, and community activity, the project caters to the increasingly demanding need for faster and comprehensive access to holistic health solutions. The platform empowers users to take their health goals to the next level and surrounds them with supportive engaged community.

# **Objectives**

Provide users with easy access to certified health professionals.

Offer a holistic approach to health by combining physical fitness, nutrition, and mental well-being services.

Create a user-friendly platform with tools for scheduling, progress tracking, and community support.

Build a trusted ecosystem where professionals can expand their reach, and users can achieve their health goals.

Foster a supportive community where users can connect, share experiences, and participate in charitable activities.

# Background

Addressed are the problems associated with the health and wellness industry that are growing very enthused. Physical fitness, balanced nutrition, and mental well-being are a few areas that an increasing number of people have started to appreciate. But still, when it comes to fulfilling health goals, they often come across resources that are not, say, reliable, or easily accessible. These projects bridge that gap in connecting individuals to certified professionals on a centralized platform where people can get personalized guidance toward improving their health. It can even be the community feature for social support, activity participation, and contribution toward causes. Application of software is definitely a very important one for advanced living under very common conditions such as fast-paced lives with mobility, trust, and community involvement.

With the health and wellbeing industry booming, awareness of physical fitness, nutrition, and mental wellbeing is on the rise. However, searching for comprehensive, affordable, and accessible resources is a challenge for most people. This project aims to fill the gap by providing one single platform where one can get in touch with certified professionals who will give detailed instructions on the treatment of the client's health with an emphasis on personal concerns. The platform helps to develop a community for social support, activities, and charity. The importance of software applications in the creation of healthy living cannot be overemphasized, especially since modern living has promoted convenience, trust, and community involvement.

### Literature Review

This study will review the existing online platforms that can provide holistic health for its user - physical fitness, nutrition, mental well-being, and community engagement. Some of the platforms in the world include: Well, Me Right, Burnalong, and Practice Better, which all offer individualized health services, on-demand classes, and practice management tools. Though these platforms promise convenience, access, and community support, they also have their setbacks such as excessive dependability on the Internet and varying levels of service across their offerings.

Reem El Khazen's holistic nutrition coaching, The Healing Sisters Holistic Center, and Chinese Medicine - Beirut serve wellness solutions culturally relevant to Lebanon; these often focus on a specific niche and lack overall integration of aspects that be included within holistic health.

In this respect, the opportunity is to build a seamless web interface that could provide personalized services, community engagement and educative materials. Such a web platform would be able to meet the growing demand for credible, accessible, and comprehensive healthcare solutions in Lebanon.

# **Applications**

Level Up web platform can be built by learning from other platforms that link users with certified personal trainers, nutritionists, therapists, and community support. Some key features include:

- 1. Custom Health Services: Offering personalized training, nutrition, and mental health plans that fit each person's needs.
- 2. All-in-One Scheduling and Tracking: Giving users tools to book sessions and keep an eye on their progress as time goes by.
- 3. Community Interaction: Setting up forums and groups where users can swap stories, team up on projects, and back charitable causes.
- 4. Learning Materials: Providing articles, videos, and workshops about various health topics to give users more knowledge and power

# Alternative Designs

Consequently, the platform can be designed with the following common approaches to accommodate the users' requirements in Lebanon:

- **1)Mobile First:** The prime app interface is to be designed as most people in Lebanon are consumers of services through smartphones.
- **2)Modular Design:** This implies that users will select those special services that may include fitness, nutrition, or mental health depending on their individual needs.
- **3)Telehealth Integration:** To conduct online consultations so that health professionals may deliver these services remotely, regardless of the given location.
- **4)AI Suggestion:** The artificial intelligence component helps to provide personalized content and service recommendations based on user preferences and behavior.

The platform should be multilingual and offer Arabic, English, and French to serve respectably among the Lebanese population.

These approaches will ensure the establishment of a well-balanced health platform which is both flexible and accessible in nature and meets today's local and modern needs.

# **Project Planning**

### Constraints

#### 1. Time Constraints

- The project had to be completed within a limited time frame (12 weeks), which meant that only the core functionalities (such as booking, authentication, and basic community features) could be implemented in the first phase.
- Advanced features like integrated video calling, automatic verification systems, or AI recommendations were postponed to future updates.

#### 2. Technical Constraints

- The platform is hosted on a shared hosting plan (Hostinger), which imposes restrictions on processing power, memory, and storage, potentially affecting performance as the user base grows.
- Third-party video call platforms are used instead of a custom-built solution due to time and technical limitations.
- The use of MySQL as the database management system may limit scalability and performance in large-scale deployments.
- The platform needs to maintain full compatibility across mobile and desktop devices, which can restrict the use of certain modern web technologies.

#### 3. Budget Constraints

- The project budget was limited, which led to reliance on free or open-source tools for development and deployment.
- Integration with premium APIs or professional services (such as advanced security solutions or cloud hosting) was not feasible within the current financial scope.

### 4. Security and Legal Constraints

- Since the platform handles sensitive user data (especially in health, fitness, and mental wellness), it is crucial to ensure secure handling and storage of information, even though full compliance with regulations like GDPR may not be fully implemented in the initial phase.
- Professionals must submit certificates that are manually reviewed and approved to ensure legitimacy and protect users.
- Donation campaigns require manual verification by the admin to prevent fraudulent activity or misuse of funds.

#### **5. User-Related Constraints**

• The platform targets users from various backgrounds, including students and athletes who may not be tech-savvy. As a result, the user interface had to remain simple and intuitive.

• The system must work well on low to mid-range devices and under limited internet conditions, which affects design and media choices.

# **Technical Implementation Details**

#### 1. Implementation Environment of the Current System

The platform is being developed using Laravel 11 as the backend framework, with MySQL as the database for data storage. The frontend will use Blade templates alongside Vue.js for dynamic interactions

#### 2. Partner or Collaborative Applications

The platform will integrate with third-party applications such as:

- -Payment Processors: Stripe, PayPal for handling transactions.
- -Video Conferencing Tools: Zoom, Google Meet for telehealth consultations.
- Authentication Services: Social login (Google, Facebook) for user convenience.

#### 3. Off-the-shelf Software

To accelerate development, LEVEL UP will utilize:

- Stripe/PayPal APIs for payment processing.
- Zoom/Google Meet APIs for video consultations.
- Laravel Packages for authentication, scheduling, and role-based access control.

#### 4. Anticipated Workplace Environment

The platform will be a web-based application, optimized for both desktop and mobile use, ensuring smooth access via desktops, smartphones and tablets

#### 5. Schedule

The project timeline is set to 12 weeks. So Development will be divided into phases, starting with an MVP (Minimum Viable Product) that includes core features like booking and authentication. Later phases will add community engagement, donations, and AI-powered recommendations. Additionally, scheduling must account for lab availability and coordination among group members.

# **Project Issues**

Issues that have been raised and do not yet have a conclusion:

• Scaling Challenges: How to ensure smooth performance with increasing users.

- User Trust: Verifying professionals while keeping the process efficient.
- Moderation Policies: How to handle content moderation and user reports effectively.

# Migration to the new product

Migration to the New Product:

Since the platform is being built from scratch, there is no need to migrate old data. The main focus will be on making it easy for professionals and users to sign up. A smooth registration and verification process will help ensure more people join and use the platform.

### **Team Members Tasks**

#### Manager:

- Oversees project execution and ensures deadlines are met.
- Manages team communication and coordination.
- Makes strategic decisions on platform growth and future development.

#### Designer:

- Responsible for UI/UX design, ensuring an intuitive and accessible user experience.
- Develops wireframes, prototypes, and brand identity.
- Ensures a responsive design approach.

#### **Developer:**

- Builds and maintains the Laravel backend and database.
- Implements frontend features using Blade/Vue.js.
- Integrates APIs for payments, video calls, and authentication.
- Ensures security best practices and system scalability.

### Ethical Issues

Privacy Concerns: Ensuring user data, including medical-related consultations, is protected.

Transparency: Clearly displaying professional credentials and ratings to maintain trust.

Fair Access: Ensuring everyone is treated equally and preventing any unfair treatment in the community.

### Software Model Process

We'll build and test features step by step, releasing small updates instead of waiting to launch everything at once. User feedback will help us improve along the way.

# Feasibility Study

#### **Technical Feasibility:**

- Laravel 11 ensures a robust backend structure.
- Payment and video conferencing integrations are widely supported.
- Scalable cloud hosting options (AWS, DigitalOcean) allow future expansion.

### **Operational Feasibility:**

- The platform is designed to be user-friendly, with an intuitive booking system and a verified professional directory.
- Admins will manually approve professionals to ensure service quality.

#### **Economic Feasibility:**

- Initial costs will cover hosting, development, and integrations.
- Future monetization can come from commission-based bookings, premium features, or sponsorships.

# Tools/Technology

- Backend: Laravel 11, MySQL/PostgreSQL.
- Frontend: Blade, Vue.js (if required).
- Payment Integration: Stripe, PayPal, Wish, Western Union(OMT).
- Video Call Integration: Zoom, Google Meet APIs.
- Hosting: AWS, DigitalOcean, or shared hosting.

### **Standards**

- Security: User data will be protected with encryption and follow privacy rules (GDPR).
- Development: The code will follow PHP best practices (PSR-4) to keep it clean and organized.
- Accessibility: The platform will be easy to use for everyone.

### Milestones

### 12-Week Development Plan

• Phase 1 - Authentication (Weeks 1-2)

Set up Laravel authentication (registration & login)

Implement user roles (users & professionals)

Develop admin approval system for professionals

Create password reset & security features

Test authentication system

• Phase 2 - Booking System (Weeks 3-5)

Set up professional schedules (available time slots)

Develop appointment booking system

Implement professional confirmation/cancellation

Add 48-hour cancellation & rescheduling policy

Test booking functionality

• Phase 3 - Payments (Weeks 6-8)

Integrate Stripe/PayPal for secure payments

Connect payments to session bookings

Implement refund & discount policies for rescheduled sessions

Test payment processing

• Phase 4 - Community (Weeks 9-12)

Develop public forums & private groups

Allow users & professionals to create and post content

Implement rating & review system for professionals

Add content moderation & reporting tools

Final testing of all feature