**ʿAwn**

**Stage 1 & 2 & 3 Report**



**Table of Contents**

[1. Team Formation Overview 4](#_Toc210390494)

[1.1. Team Members: 4](#_Toc210390495)

[2. Ideas Explored 5](#_Toc210390496)

[3. Selected MVP Concept – ʿAwn 6](#_Toc210390497)

[3.1. Introduction: 6](#_Toc210390498)

[3.2. Pain Points Addressed: 6](#_Toc210390499)

[3.3. Target Audience: 6](#_Toc210390500)

[3.4. MVP Features: 6](#_Toc210390501)

[Patient Side: 7](#_Toc210390502)

[Therapist Side: 7](#_Toc210390503)

[Shared Features (Both Roles): 7](#_Toc210390504)

[4. Documentation of the Process (SCAMPER Framework) 8](#_Toc210390505)

[5. Project Charter 9](#_Toc210390506)

[5.1. Project Objectives 9](#_Toc210390507)

[6. Scope 10](#_Toc210390508)

[6.1 In-Scope 10](#_Toc210390509)

[6.2 Out-of-Scope 10](#_Toc210390510)

[7. Risks and Mitigation 10](#_Toc210390511)

[8. High-Level Project Plan 10](#_Toc210390512)

[9. User Stories and Mockups 11](#_Toc210390513)

[9.1 MoSCoW User Stories 11](#_Toc210390514)

[9.2 Mockups 12](#_Toc210390515)

[10. System Architecture 12](#_Toc210390516)

[10.1 High-level flow 12](#_Toc210390517)

[10.2 Data flow examples 12](#_Toc210390518)

[11. Components, Classes, and Database Design 14](#_Toc210390519)

[11.1 Key Backend Components 14](#_Toc210390520)

[11.2 ER Diagram 14](#_Toc210390521)

[12. High-Level Sequence Diagrams 15](#_Toc210390522)

[A) Patient books an appointment 15](#_Toc210390523)

[B) Therapist publishes availability 15](#_Toc210390524)

[C) Patient posts a review 15](#_Toc210390525)

[13. API Specifications 16](#_Toc210390526)

[14. SCM and QA Strategies 17](#_Toc210390527)

[15. Technical Justifications 18](#_Toc210390528)

**Table of Figures**

[Figure 1 - Mockups 12](https://pnuedu-my.sharepoint.com/personal/443007812_pnu_edu_sa/Documents/ʿAwn.docx#_Toc211356910)

[Figure 2 - Mockups 12](https://pnuedu-my.sharepoint.com/personal/443007812_pnu_edu_sa/Documents/ʿAwn.docx#_Toc211356911)

# Team Formation Overview

## Team Members:

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Primary Roles | Secondary Roles | Strengths |
| Rawan Albaraiki | UX/UI Lead | Developer | Multidisciplinary Skillset, Analytical Thinking |
| Donna Almadani | Project Manager | Developer, Product management | Problem-Solving Mindset, Commitment & Reliability |
| Shahad Aljahdali | Documentation Lead | Developer | Problem-solving ability, excellent communication, experience with database management. |
| Munirh Alsubaie | Technical Lead | Developer | Technical Proficiency, Adaptability |

* 1. Collaboration Strategy:
* Communication through WhatsApp.
* Weekly check-ins to align progress.
* Shared documentation in Google Docs.

# Ideas Explored

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Idea Name | Description | WeaknessStrengths | Weakness | Decision |
| Desert Whispers | A website that collects the natural sounds of the Saudi desert (night calm, wind, birds). | Unique and simple to implement; highlights Saudi identity. | Very niche audience; limited long-term sustainability as a product | Rejected |
| TimeSwap | A platform where people exchange services using time (e.g., 1 hour Photoshop lesson = 1 hour language tutoring). | Innovative, promotes community collaboration. | Technically complex (trust system, time banking); hard to launch as MVP | Rejected |
| Emotion Garden | Users write strange dreams → app generates illustrations or short animations. | Fun, viral potential, highly innovative. | Requires advanced AI + animation resources; high technical barrier | Rejected |
| ʿAwn | Web app connecting patients with physical therapists + awareness resources. | Solves unemployment, improves access, raises awareness. | Requires careful scope definition | Selected |
| Dream Journal AR | Users write strange dreams → app generates illustrations or short animations. | Fun, viral potential, highly innovative. | Requires advanced AI + animation resources; high technical barrier. | Rejected |
| Star Gazing | Website that highlights top locations in Saudi Arabia for star gazing, with maps and photos. | Attractive, localized, clear target audience (travelers, astronomy fans); feasible with existing mapping tools. | Requires accurate data collection for spots, time consuming. | Rejected |

# Selected MVP Concept – ʿAwn

* 1. Introduction:

ʿAwn is a web-based platform designed to make physical therapy services more accessible while supporting therapists in finding employment opportunities. Inspired by existing healthcare apps like Labayh, ʿAwn focuses exclusively on physical therapy services, filling a gap in both awareness and availability.

* 1. Pain Points Addressed:

Physical therapy in Saudi Arabia is often exclusive to hospitals and medical centers, leaving many patients unaware of its importance or unable to access services. At the same time, certified therapists face unemployment challenges due to limited opportunities. ʿAwn bridges this gap by providing a platform that connects therapists and patients while also offering educational resources.

* 1. Target Audience:

 Patients in need of accessible physical therapy services.

 Certified physical therapists seeking employment opportunities.

 Educators and health organizations raising awareness of physical therapy.

 General public with limited knowledge of physical therapy benefits.

* 1. MVP Features:

### **Patient Side:**

1. **Dual Registration System** – On the homepage, users can register either as a **Specialist (Therapist)** or as a **Patient**, with sign-in linked to their National ID and verified through Absher for authenticity.
2. **Appointment Calendar** – A visual calendar showing weekly or monthly appointments, making it easy for patients to track upcoming sessions.
3. **Therapist Directory** – A searchable and filterable list of specialists, with filters for location proximity and gender preference (male or female therapist).
4. **Therapist Profile Page** – Displays:
   * Short bio and professional summary.
   * Certification(s) and qualifications.
   * Years of experience.
   * Patient ratings and reviews.
5. **Booking System** – Patients can select available slots directly from a therapist’s calendar.

### **Therapist Side:**

1. **Therapist Dashboard** – Different view from patients, tailored to specialists.
2. **Medical Records Access** – Therapists can view relevant patient records and health history to prepare for sessions.
3. **Appointment Management** – Specialists can manage their schedule, view upcoming bookings, and mark availability.
4. **Patient Notes** – Option to log session notes, track patient progress, and update case information.

### **Shared Features (Both Roles):**

* **Authentication via Absher** – Ensures trusted identity verification for both patients and specialists.
* **Ratings & Reviews System** – Patients can leave feedback after consultations, building trust and accountability.
* **Awareness/Education Section** – Centralized space with articles, FAQs, and media about physical therapy.

# **Documentation of the Process (SCAMPER Framework)**

**Substitute:** Instead of general healthcare apps, focus only on physical therapy to fill a market gap.  
**Combine:** Merge job opportunities for therapists with patient access and cultural awareness.  
**Adapt:** Adapt successful healthcare models like Labayh but narrow the scope to physical therapy.  
**Modify:** Replace complex features like user accounts with simpler engagement (emoji reactions).  
**Put to Another Use:** Repurpose physical therapy expertise into educational digital content.  
**Eliminate:** Exclude advanced features (payments, insurance integration) to keep MVP feasible.  
**Reverse:** Instead of patients searching only in hospitals, flip access by making therapists available digitally.

**Outcome:** After exploring multiple ideas, ʿAwn was chosen as the MVP because it is feasible, socially impactful, and aligned with the team’s skills and goals.

# **Project Charter**

## **Project Objectives**

**Purpose**:  
The purpose of ʿAwn is to improve access to physical therapy services while addressing therapist unemployment and increasing public awareness of physical therapy’s importance.

**SMART Objectives:**

1. Develop a functional web MVP by **9 November** with therapist profiles, booking, and awareness features.
2. Onboard at least **10 certified therapists** and publish **10 awareness resources** by the MVP launch.
3. Reach at least **20 patients** during pilot testing, with **5 completed consultations**.
   1. Stakeholders and Team Roles

**Internal Stakeholders**

* Team Members – developers, designers, documentation lead, project manager.

|  |  |  |
| --- | --- | --- |
| Role | Member | Responsibilities |
| Project Manager | Donna Almadani | Oversees planning, tracks progress. |
| Technical Lead | Munirh Alsubaie | Guides tech stack decisions. |
| Developer(s) | All | Build booking, profiles, awareness section. |
| Designer/UX Lead | Rawan Albaraiki | UI/UX design for patients and therapists. |
| Documentation Lead | Shahad Aljahdali | Maintains project documentation. |

**External Stakeholders**

* Mentors – guidance and technical/strategic support.
* Therapists – professionals offering services via the platform.
* Patients – end-users in need of accessible physical therapy.

# Scope

## **6.1 In-Scope**

* Therapist profiles and availability.
* Basic patient booking system (no payments).
* Awareness/education content (articles, FAQs, videos).
* Suggestion box, emoji reactions, and share button.

## **6.2 Out-of-Scope**

* Advanced payment systems.
* Telemedicine (video calls).
* Mobile app version (web MVP only).
* Insurance or hospital system integrations.

# Risks and Mitigation

|  |  |  |
| --- | --- | --- |
| Risk | Potential Impact | Mitigation |
| Few therapists join the platform | Limited services | Start with small pilot group, partner with mentors/clinics. |
| Lack of awareness | Low user adoption | Awareness campaign via social media and community groups. |
| Technical challenges with scheduling | Booking feature fails | Start with simple time-slot booking. |
| Team inexperience in healthcare compliance | Data/security risks | Avoid storing sensitive data in MVP. |

# High-Level Project Plan

**Timeline (18 August – 9 November)**

* **Stage 1 (18 Aug – 31 Aug):** Team Formation & Idea Development Completed
* **Stage 2 (1 Sept – 14 Sept):** Project Charter Development (current stage)
* **Stage 3 (15 Sept – 28 Sept):** Technical Documentation – define architecture, datasets, tools.
* **Stage 4 (29 Sept – 12 Oct):** MVP Development – implement therapist profiles, booking, awareness.
* **Stage 5 (13 Oct – 26 Oct):** MVP Refinement – bug fixes, improvements, pilot testing.
* **Stage 6 (27 Oct – 9 Nov):** Project Closure – final testing, presentation, and submission.

# 9. User Stories and Mockups

## **9.1 MoSCoW User Stories**

**Must Have**

* As a **patient**, I want to **sign up and log in** so that I can **book a session**.
* As a **therapist**, I want to **sign up and log in** so that I can **publish my profile and availability**.
* As a **patient**, I want to **browse a directory of therapists** with filters (**city, gender, specialty**) so that I can **find a suitable therapist**.
* As a **patient**, I want to **book an available time slot** so that I can **schedule a therapy consultation**.
* As a **therapist**, I want to **see my upcoming appointments in a calendar** so that I can **manage my schedule**.
* As an **admin**, I want to **verify therapist profiles** so that **only legitimate professionals** are listed.

**Should Have**

* As a **patient**, I want to **receive email reminders** before my appointment so that I **don’t miss it**.
* As a **patient**, I want to **see ratings/reviews on therapist profiles** so that I can **choose confidently**.
* As a **user**, I want to **switch language (AR/EN)** so that I can **use the site comfortably**.

**Could Have**

* As a patient, I want to save favorite doctors, so that I can book with them easily later.
* As a **therapist**, I want to **leave short session notes** (non-sensitive) so that I can **track follow-ups**.
* As a **patient**, I want to **get SMS reminders** so that I’m **notified on my phone**.
* As a **therapist**, I want to see analytics of my consultations, so that I can improve my services.

**Won’t Have**

* Insurance integrations, online payments, video telemedicine, storing detailed medical records, Absher/Nafath identity integration.

**9.2 Mockups**

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Figure 1 - Mockups

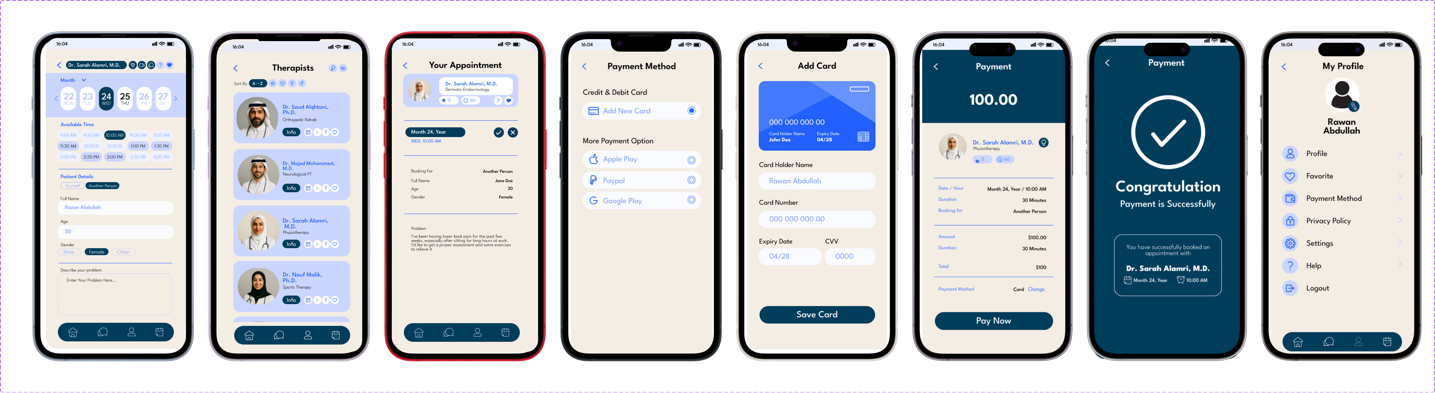
****

Figure 2 - Mockups

# 10. System Architecture

**Tech choice:** Laravel 11 (PHP 8.3), Blade + Livewire, MySQL/Postgres, Filament Admin, FullCalendar (JS), Scout (+ Meilisearch if time), Mail (email reminders).

**Hosting:** Laravel Forge or simple VPS; staging + production.

## **10.1 High-level flow**

* Frontend (Blade/Livewire) → Laravel Controllers → Services/Policies → Eloquent (DB)
* Notifications (Mail; later SMS via Unifonic) via Laravel Notifications/Queues
* Search via DB queries; optional Scout/Meilisearch if time permits

## **10.2 Data flow examples**

* Patient opens “Therapist Directory” → API/Controller fetches profiles (with filters) → returns list → click profile → fetch availability → book → creates booking with transaction guard → sends email notifications.
* Therapist edits availability (Livewire component) → creates availability\_slots → shows in calendar to patients.

# 11. Components, Classes, and Database Design

## **11.1 Key Backend Components**

* **Auth & Roles**: Breeze + spatie/permission (patient, therapist, admin)
* **Modules**:
  + Therapists (profile, verification)
  + Directory (search/filter)
  + Availability (create/manage slots)
  + Bookings (create/cancel/confirm)
  + Reviews (post-booking)
  + Content (awareness articles)
  + Notifications (email reminders)
  + Admin (Filament resources)

## **11.2** ER Diagram

* users (id, name, email, phone, password\_hash, role, gender, locale, created\_at)
* therapist\_profiles (id, user\_id FK, bio, specialties (JSON/array), years\_experience, city, lat, lng, certifications\_url, verified boolean, created\_at)
* availability\_slots (id, therapist\_id FK, starts\_at, ends\_at, status: open|blocked, created\_at)
* bookings (id, patient\_id FK (users), therapist\_id FK (users), slot\_id FK, status: pending|confirmed|completed|cancelled, notes\_short, created\_at)
* reviews (id, booking\_id FK, rating int (1–5), comment, created\_at)
* articles (id, title, slug, body\_md, tags (JSON), published\_at)

**Rules**

* A therapist\_profile belongs to one user with role=therapist.
* A booking must reference an existing availability\_slot; enforce **no double-book** with unique constraint on slot\_id where status active.
* A review can be created **only** if booking.status = completed and by that booking’s patient.

# 12. High-Level Sequence Diagrams

## A) Patient books an appointment

1. Patient → UI: open therapist profile
2. UI → API: GET /therapists/{id}/availability
3. Patient → UI: pick slot → POST /bookings { therapist\_id, slot\_id }
4. API: validates role=patient, slot open, creates booking (transaction), marks slot reserved
5. API → Mailer: send emails to patient & therapist
6. API → UI: return booking confirmation

## B) Therapist publishes availability

1. Therapist → UI: open “My Availability”
2. UI → API: POST /availability { slots[] }
3. API: validates role=therapist, inserts slots
4. API → UI: returns updated calendar

## C) Patient posts a review

1. Patient → UI: open past appointment
2. UI → API: POST /reviews { booking\_id, rating, comment }
3. API: checks booking belongs to patient & status=completed; saves review
4. API → UI: success; therapist profile aggregates rating

# 13. API Specifications

All responses are JSON; all endpoints require auth unless stated.  
Headers: Authorization: Bearer <token> (Breeze session or Sanctum token, whichever you choose).

### Public / Auth

* POST /auth/register — body: {name, email, password, role} → 201 {user, token}
* POST /auth/login — body: {email, password} → 200 {user, token}
* POST /auth/logout — 204

### Directory & Profiles

* GET /therapists?city=&gender=&specialty= → 200 [{id, name, city, gender, rating\_avg, specialties}]
* GET /therapists/{id} → 200 {profile, reviews\_summary}
* GET /therapists/{id}/availability?from=&to= → 200 [{slot\_id, starts\_at, ends\_at, status}]

### Availability (therapist role)

* POST /availability — body: [{starts\_at, ends\_at}, …] → 201 [{slot\_id,…}]
* DELETE /availability/{slot\_id} → 204

### Bookings

* POST /bookings — body: {therapist\_id, slot\_id} → 201 {booking\_id, status}
* GET /bookings/mine (patient) → 200 [ … ]
* GET /bookings/assigned (therapist) → 200 [ … ]
* PATCH /bookings/{id} — body: {status} → 200 (therapist can confirm/cancel; patient can cancel)

### Reviews (post-booking)

* POST /reviews — body: {booking\_id, rating (1–5), comment} → 201
* GET /therapists/{id}/reviews → 200 [ … ]

### Content (awareness)

* GET /articles?tag= → 200 [ {id, title, slug, excerpt} ]
* GET /articles/{slug} → 200 {title, body\_md, tags}

# 14. SCM and QA Strategies

**SCM**

* **Repo**: GitHub
* **Branches**: main (stable), develop (integration), feature/\*
* **PR rule**: at least 1 review; no direct pushes to main
* **Conventional commits**: feat:, fix:, chore:, docs:, test:

**CI/CD**

* GitHub Actions: run tests + lint on PR
* Deploy develop → **staging** (Forge) after tests pass
* Manual approval to deploy main → **production**

**QA**

* **Unit/Feature tests**: PHPUnit (models, policies, booking rules, availability)
* **HTTP tests**: Laravel HTTP tests ($this->post('/bookings'…))
* **Postman/Newman** collections\*\*:\*\* smoke test endpoints
* **Manual E2E** (staging): key user flows (register, list therapists, book, cancel, review)
* **Non-functional checks**: Arabic/RTL layout, accessibility basics, performance (N+1 queries)

**Test priorities**

* Prevent double-booking
* Role policies (patient vs therapist vs admin)
* Reviews only after completed bookings

# 15. Technical Justifications

* **Laravel**: fastest full-stack path (auth, RBAC, notifications, localization) for a two-month MVP; huge local market relevance.
* **Blade + Livewire**: avoids SPA overhead; lets junior/mid devs ship interactive UI quickly.
* **Relational DB (Postgres/MySQL):** strong integrity for bookings/availability; easy joins for directory filters.
* **Filament Admin:** admin CRUD and therapist verification without writing a whole admin app.
* **Email first, SMS later**: cut risk; plug Unifonic later via Notifications channel.
* **Privacy:** no sensitive medical records in MVP; only short session notes; enforce RBAC with policies; HTTPS only.