

## Appointment Queue Manager — Product Documentation

### 1. Product Overview

Appointment Queue Manager is a full-stack web application designed to streamline appointment scheduling and management. It allows users to browse available advocates, book appointments, and manage schedules efficiently. The system also provides a robust backend API for managing data and supporting business logic.

The application is ideal for organizations needing a structured, user-friendly solution for appointment coordination and resource management.

The screenshot shows a web application interface for 'Appointment Queue Manager'. At the top, there is a navigation bar with tabs: 'Scheduler' (highlighted in green), 'New Appointment', 'Calendar', 'Advocates' (which is currently selected and has a blue border), and a user icon. Below the navigation bar, the main content area has a title 'Find an Advocate' and a subtitle 'Discover what our advocates can do for you'. A list of advocates is displayed in sections, each with a name and email address:

- Advocate 1**  
Email: advocate1@example.com
- Advocate 6**  
Email: advocate6@example.com
- Advocate 2**  
Email: advocate2@example.com
- Advocate 7**  
Email: advocate7@example.com
- Advocate 5**  
Email: advocate5@example.com

At the bottom of the content area, there is a navigation footer with links: '< Previous', '1' (selected), '2', 'Next >'.

Scheduler

New Appointment

Calendar

Advocates

≡

## Your Appointment Calendar

View and manage all your scheduled appointments

← Prev      January 2026      Next →

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24

Thursday, Jan 22

1 appointment

Dentist App

11:00 AM - 01:00 PM

scheduled

Scheduler

New Appointment

Calendar

Advocates

≡

## Appointment & Queue Manager

Streamline your scheduling with our intuitive appointment management system. Save time, reduce no-shows, and keep your clients happy.

### Welcome, cj!

What can we help you with today?

Schedule appointment →

View calendar →

Find advocates →

The image shows a screenshot of a web application titled "Scheduler". At the top, there is a navigation bar with links for "New Appointment", "Calendar", and "Advocates". On the far right of the navigation bar is a user profile icon. Below the navigation bar, the main content area has a title "Schedule an Appointment" and a subtitle "Create a new appointment to manage your time efficiently". The central part of the screen is a form for scheduling an appointment. It includes fields for "Appointment Title/Description" (with placeholder text "e.g., Doctor's appointment, Team meeting, etc."), "Appointment Date" (with a button "Select appointment date"), "Start Time" (with a dropdown menu "Select a date first"), "End Time (Optional)" (with a dropdown menu "Select start time first"), and a note stating "If no end time is specified, a 1-hour duration will be used by default". At the bottom of the form are two buttons: a green "Create Appointment" button and a grey "Cancel" button.

Scheduler

New Appointment

Calendar

Advocates

**Schedule an Appointment**

Create a new appointment to manage your time efficiently

**Appointment Title/Description \***

e.g., Doctor's appointment, Team meeting, etc.

**Appointment Date \***

Select appointment date

**Start Time \***

Select a date first

**End Time (Optional)**

Select start time first

If no end time is specified, a 1-hour duration will be used by default.

**Create Appointment**

**Cancel**

## 2. Key Features

### Advocate Directory:

Browse, search, and filter advocates by availability or specialization.

### Appointment Scheduling:

Book, view, and manage appointments with real-time updates.

### User Management:

Register, authenticate, and manage user profiles and permissions.

### Pagination:

Supports efficient navigation of large datasets, including advocates and appointment records.

### Modern, Responsive UI:

Built with React, Tailwind CSS, and Vite for a fast and intuitive user experience across devices.

RESTful API Backend:

Powered by NestJS and TypeORM, providing scalable, maintainable, and secure endpoints for all operations.

### 3. Technology Stack

Layer	Technology
Frontend	React, TypeScript, Vite, Tailwind CSS
Backend	NestJS, TypeScript, TypeORM, PostgreSQL
Database	PostgreSQL

### 4. Project Structure

```
frontend/ # React application (UI, pages, components, services)  
backend/ # NestJS API application (modules, entities, services)
```

Frontend Highlights

frontend/src/pages/ — Main pages, e.g., HomePage, AdvocatePage

frontend/src/services/api.ts — API client for communication with the backend

Backend Highlights

backend/src/modules/ — Business logic modules (advocates, appointments, users)

backend/src/database/entities/ — Database models

### 5. Getting Started

Install Dependencies

```
cd frontend && npm install  
cd ..\backend && npm install
```

Configure Environment Variables

Set variables as needed (refer to .env.example).

Start the Backend

```
cd backend  
npm run start:dev
```

Start the Frontend

```
cd frontend  
npm run dev
```

## 6. Authors

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