Database Engineering Project

Hospital Management System

Presented by Eya Ben Ismail & Nour Yaakoub

Overview

1-System Purpose and Goals

- Creating a user-friendly clinic management system
- Managing appointments efficiently
- Providing separate interfaces for administrators and patients
- Ensuring secure data handling
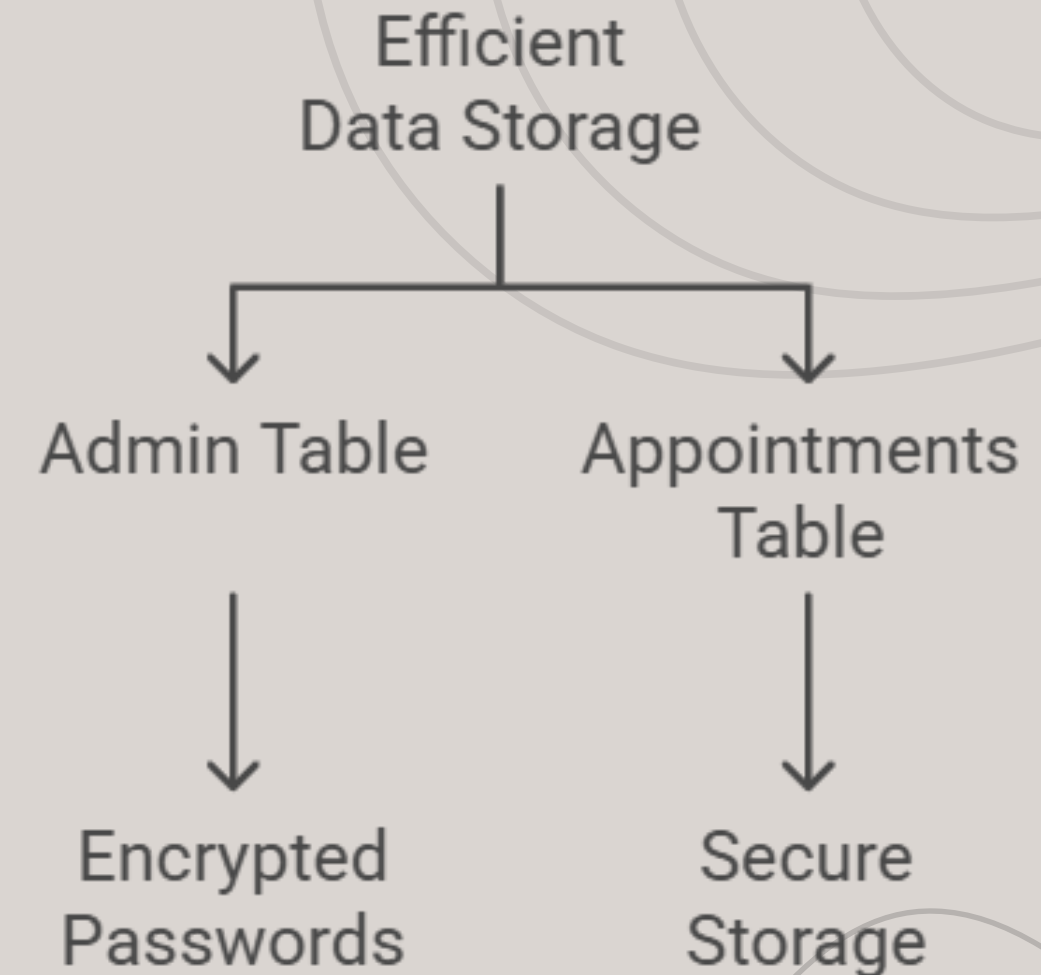- Maintaining organized medical appointment records
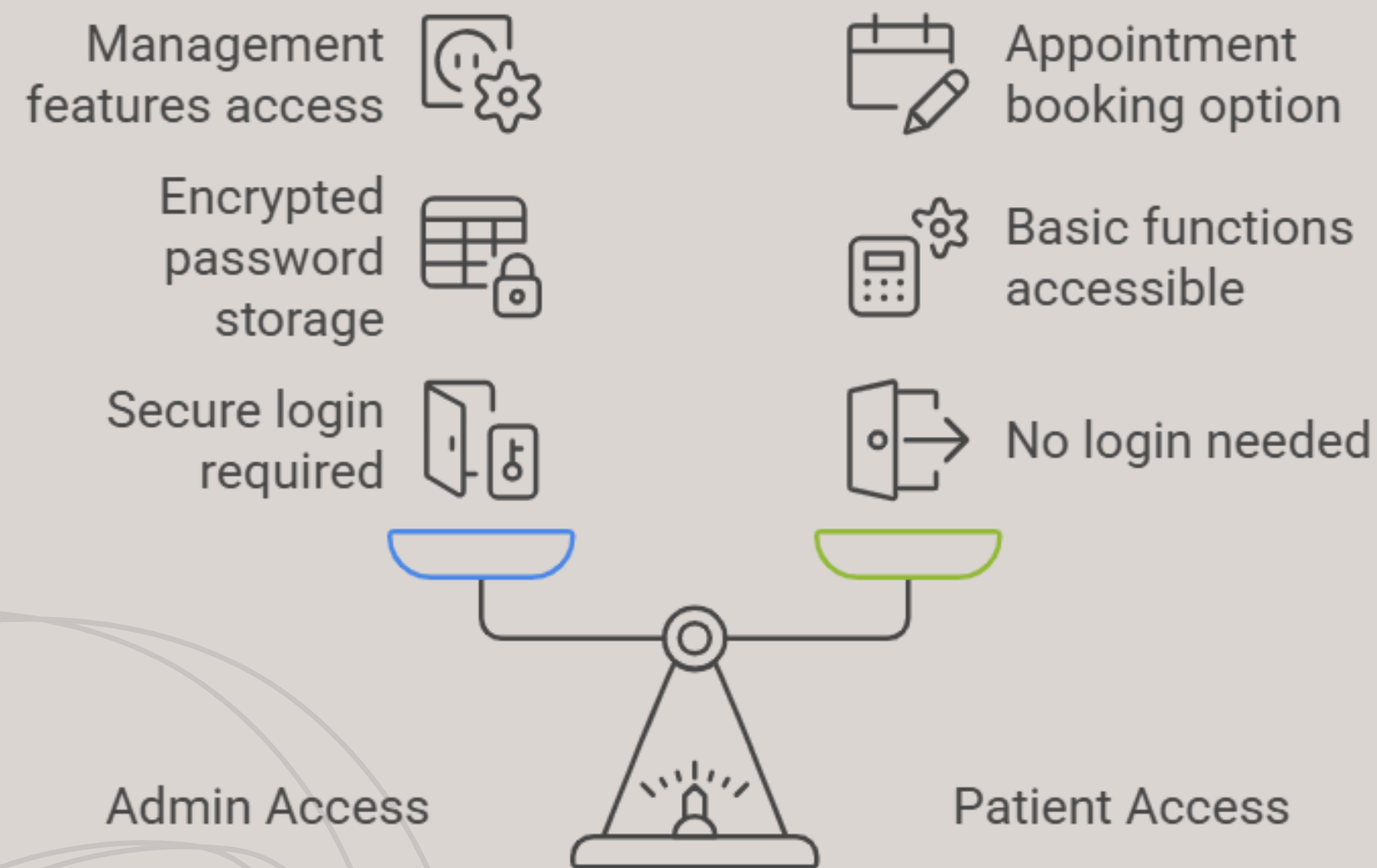
2-Main Components

MySQL Database Features:
- Stores system information efficiently.
- Manages two key tables:
  - Admin Table: Staff credentials.
  - Appointments Table: Scheduling.

Data Security:
- Encrypted passwords for admin accounts.
- Secure storage of appointment details.

Efficient
Data Storage

Admin Table   Appointments
                  Table

Encrypted   Secure
Passwords   Storage

2-Main Components

Management features access

Appointment booking option

Encrypted password storage

Basic functions accessible

Secure login required

No login needed

Admin Access

Patient Access

User Authentication System:

Admin Access:
- Secure login with username and password verification.
- Encrypted password storage.
- Access to management features.

Patient Access:
- Direct access to patient portal.
- No login required for basic functions.
- Option to view and book appointments.
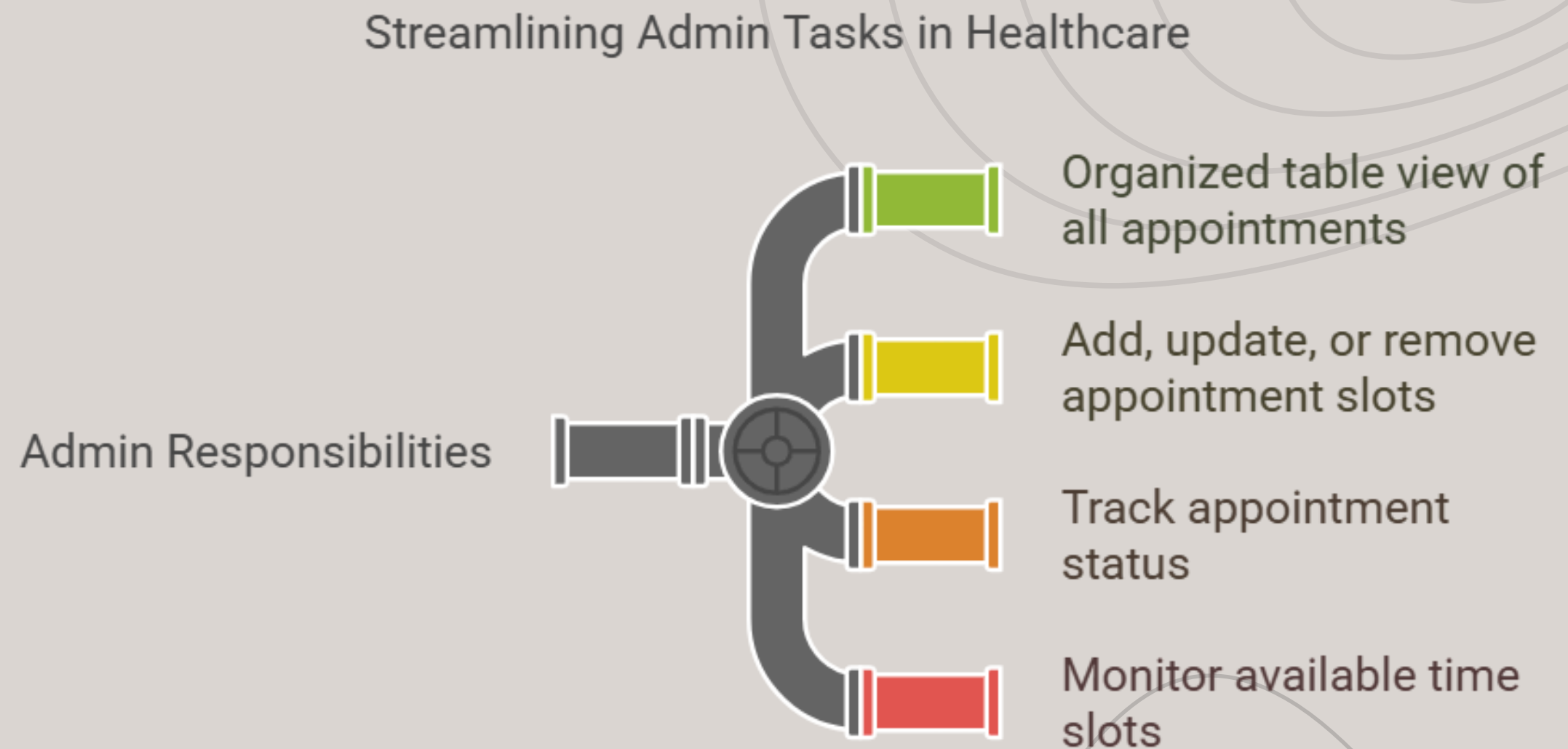
3– Core Functionality

a. Administrator Features

Appointment Management:

- Organized table view of all appointments.
- Add, update, or remove appointment slots.
- Track appointment status.

System Control:

- Monitor available time slots.
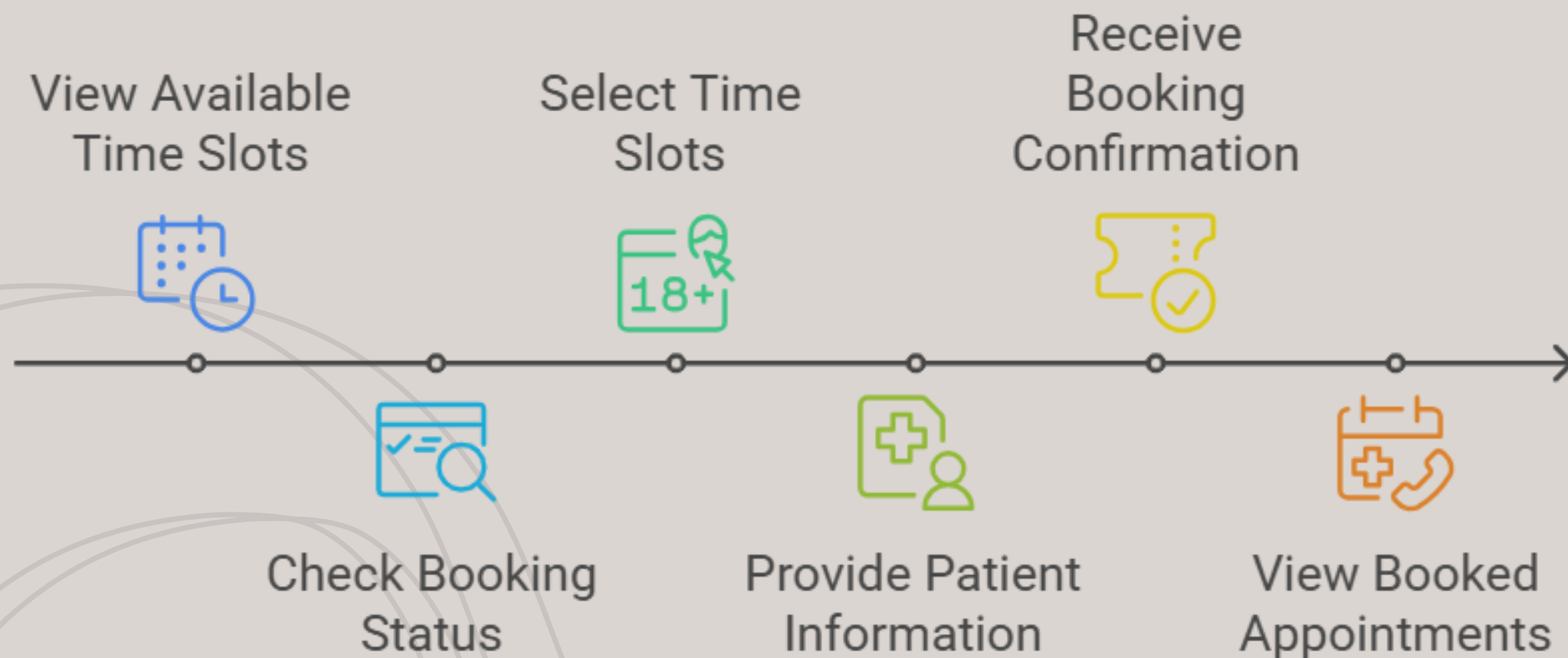- Manage doctor schedules.
- Overview of booking status.

Streamlining Admin Tasks in Healthcare

Organized table view of all appointments

Admin Responsibilities

Add, update, or remove appointment slots

Track appointment status

Monitor available time slots

3- Core Functionality

Patient Appointment Management Process

View Available
Time Slots

Select Time
Slots

Receive
Booking
Confirmation

Check Booking
Status

Provide Patient
Information

View Booked
Appointments

b. Patient Features

Appointment Viewing:
- View available time slots and doctor availability.
- Check appointment times and booking status.

Appointment Booking:
- Select time slots and provide patient information.
- Receive booking confirmation and view booked appointments.

4- Key Operations

Create:
- Add new appointments.
- Set up available time slots.
- Create admin accounts.

Read:
- View appointment lists.
- Check availability.
- Access schedule details.

Update:
- Modify appointment details.
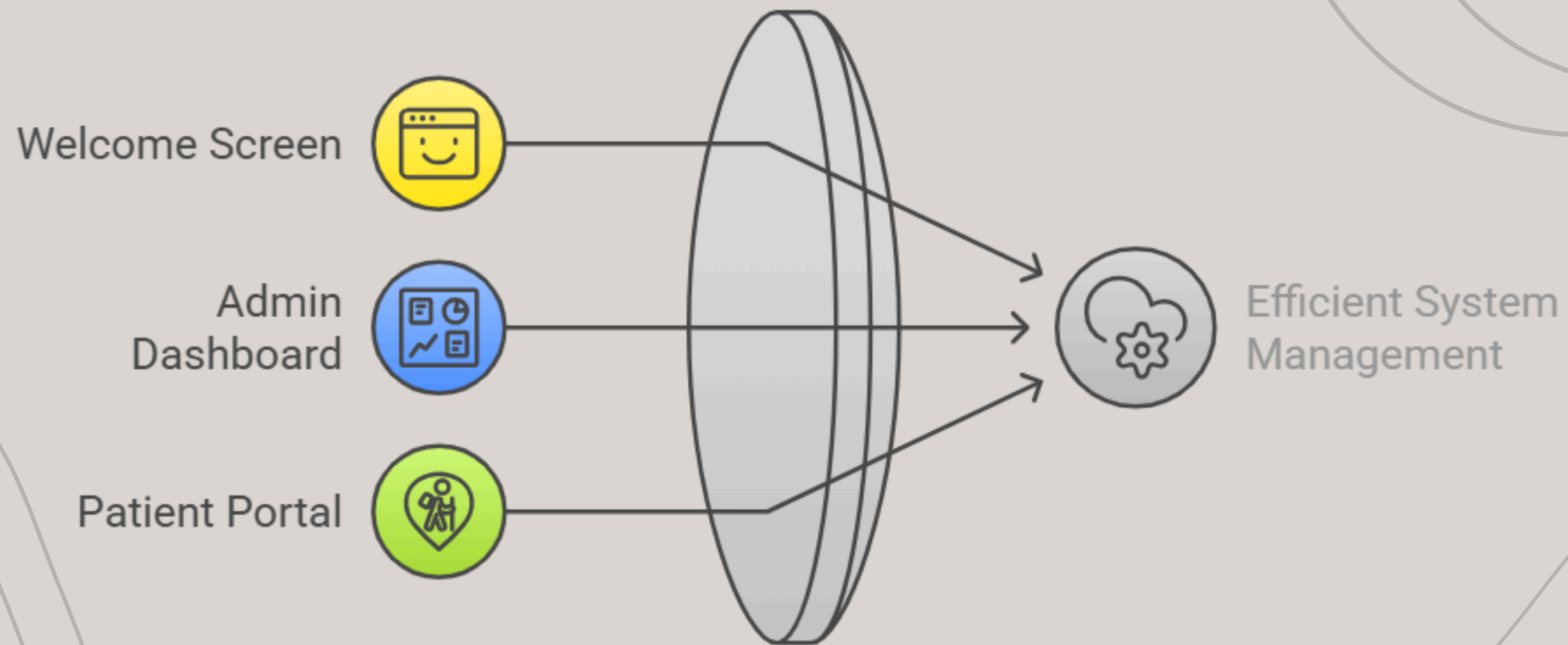- Change appointment status.
- Update schedule information.

Delete:
- Remove appointments.
- Cancel bookings.
- Clear old records.

5- User Interface Design

Streamlined User Experience

Welcome Screen

Admin Dashboard

Patient Portal

Efficient System Management

6- System Benefits

For Administrators:
- Efficient management of appointments.
- Clear schedule overview.
- Easy updates and modifications.
- Secure access to all functions.
- Organized and reliable data handling.

For Patients:
- Simple and hassle-free booking.
- Clear visibility of available slots.
- User-friendly interface.
- Instant booking confirmation.
- No login required for basic functions.

9– Conclusion

- Comprehensive appointment management solution.
- Intuitive and user-friendly interface.
- Secure and reliable data handling.
- Efficient and streamlined booking system.
- Flexible, scalable, and future-ready design.

https://github.com/nweera/HospitalManagementSystem-MySQL

Thank You

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