

Project Title & Introduction

KHAN Pharmaceuticals PLC A Full-Stack Pharmaceutical Web Application



**KHAN Pharmaceuticals PLC.
Bangladesh (KHAN_Group_LTD)**

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Welcome to KHAN Pharmaceuticals PLC. Bangladesh

KHAN Pharmaceuticals PLC, incorporated as a limited company in 2025, received its regulatory approval in October 2025 to operate as a pharmaceutical company to manufacture and market medicine in Bangladesh. However, it was not until March 2025, it went into commercial production and marketing. The company has been built on the pillars of integrity, knowledge, respect and trust. KHAN Pharmaceuticals PLC. we operate at high ethical standards and are committed towards building the organization on the foundation of our vision, mission and philosophy.

At KHAN Pharmaceuticals PLC, we aspire to aid our customers in leading a healthy life by formulating, developing, commercializing quality medicine and delivering affordable and accessible medicines that satisfy their urgent medical needs. We aspire to:

- (a) develop a broad portfolio of products and become a significant national player in the generics arena
- (b) emerge as a leading national player in high quality generic formulations and
- (c) grow by expanding territory throughout the country.

We continuously strive for the success of our company through research, innovation, training & development, manufacture and marketing of safe and effective medicines. We consider our employees as most valuable assets that can make our dreams come true. By listening to our employees and acting on what we hear, we identify and build on the strengths and talents of our people and make Euro



Project Type: Full-Stack Web Application

Presenters:



Md. Shamim Hossain
(B210102028)



Md. Abdur Rauf
(B210102023)

Executive Summary

Concept: A complete online presence for a pharmaceutical company.

Core Capabilities:

Secure user authentication and session management.

Dynamic product catalog with filtering.

Comprehensive company information modules.

Goal: To demonstrate proficiency in modern web development and secure database integration

Technology Stack

The project utilizes a modern, reliable stack for high performance:

Component	Technology	Version
Frontend	HTML5, CSS3, JavaScript	Latest
Backend	PHP	8.2+
Database	MySQL (MariaDB)	10.1+
Server	Apache (XAMPP)	

Core Project Features

User Authentication: Secure Sign Up and Login using **bcrypt** password hashing.

KHAN Pharmaceuticals PLC.
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Create Your Account

First Name *

Last Name *

Email Address *

khonshumin13@gmail.com

Phone Number

User Type *

--Select Type--

Password *

Confirm Password *

Company/Organization

Sign Up

KHAN Pharmaceuticals PLC.
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User Login

Email Address *

khonshumin13@gmail.com

Password *

Login

Don't have an account? [Sign Up Here](#)

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KHAN Pharmaceuticals PLC is one of the top 10 pharmaceutical companies in Bangladesh. The company started its journey in 2023 with the honest promise to provide quality medicines at affordable prices to the countrymen.

About Us

KHAN Pharmaceuticals PLC is one of the top 10 pharmaceutical companies in Bangladesh. The company started its journey in 2023 with the honest promise to provide quality medicines at affordable prices to the countrymen.

Contact us

Address , Phone , E-mail , Social Media:
• Kashipur, Matpara, Jibannagar, Chittagong, Khulna, Bangladesh.
• Mob: 01723355140
• E-mail: khonshumin13@gmail.com
• Social Media: Facebook

User Dashboard: Personalized displays based on session identification.

Welcome to Your Dashboard

You are logged in successfully

Name: Md. Shamim Hossain
Email: khan2@gmail.com
Login Time: 2026-02-02 04:38:43

Your Profile

Welcome to KHAN Pharmaceuticals dashboard! Here you can manage your account, view your information, and access our services.

You are now logged in as a registered user. You can access exclusive features and updates related to our pharmaceutical products and services.

Available Services

- ✓ View Product Catalog
- ✓ Check Quality Standards
- ✓ Access Medical Resources
- ✓ Contact Support Team
- ✓ Download Documents

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Product Catalog: Displays over 15 products with category-based filtering (e.g., Antibiotics, Pain Relief).

Our Products

Quality medicines at affordable prices

[All Products](#) [Antibiotic](#) [Pain Relief](#)

KP-AB-001
Amoxicillin 500mg
Antibiotic

Broad-spectrum antibiotic effective against bacterial infections. Used for respiratory, urinary, and skin infections.

By 0

৳32.00
In Stock

KP-AB-002
Azithromycin 250mg
Antibiotic

Macrolide antibiotic for various bacterial infections. Effective against respiratory and skin infections.

By 0

৳38.00
In Stock

KP-AB-005
Cephalexin 500mg
Antibiotic

Cephalosporin antibiotic for skin and respiratory infections. Safe alternative for penicillin-allergic patients.

By 0

৳40.00
In Stock

KP-AB-003
Ciprofloxacin 500mg
Antibiotic

Fluoroquinolone antibiotic for serious infections. Used for urinary tract, respiratory, and GI infections.

By 0

৳45.00
In Stock

KP-AB-004
Doxycycline 100mg
Antibiotic

Tetracycline antibiotic for acne and respiratory infections. Also effective for Lyme disease treatment.

By 0

৳35.00
In Stock

KP-AB-006
Metronidazole 400mg
Antibiotic

Antibiotic for anaerobic bacterial and parasitic infections. Effective for gastrointestinal infections.

By 0

৳28.00
In Stock

KP-PR-003
Aspirin 100mg
Pain Relief

Low-dose aspirin for pain relief and heart health. Ideal for mild to moderate pain and inflammation.

By 0

৳18.00
In Stock

KP-PR-005
Diclofenac 50mg
Pain Relief

Potent NSAID for severe pain and inflammation. Recommended by doctors for acute pain conditions.

By 0

৳25.00
In Stock

Company Pages: Dedicated sections for About Us Quality Assurance, Careers

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About KHAN Pharmaceuticals PLC

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Mission & Vision

Contact Owner's



MD. SHAMIM HOSSAIN

Aspiring Competitive Programmer | ICT Student | Tech Enthusiast

About Me

Hi, my name is Md. Shamim Hossain. I am pursuing my B.Sc. in Information and Communication Technology at Chandpur Science and Technology University, Bangladesh.

My passion is to become an excellent competitive programmer. I have solved over 1000+ algorithmic problems on various online judges.

[Facebook](#) | [GitHub](#) | [Codeforces](#) | [Beecrowd](#) | [TopH](#) | [HackerRank](#)

WhatsApp: 01723355140 | Email: khanshamim8134@gmail.com

Education

HSC: Science – Darsana Govt. College
B.Sc.: Information & Communication Technology – CSTU

News & Event

News & Events

Stay updated with latest news from KHAN Pharmaceuticals

January 25, 2026

Company News

KHAN Pharmaceuticals Launches New Product Line

We are proud to announce the launch of our new cardiovascular product line, featuring 5 new formulations designed to combat heart disease and hypertension. These products meet WHO-GMP standards and are now available nationwide.

Our research team has worked tirelessly to ensure these medications offer the highest efficacy while remaining affordable for all Bangladeshi citizens.

January 15, 2026

Achievement

WHO-GMP Certification Renewed

KHAN Pharmaceuticals PLC. has successfully renewed its WHO-GMP (Good Manufacturing Practice) certification for 2026. This prestigious certification validates our commitment to maintaining the highest quality standards in pharmaceutical manufacturing.

The certification process included rigorous audits of our manufacturing facilities, quality control procedures, and documentation systems.

Security Implementation

The application is built with a "Security First" mindset:

SQL Injection Prevention: Utilization of Prepared Statements.

Cross-Site Scripting (XSS): Input sanitization via `htmlspecialchars()`.

Password Security: Industry-standard `password_hash()` with bcrypt.

CSRF Protection: Implementation of Session Tokens.

Network Security: Specific security headers (X-Frame-Options, X-XSS-Protection)

Database Architecture

Database Name: `khan_pharmaceuticals`

```
# Database Setup Guide

## Quick Setup (Recommended)

### Step 1: Start MySQL
- Open XAMPP Control Panel
- Click "Start" next to MySQL
- Wait for it to turn green

### Step 2: Run Database Setup
Double-click one of these files:
- **`setup_database.bat`** (Windows Command Prompt)
- **`setup_database.ps1`** (PowerShell - Right-click → Run with PowerShell)

That's it! The script will automatically:
- Create the database `khan_pharmaceuticals`
- Create all required tables
- Set up indexes for performance
- Verify the installation
```

```

## Manual Setup (Alternative)

If the automatic script doesn't work:

### Method 1: Using phpMyAdmin
1. Open http://localhost/phpmyadmin
2. Click "New" to create a database
3. Name it: `khan_pharmaceuticals`
4. Click "Import" tab
5. Choose file: `database_complete_setup.sql`
6. Click "Go"

### Method 2: Using MySQL Command Line
```bash
cd "d:\Projects\Shamim vai"
mysql -u root < database_complete_setup.sql
```

---

## Database Structure

The setup creates these tables:

### 1. **users** (Main user accounts)
- id, firstName, lastName, email
- phone, userType, password, company
- created_date, updated_date, last_login, status

### 2. **activity_log** (User activity tracking)
- id, user_id, action, description
- ip_address, user_agent, timestamp

### 3. **products** (Product catalog - optional)
- id, product_name, product_code, category
- description, price, stock_quantity
- manufacturer, status, dates

### 4. **orders** (Customer orders - optional)
- id, user_id, order_number
- total_amount, order_status, payment_status
- shipping_address, dates

### 5. **sessions** (Session management - optional)
- id, user_id, data, last_activity

```

```
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```

```
## Verification
```

```
### Check if database exists:  
Run: **`check_database.bat`**
```

```
Or manually:  
```sql  
SHOW DATABASES LIKE 'khan_pharmaceuticals';
USE khan_pharmaceuticals;
SHOW TABLES;
```
```

```
### Expected output:  
```  
+-----+
| Tables_in_khan_pharmaceuticals |
+-----+
| activity_log |
| orders |
| products |
| sessions |
| users |
+-----+
```
```

```
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```

```
## Troubleshooting
```

```
### "MySQL command not found"  
**Solution:** Add MySQL to your PATH  
- XAMPP: `C:\xampp\mysql\bin`  
- WAMP: `C:\wamp64\bin\mysql\mysql8.x.x\bin`
```

```
Or use phpMyAdmin instead (Method 1 above)
```

```
### "Access denied for user 'root'"  
**Solution:** You have a MySQL password set  
1. Run the script - it will prompt for password  
2. Update `config.php`:  
```php  
define('DB_PASSWORD', 'your_password_here');
```

```
````

### "Database already exists"
**Solution:** This is fine! The script uses `CREATE DATABASE IF NOT EXISTS`


To reset everything:
```sql
DROP DATABASE khan_pharmaceuticals;
-- Then run setup_database.bat again
```

### "Table already exists"
**Solution:** This is fine! The script uses `CREATE TABLE IF NOT EXISTS`


---


## Configuration

After database setup, verify `config.php`:

```php
define('DB_HOST', 'localhost');
define('DB_PORT', '3306'); // MySQL default port
define('DB_USERNAME', 'root');
define('DB_PASSWORD', ''); // Change if you have a password
define('DB_NAME', 'khan_pharmaceuticals');
```

**Note:** If your MySQL runs on a different port, update `DB_PORT` in config.php.

---


## Testing the Setup

### Test 1: Database Connection
1. Start PHP server: `start_server.bat`
2. Go to: http://localhost:8000/setup\_check.html
3. Should show all checks passing

### Test 2: User Registration
1. Go to: http://localhost:8000/signup.html
2. Fill the form and submit
3. Should see "Account created successfully!"

### Test 3: User Login
```

```

1. Go to: http://localhost:8000/login.html
2. Enter the credentials from signup
3. Should redirect to dashboard

---

## Sample Data (Optional)

To add test users manually:
```sql
INSERT INTO users (firstName, lastName, email, userType, password)
VALUES
('Test', 'User', 'test@example.com', 'customer',
'$2y$10$92IXUNpkj00r0Q5byMi.Ye4oKoEa3Ro9llC/.og/at2.uheWG/igi');
-- Password: password
```
```

Files Created

- **`database_complete_setup.sql`** - Complete SQL schema
- **`setup_database.bat`** - Auto setup (Windows CMD)
- **`setup_database.ps1`** - Auto setup (PowerShell)
- **`check_database.bat`** - Verification script
- **`DATABASE_SETUP.md`** - This file

```

---

## Need Help?

Check these files:
- `README.md` - Main project documentation
- `QUICK_FIXES.md` - Common issues
- `TROUBLESHOOTING.md` - Detailed troubleshooting

```

Development Challenges & Solutions

Challenge: Hardcoded URLs limited portability.

Solution: Replaced with **relative paths**.

Challenge: Duplicate database code across multiple files.

Solution: Centralized logic into a reusable `getDBConnection()` function in `config.php`.

Challenge: Session timing errors.

Solution: Moved `session_start()` to the very beginning of processing scripts before any output.

Future Roadmap

Planned enhancements to further evolve the platform:

Email Verification: Activation links for new accounts.

E-commerce Expansion: Full shopping cart, invoice generation, and order history tracking.

Admin Panel: Comprehensive dashboard for managing users, products, and viewing logs.

Mobile Experience: Development into a Progressive Web App (PWA).

Conclusion

KHAN Pharmaceuticals PLC is a secure, production-ready full-stack solution. It effectively integrates frontend responsiveness with a robust backend and secure database management to meet the needs of modern pharmaceutical digital presence.

