Project Title:

Smart City Kurigram

This is a digital web-based project aimed at providing all essential, emergency, and informative services of Kurigram district in one platform. The project supports the vision of Digital Bangladesh and brings the Smart City concept to a local level.

◆ Project Objectives:

- 1. Centralize important and emergency information related to Kurigram district in one platform.
- 2. Make citizens' lives easier by offering services and data access digitally.
- 3. Ensure easy and quick information delivery, reducing time and hassle.
- 4. Introduce digital transformation in local governance and services.
- 5. In the future, expand to other districts or make it a national-level service hub.

◆ Project Scope:

Though developed for Kurigram district, the platform can be extended to other districts with minor modifications.

- ✓ Included Services on the Website:
 - Emergency Services (Police, Fire, Ambulance)
 - Doctors & Hospitals
 - Blood Donor List
 - Educational Institutes
 - Hotels & Restaurants
 - Courier Services
 - Transport Info (Bus, Train)
 - Electricians & Mechanics
 - House Rent Information
 - Loans & NGOs
 - Kurigram News
 - Tourist Attractions

Project Timeline:

- 1. Planning (1 week):
 - Feature listing
 - o Requirement gathering
 - o Wireframe design
- 2. Design & Development (3 weeks):

- Frontend with HTML, CSS
- o Backend with PHP
- o MySQL database
- o Sample data insertion
- 3. Testing & Finalizing (1 week):
 - Full site testing
 - o Bug fixes
 - UI/UX polish
 - o Final deployment

◆ Implementation Details:

✓ Frontend:

• HTML/CSS: Structure & Styling

• Bootstrap: Responsive layout

• FontAwesome: Icons and visuals

✓ Backend:

• PHP: Backend logic and form handling

• MySQL: Data storage and retrieval

✓ Hosting:

• Development: XAMPP (localhost)

• Optional: Free live hosting like 000webhost

• Core Features:

1. Emergency Services:

 Phone numbers and addresses of police, ambulance, fire service, DC office, etc.

2. Doctors & Hospitals:

- o Doctor list with specialization, chamber address, contact
- o Government and private hospitals
- 3. Blood Donors:
 - Search donors by blood group and contact number
 - o Add or update donor info
- 4. Education:
 - o Schools, colleges, madrasas with address and EIIN number
- 5. Restaurants & Hotels:
 - o Nearby restaurants, ratings, address and contact info
- 6. Courier Services:
 - o List of services like Sundarban, SA Paribahan, RedX

- 7. Transport:
 - o Bus and train schedules, ticket counters
- 8. Electricians & Mechanics:
 - o Local electrician and repairmen with phone number
- 9. House Rent Section:
 - o Houses available for rent with contact details
- 10. Loan & NGO Support:
 - o Microcredit and NGO contact details
- 11. Kurigram News:
 - o Local news update system
- 12. Tourist Spots:
 - o Information on Kurigram's famous places
- Navigation & Design:
- ✓ Navbar (Fixed):
 - Home | Contact | Notifications | Profile
- **✓** Header:
 - Welcome text and slogan: "Your City, Your Information, At Your Fingertips"
 - Background image of Kurigram

Footer:

- "Smart City Kurigram © 2025"
- Contact info: info@smartkurigram.com | 01310-990177
- Social media links: Facebook, YouTube
- Developer credit: Your name or team name
- Admin Panel (Future Plan):
 - Admin login system
 - Add/Edit/Delete data
 - Manage donor list
 - Post local news
 - Secure access with sessions

◆ Challenges Faced:

- Unicode & Bangla font rendering
- Database CRUD operations
- Responsive design on mobile
- Efficient page linking & navigation
- Image optimization
- Admin session management

◆ Sample SQL Table (Blood Donors):

```
CREATE TABLE blood_donors (
   id INT AUTO_INCREMENT PRIMARY KEY,
   name VARCHAR(100),
   blood_group VARCHAR(10),
   phone VARCHAR(20),
   address TEXT,
   last_donation DATE
);
```

◆ Database Connection (PHP):

```
<?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "smart_kurigram";

$conn = new mysqli($servername, $username, $password, $dbname);
if ($conn->connect_error) {
   die("Connection failed: " . $conn->connect_error);
}
?>
```

◆ PHP Insert Query Example:

```
$sql = "INSERT INTO blood_donors (name, blood_group, phone, address)
VALUES ('$name', '$group', '$phone', '$address')";
```

• Conclusion:

The Smart City Kurigram project is a forward-thinking initiative to make essential services available digitally for citizens. It reduces hassle, saves time, and introduces technology in

local governance. With future upgrades, it can become a model Smart City portal for all districts of Bangladesh.