**Equipment Management System, LGED**

Lged@2023 LgeD@2023 Lged@1234

**for Date range wise report:** 01/02/2023 to 30/04/2023

**for ID wise report:** 419183001

**for Contractor wise report:** M/S R-Ta Enterprise

**for Equipment wise report:** COM-RLS-12-LAU-010

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cumilla** |  |  |  |  |
| 419183001 | Burichong UP office-Rajapur UP Office Road | 3500-5500 | M/S R-Ta Enterprise | Carpeting |
| 419272003 | Chandina-Latifpur Road | 1000-3000 |  | Carpeting |
| **Chandpur** |  |  |  |  |
| 413452002 | Faridganj GC-Chandra GC Road. |  | M/S Contemporary | Base Course |
| 413222004 | Balia GC-Chandra GC Road. |  | M/S Aziz and Brothers | Base Course |
| **B.Baria** |  |  |  |  |
| 412132004 | Pairtala R&H-Gosaipur bazar road. |  | M/S Hasan Enterprise | Base Course |
| 412632002 | Kasba-Akhaura Road |  | M/S Mostafa & Sons | Base Course |

LGED/RTIP2/CHD/2022-23/UZR-03

* + District filter in equipment\_status\_view.php
  + District filter in contractor\_list\_view.php
  + Address temporary delay
  + Forgot password option
  + District filter in requisition\_status.php
  + District filter in requisition\_history.php

Requirement Analysis:

* Website
* Template - **Structured**
* Menu Create-Home, contact form, About Us….. - **Structured**
* Registration Form – **Structured**
* Password Validation
* Password and Confirm Password matching check
* Confirmation Message
* Login System – **Structured**
* Change password option
* Forgot password option
* Contractors Dashboard- **Structured**
* Requisition Submit- **Structured**
* Request Date should be auto-collected
* Requisition to/from dates should not be less than current date
* Requisition from dates should not be less than Requisition to date
* Notify Contractors
* Real Allotment Order in Allotment Details button.
* Admin Panel
* Master Setup
* Category Info. - **Structured**
* Equipment Information – **Structured**
* Operator/Driver Info. – **updated for district view**
* Admin Part
* Approve/Reject registration request
* Notify contractors
* Contractor List- **Structured**  (from e-GP website using API?)
  + - * Activate/Deactivate contractor

* Requisition List – **Structured**
* Filter by Upazila admin and forward to district admin
* Approve by District Admin
* By-pass, if header is not responding
* Notification to contractor and driver
* **Report Part**
* Current status (location, working/idle) of the equipments
* Allotment History of Equipments:
* Date Range wise
* Equipment wise
* Contractor wise
* Road ID wise
* District wise
* Revenue Generation Report:
* Date Range wise
* Equipment wise
* Contractor wise
* Road ID wise
* District wise
* Print Report
* User part (Should be visible only by System Admin)
* User Create/View/Edit/Delete - **Structured**
* Role Create/View/Edit/Delete - **Structured**
* Permission - **Structured**

**Important points:** (to be addressed)

* **Password and Confirm Password** matching check
* **Change password** option
* **Forgot password** option for contractor
* Send Notification or **Confirmation message** to **e-mail** and **mobile number**
* Auto-collection of **current-date**
* Requisition to/from dates should not be less than current date
* Requisition to date should not be less than Requisition from date
* **Availability of Equipment: within date interval**
* **Return** a Requisition Request with just adding a text note
* How to **echo/pre-select** in dependent **drop-downs select box?**
* Make some cells **read-only**
* Allotment History of Equipments::
* Date Range wise
* Equipment wise
* Contractor wise
* Road ID wise
* District wise
* Revenue Generation **Report**:
* Date Range wise
* Equipment wise
* Contractor wise
* Road ID wise
* District wise
* Bug fixing:
  + allotment\_history\_report.php
  + approved\_requisition\_list\_view.php (for role\_id==3)
  + allotment\_archives.php
  + session\_start()
  + message
* **Availability of Equipment:** available/unavailable within date interval
* An equipment **should not be available** after assigning it to any Requisition Request
* It should be **available** again after returning from its previously assigned duty
* How to insert/update database simultaneously through a single event?

* **How to notify:**
* Contractors after Registration, Requisition received, and Requisition approved.
* Upazila Engineer (Forwarder) and Mechanical Foreman (Proposer) after Requisition approved.
* **How to return** a Requisition Request with just adding a text note?
* Return by Forwarder to Contractor.
* Return by Approver to Proposer.
* How to make any cell read-only?
* Division-District-Upazila drop-downs are not dependant.
* Equipment\_Category - Equipment\_id drop-down is not dependant
* equipment\_id drop-down should be filtered according to equipment\_category
* equipment\_id drop-down should be filtered according to district name
* How to import/display data from different tables
* equipment\_movement.php
* **Change of status** after an action # OK
* Two list? Pending list, Approved list.
* Requisition request may moved from pending list to approved list.

**Strengths:**

* A registered contractor cannot submit a registration request again using the same email ID.
* A contractor cannot submit more than one registration request using the same email ID.
* A password must contain at least one uppercase and one lowercase letter, one special character, one number, and at least eight characters.
* The password and confirm password string must match.
* The Divisions, Districts and Upazilas can be selected using dependent drop-downs.
* The contractors will get a prompt message if the submission is successful.
* The Contractors cannot enter into the process unless their registrations are approved by the competent authority.
* When the registration request is approved or rejected, the contractors will get a notification through email.
* The contractors will get a dashboard upon login with the registered email ID and password.
* A brief instruction is provided at the dashboard describing what and how to do.
* The contractors can view and edit their account details, and change their password from the dashboard.
* During changing password, all security criteria, like old password checking, password strength checking, and new password and confirm password matching check etc. are examined.
* Duringsubmitting Requisition Request for Equipment, theRequisition FROM date must not be earlier than the current date and the Requisition TO date must not be earlier than Requisition FROM date.
* The contractors can view their Requisition Status after submitting Requisition Request for Equipment. If the Requisition Request is approved, they will get the details of the equipment along with the hire-charge and the mobile number of the driver/operator. On the other hand, if it is rejected, they will get to know the cause of rejection.
* The contractors can return the equipment through the dashboard after using it.
* The contractors will get the details of the bills of Hire-charge through the dashboard.
* In the admin part, most of the buttons are user specific, that means, during visiting the same page, different user will get different buttons according to their activity. Some buttons that should not be clicked more than once (like *Restore Equipment* button) will not be available after performing some action on it once.
* Some columns (attributes like *division*, *district*, *action* etc.) of a table as well as some whole table (like *user info*, *role info*, *permission info* etc.) are visible for some special user role; not for all.
* User role specific SQL queries are used throughout the project.
* In order to assign an equipment, a dynamic drop-down is used. The equipments that are already engaged will not be available in the drop-down.
* The date and time of each activity are auto-collected.
* The information which should not be changed during editing, are made read-only.
* The information which are essential, are made “required” and marked with red star.
* Some PHP User Defined Functions are used.
* In order to generate the Equipment Status Report, three tables have been joined using the RIGHT OUTER JOIN, LEFT OUTER JOIN as well as the HAVING clause.
* Some conditional concatenation in SQL queries are used in the Report Generation section.
* Allotment History Reports as well as the Revenue Generation Reports can be generated date range wise, equipment wise, road ID wise, contractor wise and so on.
* In LGED, the heavy equipments are stored in different locations; generally in the upazila level. An un-allotted equipment is not present in the district level; rather it may be available in some place near its previous assignment. That is why; the location of an un-allotted equipment has been recorded so that a contractor can understand where is it available at present.
* Two or three simultaneous activity in one click.

INSERT INTO contractor\_info  
SELECT \* FROM temp\_con\_infoWHERE temp\_con\_id=$temp\_con\_id;

ALTER TABLE equipment\_info RENAME roller\_info;

RENAME TABLE old\_table\_name TO new\_table\_name;

$sql = "select ri.\*, ci.\* from requisition\_info as ri, contractor\_info as ci where ri.contractor\_id=ci.contractor\_id and ri.district='$district'";

$sql = "SELECT ri.district, ri.allotment\_no, ri.allotment\_date, ri.requisition\_from\_date, ri.requisition\_to\_date, ri.equipment\_type, ei.equipment\_id, ei.equipment\_brand, ei.equipment\_model, ei.equipment\_weight, di.driver\_name, di.driver\_mobile\_no

FROM requisition\_info as ri, equipment\_info as ei, driver\_info as di

WHERE di.equipment\_id=ei.equipment\_id and ei.equip\_id=ri.equipment\_id and ri.requisition\_id=21";

$sql = "SELECT ei.equip\_id, ei.division, ei.district, ei.equipment\_id, ei.allotment\_status, di.driver\_id, di.driver\_name, ri.requisition\_id, ri.upazila, ri.road\_name, ri.requisition\_from\_date, ri.requisition\_to\_date, ri.contractor\_name

                    FROM equipment\_info AS ei

                    RIGHT OUTER JOIN driver\_info AS di

                    ON ei.equipment\_id = di.equipment\_id

                    LEFT OUTER JOIN requisition\_info AS ri

                    ON ei.equip\_id = ri.equipment\_id

                    AND ei.allotment\_status=1

                    AND ri.equipment\_restore\_date IS NULL

                    HAVING ei.district='$user\_district'";

SELECT ei.equip\_id, ei.equipment\_id, ei.allotment\_status, di.driver\_id, di.driver\_name

FROM equipment\_info as ei, driver\_info as di

WHERE ei.equipment\_id=di.equipment\_id and ei.district='Cumilla' join

SELECT ri.requisition\_id, ri.district, ri.upazila, ri.road\_name, ri.requisition\_from\_date, ri.requisition\_to\_date, ri.contractor\_name

FROM equipment\_info as ei, requisition\_info as ri

WHERE ei.equip\_id=ri.equipment\_id and ei.district='Cumilla' and ei.allotment\_status =1;

SELECT ei.equip\_id, ei.division, ei.district, ei.equipment\_id, ei.allotment\_status, di.driver\_id, di.driver\_name, ri.requisition\_id, ri.upazila, ri.road\_name, ri.requisition\_from\_date, ri.requisition\_to\_date, ri.contractor\_name

FROM equipment\_info AS ei

RIGHT OUTER JOIN driver\_info AS di

ON ei.equipment\_id = di.equipment\_id

LEFT OUTER JOIN requisition\_info AS ri

ON ei.equip\_id = ri.equipment\_id

AND ei.allotment\_status=1

Having ei.district='cumilla';

SELECT ei.equip\_id, ei.division, ei.district, ei.equipment\_id, ei.allotment\_status, di.driver\_id, di.driver\_name, ri.requisition\_id, ri.upazila, ri.road\_name, ri.requisition\_from\_date, ri.requisition\_to\_date, ri.contractor\_name FROM equipment\_info AS ei RIGHT OUTER JOIN driver\_info AS di ON ei.equipment\_id = di.equipment\_id AND ei.district='Cumilla' LEFT OUTER JOIN requisition\_info AS ri ON ei.equip\_id = ri.equipment\_id AND ei.allotment\_status=1;

SELECT ei.equip\_id, ei.district, ei.equipment\_id, ei.allotment\_status, di.driver\_name, ri.upazila, ri.contractor\_name

FROM equipment\_info AS ei NATURAL JOIN driver\_info AS di having ei.district='Cumilla'

CREATE TABLE `divisions` (

`division\_id` int(16) NOT NULL PRIMARY KEY AUTO\_INCREMENT,

`division\_name` varchar(255) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

INSERT INTO `divisions` (`division\_id`, `division\_name`) VALUES

(1, 'Dhaka'),

(2, 'Chattogram'),

(3, 'Sylhet'),

(4, 'Mymensingh'),

(5, '**Rajshahi**'),

(6, '**Rangpur**'),

(7, '**Khulna**'),

(8, '**Barishal**'),

(9, '**-**');

-- --------------------------------------------------------

CREATE TABLE `districts` (

`district\_id` int(16) NOT NULL PRIMARY KEY AUTO\_INCREMENT,

`district\_name` varchar(255) NOT NULL,

`**division\_id**` int(16) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

INSERT INTO `districts` (`district\_id`, `district\_name`, `division\_id`) VALUES

(1, '[Dhaka](https://en.wikipedia.org/wiki/Dhaka_District)', 1),

(2, '[Faridpur](https://en.wikipedia.org/wiki/Faridpur_District)', 1),

(3, '[Gazipur](https://en.wikipedia.org/wiki/Gazipur_District)', 1),

(4, '[Gopalganj](https://en.wikipedia.org/wiki/Gopalganj_District,_Bangladesh)', 1),

(5, '[Kishoreganj](https://en.wikipedia.org/wiki/Kishoreganj_District)', 1),

(6, '[Madaripur](https://en.wikipedia.org/wiki/Madaripur_District)', 1),

(7, '[Manikganj](https://en.wikipedia.org/wiki/Manikganj_District)', 1),

(8, '[Munshiganj](https://en.wikipedia.org/wiki/Munshiganj_District)', 1),

(9, '[Narayanganj](https://en.wikipedia.org/wiki/Narayanganj_District)', 1),

(10, '[Narsingdi](https://en.wikipedia.org/wiki/Narsingdi_District)', 1),

(11, '[Rajbari](https://en.wikipedia.org/wiki/Rajbari_District)', 1),

(12, '[Shariatpur](https://en.wikipedia.org/wiki/Shariatpur_District)', 1),

(13, 'Tangail', 1),

(14, '[Bandarban](https://en.wikipedia.org/wiki/Bandarban_District)', 2),

(15, '[Brahmanbaria](https://en.wikipedia.org/wiki/Brahmanbaria_District)', 2),

(16, '[Chandpur](https://en.wikipedia.org/wiki/Chandpur_District)', 2),

(17, '[Chattogram](https://en.wikipedia.org/wiki/Chittagong_District)', 2),

(18, '[Cumilla](https://en.wikipedia.org/wiki/Comilla_District)', 2),

(19, "[Cox's Bazar](https://en.wikipedia.org/wiki/Cox%27s_Bazar_District)", 2),

(20, '[Feni](https://en.wikipedia.org/wiki/Feni_District)', 2),

(21, '[Khagrachhari](https://en.wikipedia.org/wiki/Khagrachhari_District)', 2),

(22, '[Lakshmipur](https://en.wikipedia.org/wiki/Lakshmipur_District)', 2),

(23, '[Noakhali](https://en.wikipedia.org/wiki/Noakhali_District)', 2),

(24, '[Rangamati](https://en.wikipedia.org/wiki/Rangamati_Hill_District)', 2),

(25, '[Habiganj](https://en.wikipedia.org/wiki/Habiganj_District)', 3),

(26, '[Moulvibazar](https://en.wikipedia.org/wiki/Moulvibazar_District)', 3),

(27, '[Sunamganj](https://en.wikipedia.org/wiki/Sunamganj_District)', 3),

(28, '[Sylhet](https://en.wikipedia.org/wiki/Sylhet_District)', 3),

(65, '-', 9);

CREATE TABLE `upazilas` (

`upazila\_id` int(16) NOT NULL PRIMARY KEY AUTO\_INCREMENT,

`upazila\_name` varchar(255) NOT NULL,

`district\_id` int(16) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

INSERT INTO `upazilas` (`upazila\_id`, `upazila\_name`, `district\_id`) VALUES

(1, 'Dhamrai', 1),

(2, 'Dohar', 1),

(3, 'Keraniganj', 1),

(4, 'Nawabganj', 1),

(5, 'Savar', 1),

(6, '[Barura](https://en.wikipedia.org/wiki/Barura_Upazila)', 18),

(7, '[Brahmanpara](https://en.wikipedia.org/wiki/Brahmanpara_Upazila)', 18),

(8, '[Burichong](https://en.wikipedia.org/wiki/Burichong_Upazila)', 18),

# (9, 'Comilla Adarsha Sadar', 18),

(10, '[Comilla Sadar Dakshin](https://en.wikipedia.org/wiki/Comilla_Sadar_Dakshin_Upazila)', 18),

(11, '[Chandina](https://en.wikipedia.org/wiki/Chandina_Upazila)', 18),

(12, '[Chauddagram](https://en.wikipedia.org/wiki/Chauddagram_Upazila)', 18),

(13, '[Daudkandi](https://en.wikipedia.org/wiki/Daudkandi_Upazila)', 18),

(14, '[Debidwar](https://en.wikipedia.org/wiki/Debidwar_Upazila)', 18),

(15, '[Homna](https://en.wikipedia.org/wiki/Homna_Upazila)', 18),

(16, '[Laksam](https://en.wikipedia.org/wiki/Laksam_Upazila)', 18),

(17, '[Lalmai](https://en.wikipedia.org/wiki/Lalmai_Upazila)', 18),

(18, '[Monohorgonj](https://en.wikipedia.org/wiki/Monohorgonj_Upazila)', 18),

(19, '[Meghna](https://en.wikipedia.org/wiki/Meghna_Upazila)', 18),

(20, '[Muradnagar](https://en.wikipedia.org/wiki/Muradnagar_Upazila)', 18),

(21, '[Nangalkot](https://en.wikipedia.org/wiki/Nangalkot_Upazila)', 18),

(22, '[Titas](https://en.wikipedia.org/wiki/Titas_Upazila)', 18),

(23, '[Chandpur Sadar](https://en.wikipedia.org/wiki/Chandpur_Sadar_Upazila)', 16),

(24, '[Faridganj](https://en.wikipedia.org/wiki/Faridganj_Upazila)', 16),

(25, '[Haimchar](https://en.wikipedia.org/wiki/Haimchar_Upazila)', 16),

(26, '[Haziganj](https://en.wikipedia.org/wiki/Haziganj_Upazila)', 16),

(27, '[Kachua](https://en.wikipedia.org/wiki/Kachua_Upazila,_Chandpur)', 16),

(28, '[Matlab Uttar](https://en.wikipedia.org/wiki/Matlab_Uttar_Upazila)', 16),

(29, '[Matlab Dakshin](https://en.wikipedia.org/wiki/Matlab_Dakshin_Upazila)', 16),

(30, '[Shahrasti](https://en.wikipedia.org/wiki/Shahrasti_Upazila)', 16),

(31, '[Brahmanbaria Sadar](https://en.wikipedia.org/wiki/Brahmanbaria_Sadar_Upazila)', 15),

(32, '[Ashuganj](https://en.wikipedia.org/wiki/Ashuganj_Upazila)', 15),

(33, '[Nasirnagar](https://en.wikipedia.org/wiki/Nasirnagar_Upazila)', 15),

(34, '[Nabinagar](https://en.wikipedia.org/wiki/Nabinagar_Upazila)', 15),

(35, '[Sarail](https://en.wikipedia.org/wiki/Sarail_Upazila)', 15),

(36, '[Kasba](https://en.wikipedia.org/wiki/Kasba_Upazila)', 15),

(37, '[Akhaura](https://en.wikipedia.org/wiki/Akhaura_Upazila)', 15),

(38, '[Bancharampur](https://en.wikipedia.org/wiki/Bancharampur_Upazila)', 15),

(39, '[Bijoynagar](https://en.wikipedia.org/wiki/Bijoynagar_Upazila)', 15),

(500, '-', 65);