



Armoured Vehicles Nigam Limited

ORDNANCE FACTORY MEDAK (OFMK)

YEDDUMAILARAM

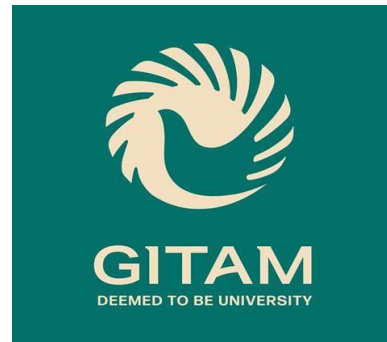
SANGAREDDY (DIST)

TELANGANA

Internship Training Report :

From (05/05/2025) to (04/06/2025)

Submitted by:
Madupathi Sreelakshmi
Computer Science Engineering
GITAM, HYDERABAD



ACKNOWLEDGEMENT

I express my deep sense of gratitude to the **GENERAL MANAGER** **ORDNANCE FACTORY MEDAK** for permitting me to carry out **INTERNSHIP** for 1 month [in-plant training]. I extend my sincere thanks to all the Head of Section(s) who guided me throughout my internship period at OFMK.

I feel immensely grateful for enlightening me, for making the place comfortable for learning through this transformative journey, one that I will carry with me as I embark on the next chapter of my professional life.

I also want to extend my thanks to all the Ordnance Factory Officers and the dealing Staff who have empowered me to push my boundaries and strive for excellence every step of the way.

Madupathi Sreelakshmi

B.TECH-CSE

GITAM-HYD



**ORDNANCE FACTORY MEDAK
MINISTRY OF DEFENCE**



YEDDUMAILARAM-502205

CERTIFICATE

This is to certify that **MS Madupathi Sreelakshmi** has undergone internship training from 05/05/2025 to 04/06/2025 in IT Section. During this tenure, she has shown keen interest in learning Python, JavaScript, MySQL and HTML programming using PHP for creating a webpage and program to access the application forms and file rack management and storing data in database. she has carried out a project work to create a admin forms and file rack management in the factory.

During this period, she is found to be very sincere, punctual and hard working. she has shown a lot of interest in her duties.

**SATCHIN TYAGI
WORKS MANAGER/ PC &IT.**

CONTENTS

- Introduction: OFMK
- Products [vehicles] manufactured in OFMK
- OFMK Organization
- Foundry
- Hull and Turret[HT]
- Process and tools engineering [P& TE]
- Light Machine Shop[LMS]
- Sheet Metal Shop[SMS]
- Tool Room and Die Shop
- Ordnance Factory Development Centre[ODC]
- Vehicle Assembly[VA]
- Final Acceptance [FA]
- Functional Departments
- Project:

ADMIN FORMS and FILE RACK MANAGEMENT

ORDNANCE FACTORY MEDAK

The Ordnance Factory Medak had come live with the foundation stone being laid by the then Prime Minister of India smt.Indira Gandhi on 19, July 1984 with an aim to manufacture SARATH - the chariot to victory for Indian Army.

SARATH is one of the best Infantry Combat Vehicles in the world with the modern weapon systems. India joined a Select Club of countries producing State of the Art Infantry Combat Vehicles with the creation of Ordnance Factory, Medak. Within a span of three years of foundation, chariots to victory started rolling out of Medak. The main objectives of OFMK stand tall for:

- To manufacture and supply State of art Armoured Vehicles and Defence Products to meet requirement of Armed and Paramilitary forces.
- Self-reliance in Armoured Vehicles.
- To capture the International Market of Armoured Vehicles.
- To maintain the world class competency in production of Armoured Vehicles.

OFMK Vision:

- Production of State of the Art Battle Field Equipments.
- To continuously improve quality.
- To improve operational efficiency and communications by extensive use of information technology.
- To achieve highest level of customer satisfaction.
- To increase customer base in defence, non-defence and export markets and establish global presence.

❖ PRODUCTS MANUFACTURED IN OFMK:

Over the decades, the company has diversified its product range, manufacturing surface-to-air missile (SAM) launchers, Armored ambulances, self-propelled howitzers, armored cars, unmanned ground vehicles (UGV), Armored light recovery vehicles, NBC recce vehicles, mine protected vehicles, Armored amphibious dozers, armored radars, naval armaments

BMP-2 SARATH (Chariot Of Victory):

Indian license-produced variant of the BMP-2, build by ordnance Factory Medak. The first vehicle, assembled from components supplied by KBP, was ready in 1987. By 1999, about 90% of the complete vehicle and its associated system were being produced in India. It is estimated that that by 2007,1250 vehicles had been built. India has also developed the following versions of the sarath



ARMOURED AMBULANCE:

This version retains the turret but without the gun or smoke grenade launchers. The troop compartment has been modified to carry four stretchers.



ARMOURED AMPHIBIOUS DOZER (AAD):

Turret-less combat engineer vehicle, fitted dozer blade at the rear, mine ploughs, a main winch with a capacity of 8,000kg and a rocket-propelled earth anchor for self-recovery



ARMOURED ENGINEER RECONNAISSANCE VEHICLE :

This version has no gun and is fitted with specialized equipment, including an echo-sounder, a water current meter, a laser range finder and GPS. On the left rear of the hull, a marking system with 40 rods is fitted.



NBC RECONNAISSANCE VEHICLE (NBCRV):

For detection of nuclear, biological and chemical contaminations. The NBCRV was developed by DRDO and VRDE. It has been ordered by the Indian Army.



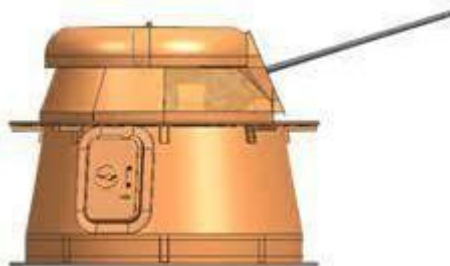
CARRIER MORTAR TRACKED VEHICLE (CMT):

This turret-less version has an 81mm mortar mounted in the modified troop compartment. The mortar is fired through an opening in the hull roof that has two hinged doors. It has a maximum range of 5,000 m and a normal rate of fire of 6- 8rds/min. There is also a long range version of the mortar. The vehicle carries 108 mortar rounds and is also fitted with a 7.62 mm machine gun with 2,350 rounds. Crew:2+4. The first prototype was completed in 1997.



CRN 91 NAVAL GUN :

It is a naval version of the medak 30mm automatic gun installed on the Sarath infantry fighting vehicle, a variant of the Russian BMP-2 manufactured in India under license by the Ordnance Factory Medak. It is based on Russian shipunov 2A42 30mm. Ordnance Factory, Medak accredited with ISO 9001-2000, ISO 9002, EMS (ISO 14001-2004). Certification and also has accredited metallurgical Laboratory under NABL.



TOTAL AREA OCCUPIED BY OFMK

AREA	ACERS
Factory Area	607
Estate Area	1691
Testing Track	593
Railway Siding	132
Total Area	3023

SECTIONS IN OFMK

FOUNDRY:

- ❖ Foundry is a factory that produces metal castings, metal are cast into shapes by melting them, pouring a metal into a mould, and removing the mould material or casting after the metal is solidified as it cools.
- ❖ The most common metals used are aluminium, and cast iron. However other metals like bronze, brass, steel, magnesium, and zinc are also used Melting is done in furnace.
- ❖ External materials are also added to molten material to make it stable which acts as catalysts.
- ❖ Sand moulds are generally formed by adding RESIN to sand. This RESIN mixed sand, when exposed to oxygen and carbon dioxide at certain pressure, hardness, which can be further used as moulds,
- ❖ Very heavy hydraulic machines are used in casting process.
- ❖ For casting till finishing is done in foundry only.
- ❖ The parts are also tested by water pressure test. The water at 243K and pressure of 4-5kg/cm² is sent into closed holes. If any leakage is found, the piece is sent for grinding and welding till the defect is removed.

SHEET METAL SHOP:

- ❖ Sheet is a metal formed by an industrial process into thin and flat pieces.
- ❖ It is one of the fundamental forms used in metal working and it can be cut and bent into variety shapes. Thickness can vary significantly, extremely, thin sheets are considered foil or leaf and pieces thicker than 6mm are considered as plates.
- ❖ Sheet material is available in flat pieces and coiled stripes.
- ❖ The coils are formed by continuous sheet of metal through a roll splitter.
- ❖ Generally aluminium sheets are used as sheets.
- ❖ Straightening of small hollow cylinders are also done here with the help of guage.
- ❖ Heavy machines are used here for more accuracy.
- ❖ Diesel tanks in BMP are manufactured here.
- ❖ The major operations done here are welding.
- ❖ Welding types used are plasma arc welding, gas welding, spot welding etc.
- ❖ They maintain high accuracy

HULL AND TURRET MACHINE SHOP:

- ❖ This is the largest section of all Ordnance Factories in India.
- ❖ There are different types of machines here. Some of them are milling, drilling, turning machines, bores, hydraulic press and etc.
- ❖ Some are CNC machines and some are manual controllable machines.
- ❖ Major part of BMP part of is manufactured here.
- ❖ The HULL of a BMP is designed here with the help of welding.
- ❖ The bores of the hull which are used to fix wheels, pulleys, turrets, chains, and other external components are also drilled here.
- ❖ The drilling of bores is done by a major CNC machine which is controlled by 2 to 3 members.
- ❖ The brass brushers which are used under the hull for oil supply are also prepared by turning operations.
- ❖ Grooves are provided inside the brass bushes for oil supply which is used as lubricant.
- ❖ This is completely CNC type of machine.
- ❖ The work is very rapid.

TOOL ROOM:

In this shop all types of high precision tools are used in the factory are manufactured.

- ❖ Not only tools but also dies used for pressing tools and gigs, fixtures will drill bits be made.
- ❖ This room also provides the machines which are used to check the quality, accuracy, finishing of a particular tool produced in it this section is known as quality checking room.
- ❖ This room also contains various types of furnaces, in which hardness of the material will be increased.
- ❖ Types of grinding machines:
 - ✓ Universal Grinding Machine
 - ✓ Surface Grinding Machine
 - ✓ Thread Grinding Machine
 - ✓ Jig Grinding Machine
 - ✓ Center-less Grinding Machine

Optical Grinding Machine

LIGHT MACHINE SHOP:

This shop involves in making of different types of parts mainly Torsion bars, road wheels, supporters wheels and crank for idler wheels. Before the Torsion bar is simply mild steel bar, after all the heat treatment process it becomes spring steel bar, such that it can be twisted in any angle.

- ❖ HMC (Horizontal Machine Centre) Machines
- ❖ CNC Lathe Machine
- ❖ Bar Twisting Machine
- ❖ CNC Milling Machine

TANK ELECTRONIC SHOP:

In this Tank Electronics Shop we can observe the production of following components:

- ❖ RN-10 (Voltage regulator)
- ❖ 902B (Smoke Generator)
- ❖ KP-25
- ❖ KP-40, KP-55, KP60
- ❖ Miniature Circuit Breakers (MCB)
- ❖ RN-10 (Voltage regulator)
- ❖ 902B (Smoke Generator)
- ❖ KP-25
- ❖ KP-40, KP-55, KP60
- ❖ Miniature Circuit Breakers (MCB)

VEHICLE ASSEMBLY (VA):

- ❖ Thus all the parts from different sections are bought into this section and assembled so that whole BMP is completed.
- ❖ Engine which is assembled in Aawadi, Gear box assembled in Bangalore are bought here and coupled.
- ❖ The whole system of engine and gearbox are mounted slowly on Hull of the BMP
- ❖ The chain is also mounted on wheels and pulleys which rest on torsion bar.
- ❖ These torsion bars totally 6 bars the whole weight of BMP I.E, 14 tons..
- ❖ And also the torsion bar has an ability to twist 65 degrees to and fro. So totally it twist 130 degrees. This helps in easy movement of tanks even on irregular areas.

FINAL ACCEPTANCE (FA):

In this section the tank is tested, for several conditions. If it satisfies all the parameters and conditions, it is ready for the war.

This is the introduction of Ordnance Factory Medak.

PROJECT 1

ADMIN FORMS

Overview

"ADMIN FORMS" is a web application designed to get access to the management to go through any forms that have been released. In this web site they can see and go through the forms and also get downloaded.

Technologies Used

- **Frontend:** HTML, Javascript
- **Backend:** PHP
- **Database:** MySQL

CODE SCREENS

Style.css

```
line wrap ☐
1 <html>
2 <head>
3 <script type='text/javascript' src='../..//include/jquery.min.js'></script>
4
5 <link rel="stylesheet" href="assets/css/bootstrap.min.css">
6 <link rel="stylesheet" href="assets/css/font-awesome.min.css">
7
8 <style>
9
10 body{
11     background :linear-gradient(90.1deg, rgb(230, 140, 6) 10.9%, rgb(36, 25, 14) 63.8%);
12     margin:0;
13     padding:0;
14
15 }
16
17 .header{
18
19     background-color:#f3e5ee;
20     color:#f1eef5;
21     padding:10px;
22     text-align:center;
23
24 }
25
26 .styled-table thead tr{
27
28     background-color: #1d0404;
29     color:#f0e8e8;
30     text-align: left;
31
32 }
33
34 .styled-table th{
35
36     padding:12px 15px;
37 }
38
39 .styled-table td{
40
41     padding:12px 15px;
42 }
43
44 .styled-table tbody tr {
45
46     border-bottom: 1px solid #5e08fd;
47
48 }
49
50 .styled-table tbody tr:nth-of-type(even){
51
52     background-color:#cebadb81;
```



```

53 }
54 }
55
56 .styled-table tbody tr:last-of-type {
57     border-bottom: 2px solid #009879;
58 }
59
60 .styled-table tbody tr .active-row {
61     padding-right: 10%;
62     font-weight: bold;
63     color: #009879;
64 }
65
66 .styled-table11 thead tr{
67     background-color: #1d0c0c;
68     color:#f0e8e8;
69     text-align: left;
70 }
71
72 .styled-table11 th{
73     padding:12px 15px;
74 }
75
76 .styled-table11 td{
77     padding:12px 15px;
78 }
79
80 .styled-table11 tbody tr {
81     border-bottom: 1px solid #0d14ef;
82 }
83
84 .styled-table11 tbody tr:nth-of-type(even){
85     background-color:#cebadb81;
86 }
87
88 .styled-table11 tbody tr:last-of-type {
89     border-bottom: 2px solid #009879;
90 }

```

```

106
107 .styled-table11 tbody tr .active-row {
108     padding-right: 10%;
109     font-weight: bold;
110     color: #009879;
111 }
112
113 .container{
114     display:flex;
115     /* justify-content:center; */
116     align-items:center;
117     padding-top:60px;
118 }
119
120 .first{
121     background-color:#D3D3D3;
122 }
123
124 .text{
125     color:#58062d;
126     text-align: center;
127     font-size: 60;
128 }
129
130 .img{
131     padding-left:2%;
132 }
133
134 .bottom{
135     padding-top:30px;
136 }
137
138 .h1{
139     size:150px;
140 }
141
142 .clo{
143     color:#ffffff;
144     background-color:#000000;
145 }
146
147 .tt{
148     padding-left: 5% ;
149 }
150
151 .styled-table{
152     padding-inline-start: 100px;
153 }
154
155 .styled-table11{
156     padding-right: 100px;
157     align-items: last baseline;
158     padding-inline-start: 100px;

```

Main html code


```
101 }
102 }
103 .add{
104     display:flex;
105     align-items: center;
106     justify-content: center;
107 }
108 }
109
110 /* .qqq{
111     padding-left: 300px;
112 } */
113
114 </style>
115
116 </head>
117
118
119
120
121 <body>
122 <div class="header">
123 <!-- <table> -->
124
125
126 <!-- <tr>
127 <td></td></tr>
128 <tr>-
129 <td>
130 <h1 class="text"><strong>ORDNANCE FACTORY MEDAK FORMS DOWNLOAD (ADMIN)</h1></td></tr> -->
131
132 <!-- <td width="35"></td> -->
133
134 <!-- <div> -->
135 <!-- <tr> -->
136 
137
138 
139 <header>
140 <b class="text" ><strong f>ORDNANCE FACTORY MEDAK FORMS DOWNLOAD (ADMIN)</b>
141 </header>
142
143 <!-- <tr> -->
144
145
146
147 </div>
148
149 <!--
150 </table> -->
151 </div>
152
153 <div class="container">
154
155 <!--
156 <div class="row">
157 <div class="qqq" style="color:rgb(255, 255, 255)"><b>News paper & Hospitality Bills entry window is open for entry till 15/01/2025</b></marquee>
158 <div class="col-lg-4">
159 <table class="styled-table">
160 <thead>
161 <tr>
162 <th class="add">NOC FOR LAPTOP/MOBILE</th>
163 <th>LINK</th>
164 </tr>
165 </thead>
166 <tbody>
167 <tr>
168 <td><b> NOC FOR LAPTOP/MOBILE/TABLETS/PADS </b></td>
169 <td><a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop.php"><b>DOWNLOAD</b> </a> </td> <!-- <a href="http://172.41.100.8/web/eadm/admbills/hp/hpindex.php"> -->
170 </tr>
171 <tr>
172 <td><b> GM/IT SANCACTION LETTER FOR LAPTOP/MOBILE/TABLETS/PADS </b></td>
173 <td><a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop_gm.php">DOWNLOAD </a></b> </td> <!-- <a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop.php"> -->
174 </tr>
175 <tr>
176 <td><b> CGM SANCACTION LETTER FOR LAPTOP/MOBILE/TABLETS/PADS </b></td>
177 <td><a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop_gcm.php">DOWNLOAD </a></b> </td> <!-- <a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop.php"> -->
178 </tr>
179 <tr>
180 <td><b> COMMON NOMINATION FORM FOR GRATUITY, GENERAL PROVIDENT FUND AND CENTRAL GOVERNMENT EMPLOYEES GROUP INSURANCE SCHEME</b></td>
181 <td><a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop_gcm.php">DOWNLOAD </a></b> </td> <!-- <a href="http://172.41.100.8/web/eadm/admbills/hp/noc_laptop.php"> -->
182 </tr>
183
184 </tbody>
185 </table>
186 <table class="styled-table1">
```

```


205 <code><!--> <style> <table>
206 <thead>
207 <tr>
208 <th class="add">ADMIN</th>
209 <th>LINK</th>
210 </thead>
211 <tbody>
212 <tr class="first">
213 <td> NEWSPAPER-ALLOWANCE FORM</td>
214 <td><a href="http://172.41.100.8/web/eadm/admbills/np/npindex.php?DOWNLOAD=a"/>DOWNLOAD</a></td> <!--<a href="http://172.41.100.8/qms/admin docs/Newspaper-allowance form.pdf">-->
215 </tr>
216 <tr class="first">
217 <td> HOSPITALITY CLAIM FORM</td>
218 <td><a href="http://172.41.100.8/web/eadm/admbills/hp/hpindex.php?DOWNLOAD=a"/>DOWNLOAD</a></td> <!--<a href="http://172.41.100.8/web/eadm/admbills/hp/hpindex.php">-->
219 </tr>
220 <tr class="first">
221 <td> TEMPORARY DUTY FORMATS FOR GROUP-A AND OTHERS</td>
222 <td><a href="http://172.41.100.8/web/index.php?module=eadm&act=Tadadototindex"> <b> DOWNLOAD </b></a> </td>
223 </tr>
224 <tr>
225 <td><b>CHILDREN EDUCATION ALLOWANCE</b></td>
226 <td><a href="http://172.41.100.8/qms/admin%20docs/CEA%20PROFORMA.pdf"><b>PROFORMA</b></a> </td>
227 </tr>
228 <tr class="first">
229 <td><b>ANNUAL IMMOVABLE PROPERTY RETURNS</b></td>
230 <td><a href="http://172.41.100.8/qms/admin%20docs/AIPR.pdf"><b>PROFORMA</b> </td>
231 </tr>
232 <tr class="first">
233 <td><b>BRIEF CASE REIMBURSEMENT CLAIM FORM</b></td>
234 <td><a href="http://172.41.100.8/qms/admin%20docs/Bolmbursement%20for%20Brie%20case.pdf"><b>PROFORMA</b></a> </td>
235 </tr>
236 <tr class="first">
237 <td><b>UNDER TAKING FOR PRIVATE VISIT or FOREIGN DEPUTATION for NOC</b></td>
238 <td><a href="http://172.41.100.8/qms/admin%20docs/UNDER%20TAKING%20FOR%20PRIVATE%20VISIT%20or%20FOREIGN%20DEPUTATION%20for%20NOC.pdf"><b>PROFORMA</b></a> </td>
239 </tr>
240 <tr class="first">
241 <td><b>COMMON NOMINATION FORM FOR GRATUITY, GENERAL PROVIDENT FUND AND CENTRAL GOVERNMENT EMPLOYEES GROUP INSURANCE SCHEME</b></td>
242 <td><a href="http://172.41.100.8/qms/admin docs/Common Nomination Form for Gratuity, General Provident Fund and Central Government Employees Group Insurance Scheme.pdf"><b>PROFORMA</b> </td>
243 </tr>
244 <tr class="first">
245 <td><b>DECLARATION FORM FOR FAMILY PARTICULARS</b></td>
246 <td><a href="http://172.41.100.8/qms/admin docs/Family Decl.pdf"><b>PROFORMA</b> </td>
247 </tr>
248 <tr class="first">
249 <td><b>DECLARATION FORM FOR FAMILY PARTICULARS</b></td>
250 <td><a href="http://172.41.100.8/qms/admin docs/Family Decl.pdf"><b>PROFORMA</b> </td>
251 </tr>
252 </tbody>
253 </div>
254 </div>
255 <br>
256 <script src="assets/js/jquery.min.js"></script>
257 <script src="assets/js/bootstrap.min.js"></script>
258 </body>
259 </html>

```

OUTPUT



ORDNANCE FACTORY MEDAK FORMS DOWNLOAD (ADMIN)

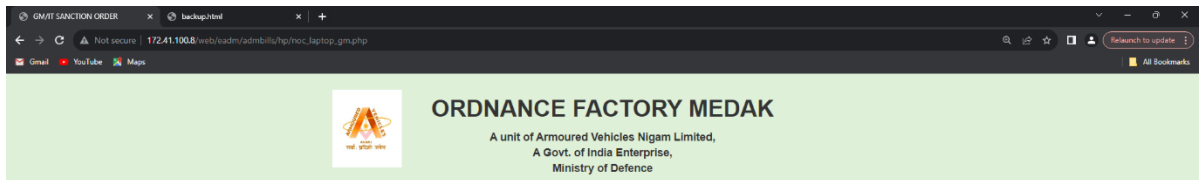


News paper & Hospitality Bills entry window is open for entry till 15/01/2025

NOC FOR LAPTOP/MOBILE	LINK
NOC FOR LAPTOP/MOBILE/TABLETS/PADS	DOWNLOAD
GMIT SANCATION LETTER FOR LAPTOP/MOBILE/TABLETS/PADS	DOWNLOAD
CGM SANCATION LETTER FOR LAPTOP/MOBILE/TABLETS/PADS	DOWNLOAD
COMMON NOMINATION FORM FOR GRATUITY, GENERAL PROVIDENT FUND AND CENTRAL GOVERNMENT EMPLOYEES GROUP INSURANCE SCHEME	DOWNLOAD

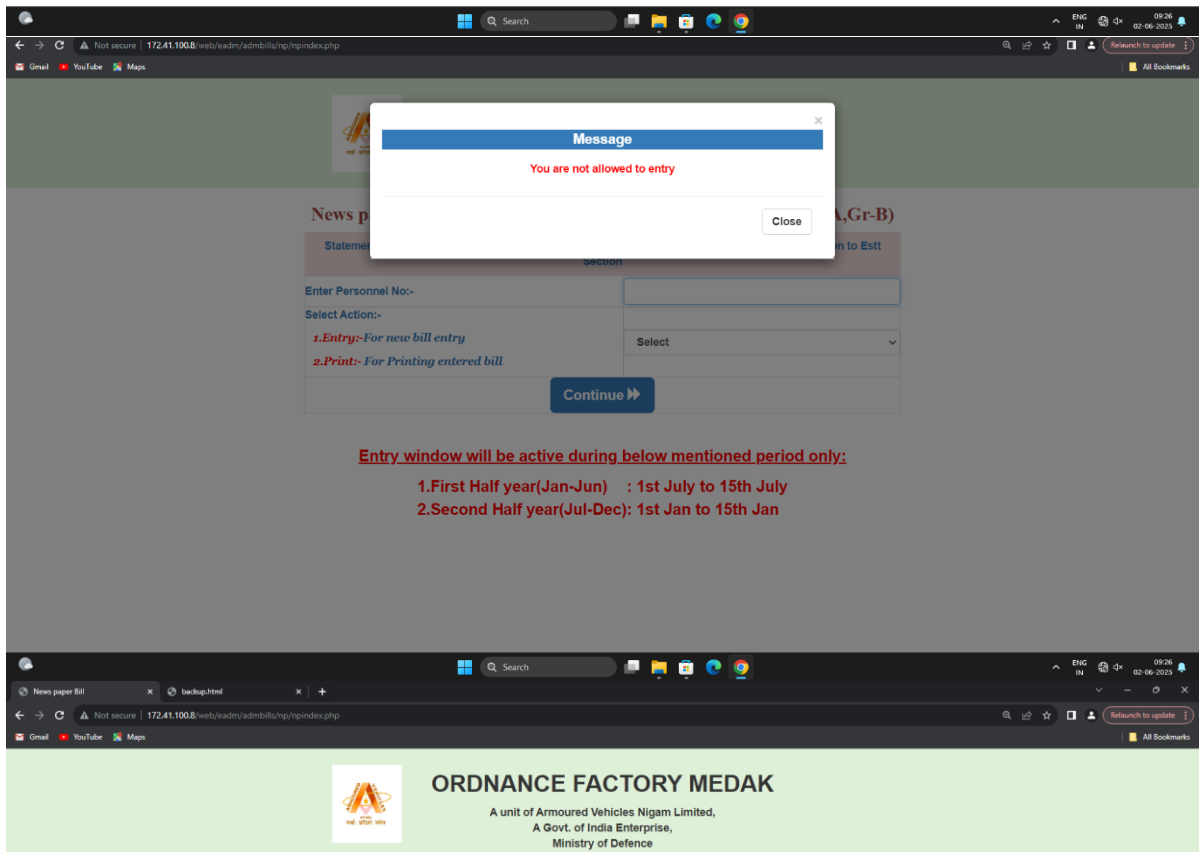
ADMIN	LINK
NEWSPAPER-ALLOWANCE FORM	DOWNLOAD
HOSPITALITY CLAIM FORM	DOWNLOAD
TEMPORARY DUTY FORMATS FOR GROUP-A AND OTHERS	DOWNLOAD
CHILDREN EDUCATION ALLOWANCE	PROFORMA
ANNUAL IMMOVABLE PROPERTY RETURNS	PROFORMA
BRIEF CASE REIMBURSEMENT CLAIM FORM	PROFORMA
UNDER TAKING FOR PRIVATE VISIT or FOREIGN DEPUTATION for NOC	PROFORMA
COMMON NOMINATION FORM FOR GRATUITY, GENERAL PROVIDENT FUND AND CENTRAL GOVERNMENT EMPLOYEES GROUP INSURANCE SCHEME	PROFORMA
DECLARATION FORM FOR FAMILY PARTICULARS	PROFORMA

172.41.100.8/web/eadm/admbills/hp/noc_laptop_gm.php



GM IT SANCTION ORDER For Procurement of Laptop as per AVNL policy

Enter Personnel No:-
Note: Before this please generate No Due Certificate

[CLICK HERE FOR IT SECTION NOC](#) 

Entry window will be active during below mentioned period only:

- 1.First Half year(Jan-Jun) : 1st July to 15th July
- 2.Second Half year(Jul-Dec): 1st Jan to 15th Jan

News paper Reimbursement Entry and Printing (For GO's :- Gr-A,Gr-B)

Statement to be furnished on half-yearly basis by the Officer and forward the print of self declaration to Estt Section

Enter Personnel No:-

Select Action:-

1.Entry:- For new bill entry

2.Print:- For Printing entered bill

Entry window will be active during below mentioned period only:

- 1.First Half year(Jan-Jun) : 1st July to 15th July
- 2.Second Half year(Jul-Dec): 1st Jan to 15th Jan

PROJECT 2

FILE RACK MANAGEMENT

Overview

"FILE RACK MANAGEMENT" is a web application designed to the higher management such that the files which are located in different rack locations are separated and merged and making sure that every rack locations has their own related files in it.

Technologies Used

- **Frontend:** HTML, Javascript
- **Backend:** PHP
- **Database:** MySQL

CODE SCREENS

Style.css

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Ordnance Factory Medak - Rack Management System</title>
7   <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet">
8   <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/font-awesome@6.0.0/css/all.min.css">
9   <style>
10    :root {
11      --primary-color: #1a237e;
12      --secondary-color: #0d47a1;
13      --accent-color: #2962ff;
14      --background-start: #e3f2fd;
15      --background-end: #bbdefb;
16    }
17
18    body {
19      background: linear-gradient(135deg, var(--background-start) 0%, var(--background-end) 100%);
20      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
21      min-height: 100vh;
22      margin: 0;
23      padding: 20px;
24    }
25
26    .container-fluid {
27      max-width: 1400px;
28      margin: 0 auto;
29      padding: 20px;
30    }
31
32    .header-section {
33      text-align: center;
34      margin-bottom: 40px;
35      background: linear-gradient(135deg, #1a237e 0%, #0d47a1 100%);
36      padding: 40px 30px;
37      border-radius: 20px;
38      box-shadow: 0 8px 16px rgba(0, 0, 0, 0.2);
39      color: white;
40    }
41
42    .factory-logo {
43      width: 120px;
44      height: 120px;
45      margin-bottom: 20px;
46      animation: float 3s ease-in-out infinite;
47      background: white;
48      padding: 10px;
49      border-radius: 50%;
50      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
51    }
52  </style>
```

```

/* .factory-title {
  color: white;
  font-size: 3rem;
  font-weight: 700;
  margin-bottom: 15px;
  text-shadow: 2px 2px 4px rgba(0, 0, 0, 0.2);
} */

.factory-title {
  color: white;
  font-size: 70PX;
  font-weight: 700;
  margin-bottom: 15px;
  text-shadow: 2px 2px 4px rgba(0, 0, 0, 0.2);
}

/* .system-title {
  color: #e3f2fd;
  font-size: 2rem;
  font-weight: 600;
  margin-bottom: 10px;
  text-shadow: 1px 1px 2px rgba(0, 0, 0, 0.2);
} */

.system-title {
  color: #e3f2fd;
  font-size: 50PX;
  font-weight: 600;
  margin-bottom: 10px;
  /* text-shadow: 1px 1px 2px rgba(0, 0, 0, 0.2); */
  text-align: center;
}

.search-container {
  max-width: 700px;
  margin: 0 auto 40px;
}

.search-container .input-group {
  box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
  border-radius: 15px;
  overflow: hidden;
  background: rgba(255, 255, 255, 0.95);
  padding: 8px;
}

.search-container .form-control {
  border: 2px solid var(--accent-color);
  padding: 15px;
  font-size: 16px;
  border-radius: 12px;
}

}

.search-container .btn {
  padding: 15px 30px;
  font-weight: 600;
  background: var(--accent-color);
  border: none;
  transition: all 0.3s ease;
}

.search-container .btn:hover {
  background: var(--primary-color);
  transform: translateY(-2px);
}

.racks-container {
  padding: 20px 0;
}

.rack {
  background: rgba(255, 255, 255, 0.95);
  border-radius: 20px;
  padding: 25px;
  height: 100%;
  box-shadow: 0 8px 16px rgba(0, 0, 0, 0.1);
  transition: all 0.3s ease;
  border: 2px solid var(--accent-color);
  margin-bottom: 30px;
  position: relative;
  overflow: hidden;
}

.rack::before {
  content: '';
  position: absolute;
  top: 0;
  left: 0;
  width: 100%;
  height: 5px;
  background: linear-gradient(90deg, var(--primary-color), var(--accent-color));
}

.rack:hover {
  transform: translateY(-5px);
  box-shadow: 0 12px 24px rgba(0, 0, 0, 0.15);
}

.rack h3 {
  color: var(--primary-color);
  font-size: 1.4rem;
  margin-bottom: 20px;
  padding-bottom: 15px;
  border-bottom: 2px solid var(--accent-color);
  display: flex;

```

```

}

.files {
  display: flex;
  flex-direction: column;
  gap: 15px;
}

.file-item {
  display: flex;
  align-items: center;
  padding: 15px;
  background: #f8f9fa;
  border-radius: 12px;
  color: var(--primary-color);
  text-decoration: none;
  transition: all 0.3s ease;
  border: 1px solid var(--accent-color);
}

.file-item:hover {
  background: #e3f2fd;
  color: var(--accent-color);
  transform: translateX(5px);
  border-color: var(--primary-color);
}

.file-item i {
  margin-right: 12px;
  color: var(--accent-color);
  font-size: 1.2rem;
}

#searchResult {
  max-width: 700px;
  margin: 0 auto 30px;
  border-radius: 15px;
  padding: 20px;
  text-align: center;
  background: rgba(255, 255, 255, 0.95);
  box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
  font-size: 1.1rem;
  font-weight: 500;
}

@keyframes float {
  0% { transform: translateY(0px); }
  50% { transform: translateY(-10px); }
  100% { transform: translateY(0px); }
}

200% { transform: translateY(0px); }

@media (max-width: 1200px) {
  .col-md-4 {
    width: 50%;
  }
}

@media (max-width: 768px) {
  .col-md-4 {
    width: 100%;
  }

  .factory-title {
    font-size: 2rem;
  }

  .system-title {
    font-size: 1.5rem;
  }

  .rack {
    margin-bottom: 20px;
  }
}

@keyframes fadeIn {
  from { opacity: 0; transform: translateY(-10px); }
  to { opacity: 1; transform: translateY(0); }
}

#searchResult.show {
  animation: fadeIn 0.3s ease-out;
}

.search-result-content {
  text-align: center;
  padding: 10px;
}

.file-details {
  background: rgba(255, 255, 255, 0.9);
  padding: 15px;
  border-radius: 10px;
  margin-top: 10px;
}

.found-file {
  padding: 8px;
  background: rgba(227, 242, 253, 0.5);
  border-radius: 8px;
}

```

Main html code

```
</style>
</head>
<body>
  <div class="container-fluid">
    <div class="header-section">
      

      
      <B class="factory-title">Ordnance Factory Medak</B>
      <br>
      <B class="system-title">Rack Management System</B>
    </div>

    <!-- <i class="fas fa-archive"></i> -->

    <div class="search-container">
      <div class="input-group">
        <input type="text" id="searchInput" class="form-control" placeholder="Search for a file...">
        <button class="btn btn-primary" onclick="searchFile()">
          <i class="fas fa-search"></i> Search
        </button>
      </div>
    </div>

    <div id="searchResult" class="alert alert-info" style="display: none;"></div>

    <div class="racks-container">
      <div class="row">
        <div class="col-md-4">
          <div class="rack" id="rack-1">
            <h3><i class="fas fa-archive"></i> Rack A</h3>
            <div class="files">
              <a href="files/file1.pdf" class="file-item" onclick="showFileInfo('File 1', 'Rack 1')">
                <i class="fas fa-file-pdf"></i> File 1
              </a>
              <a href="files/file2.pdf" class="file-item" onclick="showFileInfo('File 2', 'Rack 1')">
                <i class="fas fa-file-pdf"></i> File 2
              </a>
              <a href="files/file3.pdf" class="file-item" onclick="showFileInfo('File 3', 'Rack 1')">
                <i class="fas fa-file-pdf"></i> File 3
              </a>
            </div>
          </div>
        </div>
        <div class="col-md-4">
          <div class="rack" id="rack-2">
            <h3><i class="fas fa-archive"></i> Rack B</h3>
            <div class="files">
              <a href="files/file4.pdf" class="file-item" onclick="showFileInfo('File 4', 'Rack 2')">
                <i class="fas fa-file-pdf"></i> File 4
              </a>
              <a href="files/file5.pdf" class="file-item" onclick="showFileInfo('File 5', 'Rack 2')">
                <i class="fas fa-file-pdf"></i> File 5
              </a>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
```

```
      <a href="files/file6.pdf" class="file-item" onclick="showFileInfo('File 6', 'Rack 2')">
        <i class="fas fa-file-pdf"></i> File 6
      </a>
    </div>
  </div>
  <div class="col-md-4">
    <div class="rack" id="rack-3">
      <h3><i class="fas fa-archive"></i> Rack C</h3>
      <div class="files">
        <a href="files/file7.pdf" class="file-item" onclick="showFileInfo('File 7', 'Rack 3')">
          <i class="fas fa-file-pdf"></i> File 7
        </a>
        <a href="files/file8.pdf" class="file-item" onclick="showFileInfo('File 8', 'Rack 3')">
          <i class="fas fa-file-pdf"></i> File 8
        </a>
        <a href="files/file9.pdf" class="file-item" onclick="showFileInfo('File 9', 'Rack 3')">
          <i class="fas fa-file-pdf"></i> File 9
        </a>
      </div>
    </div>
  </div>
  <div class="col-md-4">
    <div class="rack" id="rack-4">
      <h3><i class="fas fa-archive"></i> Rack D</h3>
      <div class="files">
        <a href="files/file10.pdf" class="file-item" onclick="showFileInfo('File 10', 'Rack 4')">
          <i class="fas fa-file-pdf"></i> File 10
        </a>
        <a href="files/file11.pdf" class="file-item" onclick="showFileInfo('File 11', 'Rack 4')">
          <i class="fas fa-file-pdf"></i> File 11
        </a>
        <a href="files/file12.pdf" class="file-item" onclick="showFileInfo('File 12', 'Rack 4')">
          <i class="fas fa-file-pdf"></i> File 12
        </a>
      </div>
    </div>
  </div>
  <div class="col-md-4">
    <div class="rack" id="rack-5">
      <h3><i class="fas fa-archive"></i> Rack E</h3>
      <div class="files">
        <a href="files/file13.pdf" class="file-item" onclick="showFileInfo('File 13', 'Rack 5')">
          <i class="fas fa-file-pdf"></i> File 13
        </a>
        <a href="files/file14.pdf" class="file-item" onclick="showFileInfo('File 14', 'Rack 5')">
          <i class="fas fa-file-pdf"></i> File 14
        </a>
        <a href="files/file15.pdf" class="file-item" onclick="showFileInfo('File 15', 'Rack 5')">
          <i class="fas fa-file-pdf"></i> File 15
        </a>
      </div>
    </div>
  </div>
</div>
```



```

359     </div>
360 </div>
361 <div class="col-md-4">
362   <div class="rack" id="rack-6">
363     <h3><i class="fas fa-archive"></i> Rack 6</h3>
364     <div class="files">
365       <a href="files/file16.pdf" class="file-item" onclick="showFileInfo('File 16', 'Rack 6')">
366         <i class="fas fa-file-pdf"></i> File 16
367       </a>
368       <a href="files/file17.pdf" class="file-item" onclick="showFileInfo('File 17', 'Rack 6')">
369         <i class="fas fa-file-pdf"></i> File 17
370       </a>
371       <a href="files/file18.pdf" class="file-item" onclick="showFileInfo('File 18', 'Rack 6')">
372         <i class="fas fa-file-pdf"></i> File 18
373       </a>
374     </div>
375   </div>
376 </div>
377 </div>
378 </div>
379 </div>
380
381 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"></script>
382 <script>
383   function showFileInfo(fileName, rackName) {
384     const searchResult = document.getElementById('searchResult');
385     searchResult.innerHTML = `
386     <div class="search-result-content">
387       <i class="fas fa-check-circle text-success mb-2" style="font-size: 2rem;"></i>
388       <h4 class="mb-3">File Found</h4>
389       <div class="file-details">
390         <p class="mb-2"><strong>File Name:</strong> ${fileName}</p>
391         <p class="mb-2"><strong>Location:</strong> ${rackName}</p>
392         <p class="mb-0"><small class="text-muted">Ordnance Factory Medak</small></p>
393       </div>
394     </div>
395   `;
396   searchResult.style.display = 'block';
397   searchResult.className = 'alert alert-success show';
398 }
399
400 function searchFile() {
401   const searchInput = document.getElementById('searchInput');
402   const searchResult = document.getElementById('searchResult');
403   const searchTerm = searchInput.value.toLowerCase().trim();
404
405   if (searchTerm === '') {
406     searchResult.style.display = 'none';
407     return;
408   }
409
410   const fileItems = document.querySelectorAll('.file-item');
411   let foundFiles = [];
412
413   fileItems.forEach(item => {
414     const fileName = item.textContent.toLowerCase();
415     const rack = item.closest('.rack');
416     const rackName = rack.querySelector('h3').textContent.trim();
417
418     if (fileName.includes(searchTerm)) {
419       foundFiles.push({
420         name: item.textContent.trim(),
421         rack: rackName
422       });
423       rack.style.display = 'block';
424       item.style.backgroundColor = '#e3f2fd';
425     } else {
426       item.style.backgroundColor = '';
427     }
428   });
429
430   if (foundFiles.length > 0) {
431     let resultHTML = `
432     <div class="search-result-content">
433       <i class="fas fa-search text-primary mb-2" style="font-size: 2rem;"></i>
434       <h4 class="mb-3">Search Results</h4>
435       <div class="file-details">
436
437       foundFiles.forEach(file => {
438         resultHTML += `
439         <div class="found-file mb-2">
440           <p class="mb-1"><strong>${file.name}</strong> found in ${file.rack}</p>
441         </div>
442       `;
443     });
444
445     resultHTML += `
446     <p class="mb-0 mt-3"><small class="text-muted">Ordnance Factory Medak</small></p>
447     </div>
448   `;
449
450     searchResult.innerHTML = resultHTML;
451     searchResult.style.display = 'block';
452     searchResult.className = 'alert alert-success show';
453   } else {
454     searchResult.innerHTML = `
455     <div class="search-result-content">
456       <i class="fas fa-exclamation-circle text-warning mb-2" style="font-size: 2rem;"></i>
457       <h4 class="mb-3">No Files Found</h4>
458       <div class="file-details">
459         <p class="mb-2">No matching files found in the racks</p>
460         <p class="mb-0"><small class="text-muted">Ordnance Factory Medak</small></p>
461       </div>
462     </div>
463   `;

```

```

        `;
        searchResult.style.display = 'block';
        searchResult.className = 'alert alert-warning show';
    }
}

document.getElementById('searchInput').addEventListener('keypress', function(e) {
    if (e.key === 'Enter') {
        searchFile();
    }
});

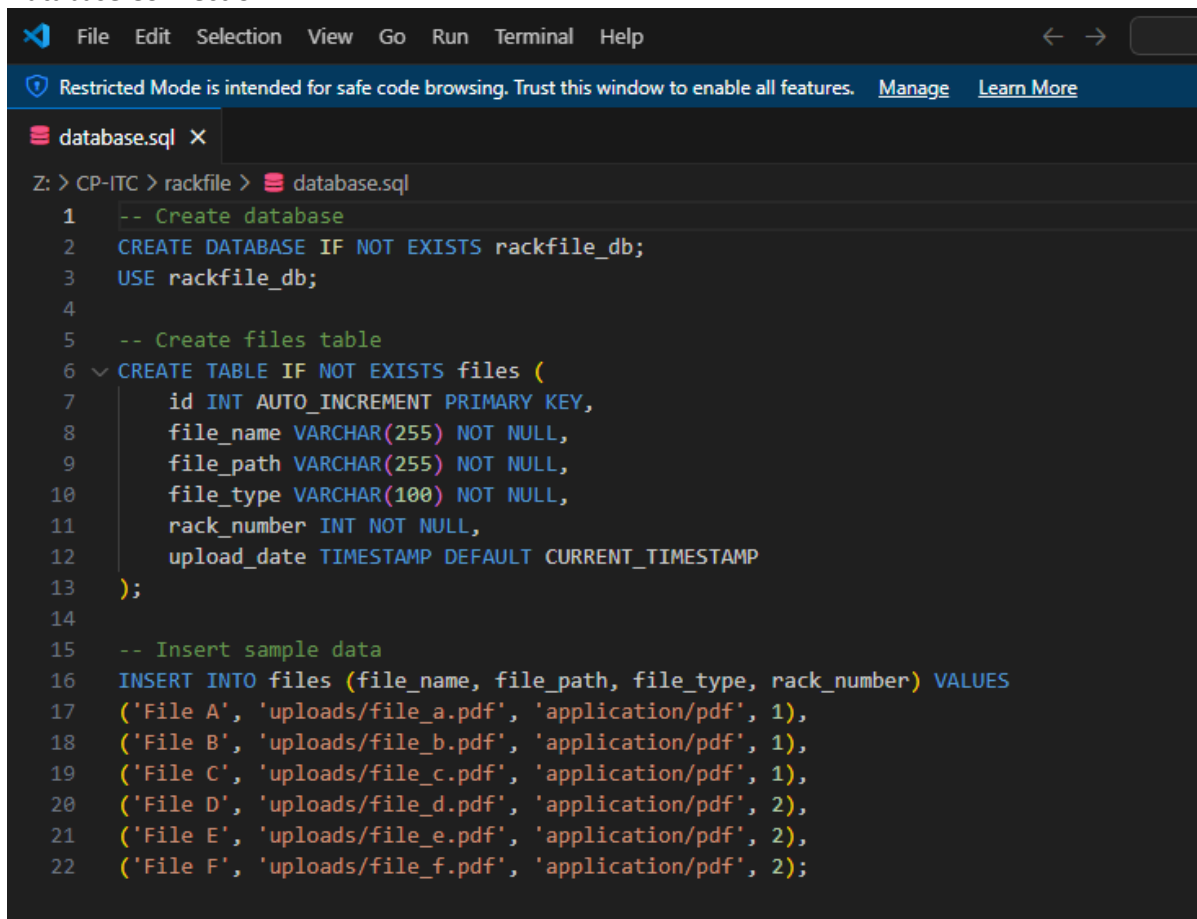
document.querySelectorAll('.rack').forEach(rack => {
    rack.addEventListener('mouseenter', function() {
        this.style.transform = 'translateY(-5px)';
    });

    rack.addEventListener('mouseleave', function() {
        this.style.transform = 'translateY(0)';
    });
});

document.addEventListener('DOMContentLoaded', function() {
    const tooltipTriggerList = [].slice.call(document.querySelectorAll('[data-bs-toggle="tooltip"]'));
    tooltipTriggerList.map(function(tooltipTriggerEl) {
        return new bootstrap.Tooltip(tooltipTriggerEl);
    });
});
</script>
</body>
</html>

```

Database Connection



The screenshot shows a VS Code editor window with a file named 'database.sql' open. The editor is in 'Restricted Mode' as indicated by a blue banner at the top. The SQL script is written in a dark theme and includes comments for creating a database, a table, and inserting sample data.

```

Z: > CP-ITC > rackfile > database.sql
1  -- Create database
2  CREATE DATABASE IF NOT EXISTS rackfile_db;
3  USE rackfile_db;
4
5  -- Create files table
6  CREATE TABLE IF NOT EXISTS files (
7      id INT AUTO_INCREMENT PRIMARY KEY,
8      file_name VARCHAR(255) NOT NULL,
9      file_path VARCHAR(255) NOT NULL,
10     file_type VARCHAR(100) NOT NULL,
11     rack_number INT NOT NULL,
12     upload_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP
13 );
14
15 -- Insert sample data
16 INSERT INTO files (file_name, file_path, file_type, rack_number) VALUES
17 ('File A', 'uploads/file_a.pdf', 'application/pdf', 1),
18 ('File B', 'uploads/file_b.pdf', 'application/pdf', 1),
19 ('File C', 'uploads/file_c.pdf', 'application/pdf', 1),
20 ('File D', 'uploads/file_d.pdf', 'application/pdf', 2),
21 ('File E', 'uploads/file_e.pdf', 'application/pdf', 2),
22 ('File F', 'uploads/file_f.pdf', 'application/pdf', 2);

```

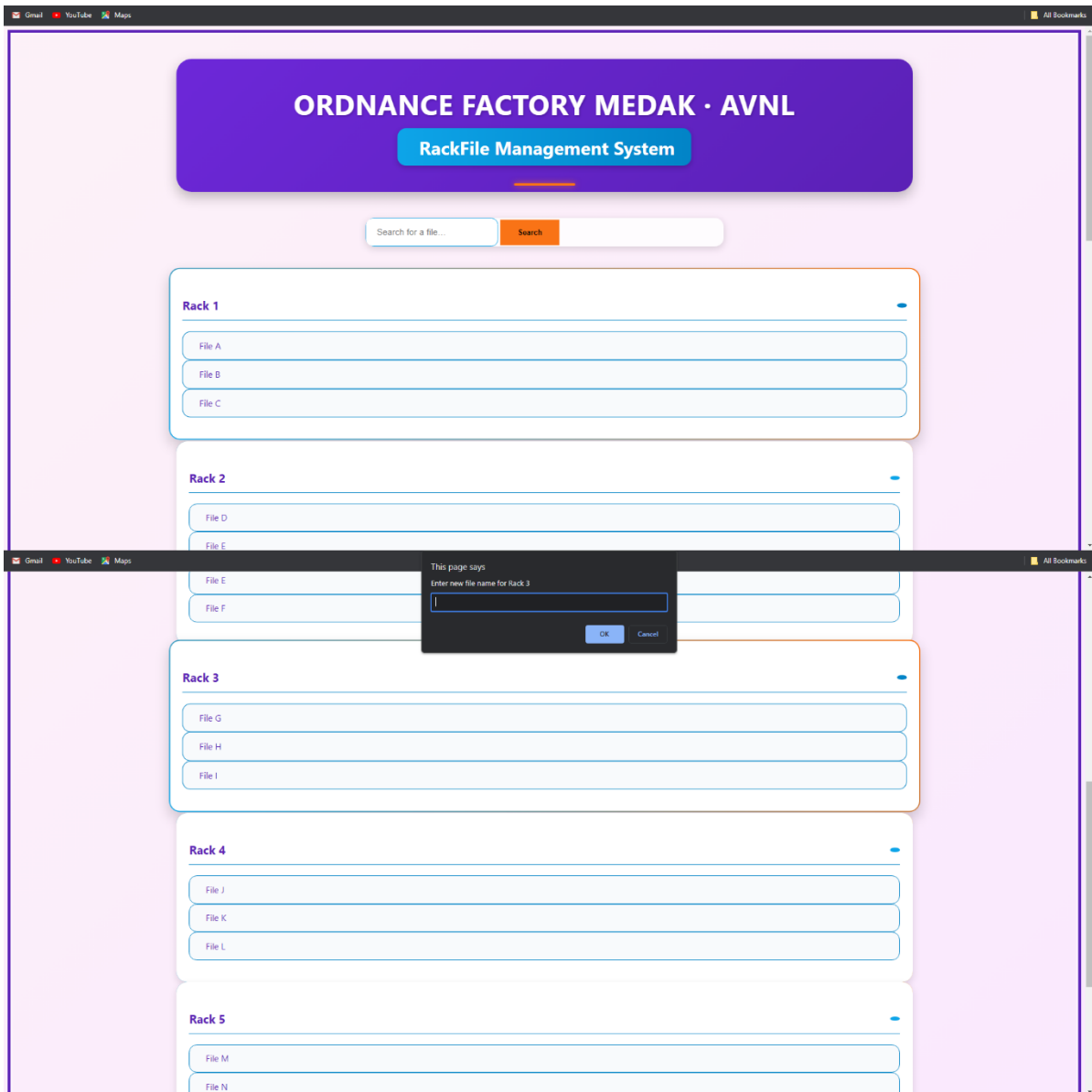
```
File Edit Selection View Go Run Terminal Help
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

db_connect.php X
Z: > CP-ITC > rackfile > db_connect.php
1  <?php
2  $servername = "localhost";
3  $username = "root";
4  $password = "";
5  $dbname = "rackfile_db";
6
7  try {
8      $conn = new PDO("mysql:host=$servername;dbname=$dbname", $username, $password);
9      $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
10 } catch(PDOException $e) {
11     echo "Connection failed: " . $e->getMessage();
12     die();
13 }
14 ?>
```

Database to get downloaded

```
download.php X
Z: > CP-ITC > rackfile > download.php
1  <?php
2  require_once 'db_connect.php';
3
4  if (isset($_GET['file'])) {
5      $fileName = $_GET['file'];
6
7      try {
8          // Prepare SQL statement to get file information
9          $stmt = $conn->prepare("SELECT file_name, file_path, file_type FROM files WHERE file_name = :fileName");
10         $stmt->bindParam(':fileName', $fileName);
11         $stmt->execute();
12
13         if ($row = $stmt->fetch(PDO::FETCH_ASSOC)) {
14             $filePath = $row['file_path'];
15             $fileType = $row['file_type'];
16
17             // Check if file exists
18             if (file_exists($filePath)) {
19                 // Set headers for file download
20                 header('Content-Description: File Transfer');
21                 header('Content-Type: ' . $fileType);
22                 header('Content-Disposition: attachment; filename="' . basename($filePath) . '"');
23                 header('Expires: 0');
24                 header('Cache-Control: must-revalidate');
25                 header('Pragma: public');
26                 header('Content-Length: ' . filesize($filePath));
27
28                 // Clear output buffer
29                 ob_clean();
30                 flush();
31
32                 // Read file and output to browser
33                 readfile($filePath);
34                 exit;
35             } else {
36                 echo "File not found on server.";
37             }
38         } else {
39             echo "File not found in database.";
40         }
41     } catch(PDOException $e) {
42         echo "Error: " . $e->getMessage();
43     }
44 } else {
45     echo "No file specified.";
46 }
47 ?>
```

OUTPUT



After Searching the file found out given

