BIRZEIT UNIVERSITY

Computer Science Department

Web Application and Technologies (COMP 334)

First Semester 2024/2025

Assignment 2: PHP ***Due Date 09/12/2024***

Objectives

To demonstrate the ability to create a data-driven PHP page and to use super global arrays.
To practice SQL processing through PHP scripts.

Notes:

- You must define your database connection details in a separate file called “dbconfig.in.php”, it should **define** the required variables used to create a connection and ***create a PDO object*. The database connection must be of type PDO.**
- You should always use **ONLY** prepared statements with named binding parameters for any database SQL.

Overview

For this assignment, you will write a web application using PHP and a database that allows users to submit, track, and manage maintenance requests to the Maintenance Request Ticketing System. Only authenticated users can use the system functionalities. You have two types of users: manager and customer. The main script of your application is called “ticketsys.php,” which checks if the user has not logged on to the system; the script should direct the user to the login page, shown in Figure 1. Otherwise, the user is directed to the user dashboard page, which is generated based on user type

that means the same page will be used but the data is different
on that page depending on the type of logged in user

A manager

Search for a ticket.

Assign a ticket

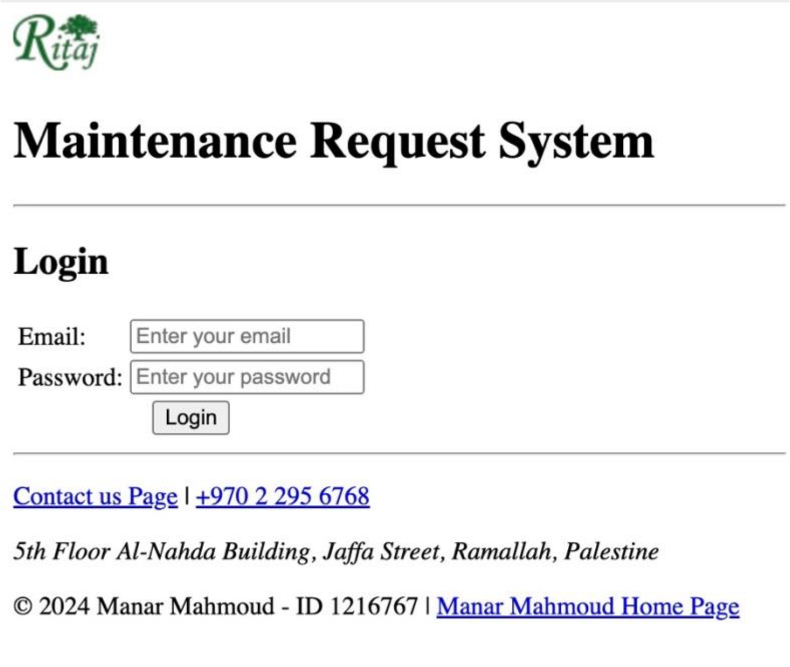
A Customer can

Search for a ticket.

Sent a Maintenance Request

All the pages must consist of the following parts:

- **Header**: Contains the logo, site title, and navigation links based on the user type and user name.
- **Main Section**: Displays information related to the page’s functionality.
- **Footer**: Displays company contact information (address, telephone number, email), link to the Contact Us page created in assignment One, and copyright: Your Name, Your ID, and Link to your Home Page on the CS host.



Maintenance Request System

Login

Email:
Password:

Contact us Page | +970 2 295 6768

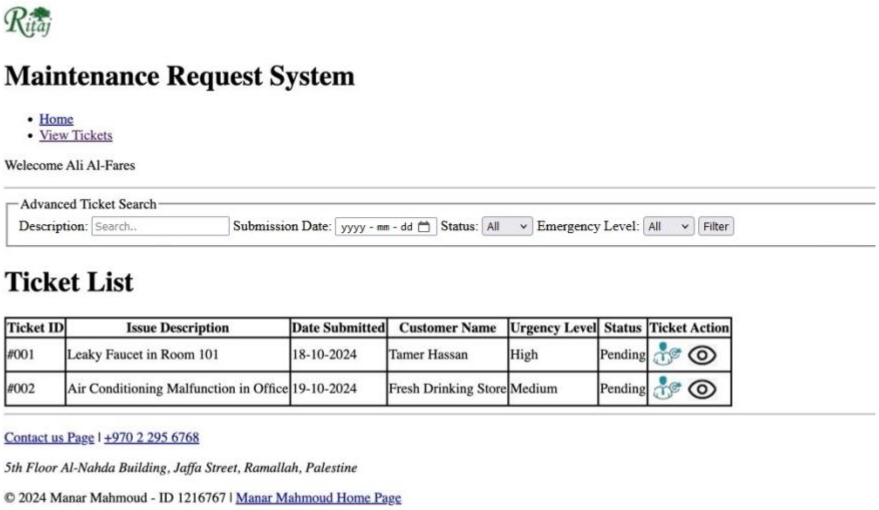
5th Floor Al-Nahda Building, Jaffa Street, Ramallah, Palestine

© 2024 Manar Mahmoud - ID 1216767 | Manar Mahmoud Home Page

Figure 1: Login Page

The login button submits the form to a script called “login.php” to check the user’s credentials. Upon successful login, the script redirects the user to the user dashboard. Otherwise, an error page is generated with an error message, and the Login form is displayed again.

The manager dashboard page should be like the page shown in Figure 2. The page has two main sections: the first is a form that allows the user to perform a **filter search,** and the second is the **Tickets list** table that shows the search results. When the script is called for the first time, the table should display all the **pending lists; those tickets have been submitted and have yet to be assigned to staff**. The search form consists of text boxes and select inputs. The Filter button sends the user input to the *same script that generates the manager dashboard page*. Set the form's method attribute to POST. Create a **tickets list** table like the one shown in Figure 2.
The action buttons in each row are a series of images enclosed within anchor elements, each linking to the appropriate PHP script. See the assign and view actions below.
Actions:
Search: The user can search by ticket description (or part of it), submission date, ticket status, or Emergency level. The search can be performed using a single field or combining multiple fields. The drop-down lists should be dynamically generated using PHP.



Maintenance Request System

Welecome Ali Al-Fares

Advanced Ticket Search
Description: Search.. Submission Date: yyyy - mm - dd Status: All Emergency Level: All

Ticket List

Ticket ID	Issue Description	Date Submitted	Customer Name	Urgency Level	Status	Ticket Action
#001	Leaky Faucet in Room 101	18-10-2024	Tamer Hassan	High	Pending	👤 👁
#002	Air Conditioning Malfunction in Office	19-10-2024	Fresh Drinking Store	Medium	Pending	👤 👁

Contact us Page | +970 2 295 6768

5th Floor Al-Nahda Building, Jaffa Street, Ramallah, Palestine

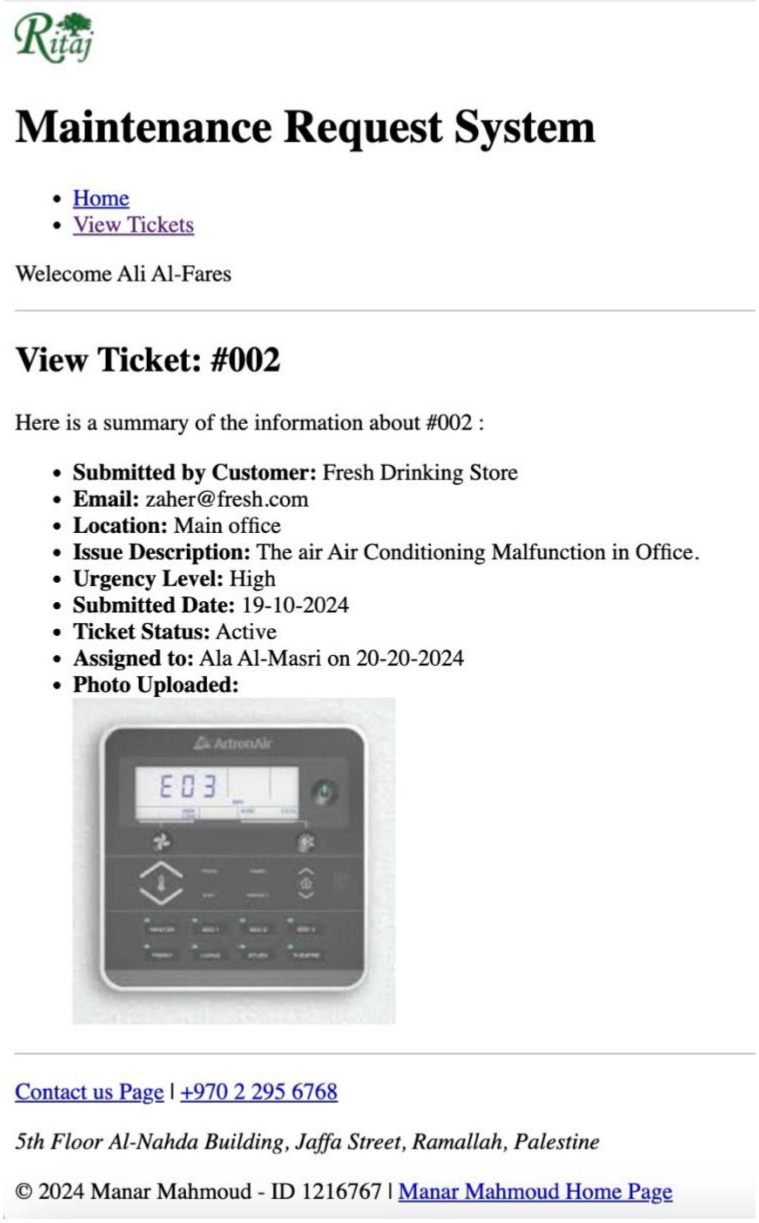
© 2024 Manar Mahmoud - ID 1216767 | Manar Mahmoud Home Page

Figure 2: Manager Dashboard

Ticket details are retrieved from the database, and **the data should be fetched to a ticket Object.** So, you must create a Ticket Class containing the ticket information: ticket ID, customer name, description, submitted date, status, emergency level, assigned date, assigned staff, and ticket image name. In addition to the constructor and the necessary setters and getters methods, the class has the following methods: *displayTable* returns ticket details as an HTML table row, and each table cell holds the ticket's data. The second method, displayTicketPage, generates a <main> HTML element to display the ticket page, as shown in Figure 3 below.

Assign action (👤) should be hyperlinked, and the anchor element should refer to the "assign.php" script, as fully described in the **assign** action below. The view action (👁) should be hyperlinked, and the anchor element should refer to the "view.php" script, as fully described in the **view** action below.

View Action (👁): The ticket ID should be hyperlinked, and the anchor element should refer to the "view.php" script, and the ticket ID should be added to the query string so that when the action image is clicked, a GET request that combines the query string and "view.php" script together. So, the script receives as input the ticket ID to display. The"view.php" script dynamically creates an HTML page, as shown in Figure 3. Ticket details are retrieved from the database. An HTML page with an error message should be displayed if an invalid ID has been sent.



Ritaj

Maintenance Request System

- Home
- View Tickets

Welecome Ali Al-Fares

View Ticket: #002

Here is a summary of the information about #002 :

- **Submitted by Customer:** Fresh Drinking Store
- **Email:** zaher@fresh.com
- **Location:** Main office
- **Issue Description:** The air Air Conditioning Malfunction in Office.
- **Urgency Level:** High
- **Submitted Date:** 19-10-2024
- **Ticket Status:** Active
- **Assigned to:** Ala Al-Masri on 20-20-2024
- **Photo Uploaded:**

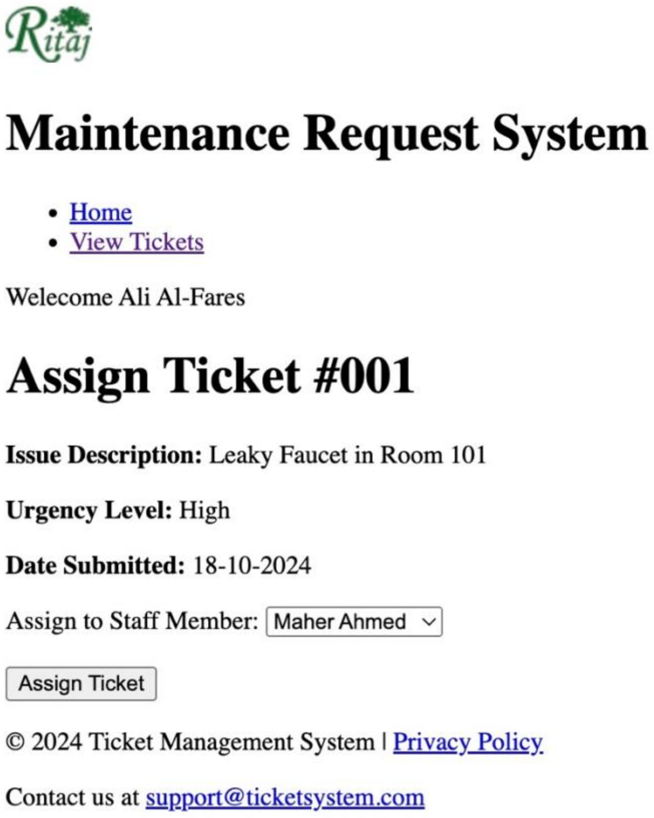
Contact us Page | +970 2 295 6768

5th Floor Al-Nahda Building, Jaffa Street, Ramallah, Palestine

© 2024 Manar Mahmoud - ID 1216767 | Manar Mahmoud Home Page

Figure 3: Ticket view Page

- Assign ( ) when the user clicks the assign link, the request will be sent to the "assign.php" script. The ticket ID should be added to the query string. The script should check if the ticket has already been assigned or completed, so an appropriate message should be displayed, and the request should be redirected to the ticket view script. Otherwise, the data is retrieved from the database and displayed, as shown Figure 4. Note that staff names should be generated from the database. Using the post method, the assign Ticket button sends the ticket ID and staff ID to the assign.php script, which updates the ticket status and adds the staff name and the assignment date.



Maintenance Request System

- Home
- View Tickets

Welecome Ali Al-Fares

Assign Ticket #001

Issue Description: Leaky Faucet in Room 101

Urgency Level: High

Date Submitted: 18-10-2024

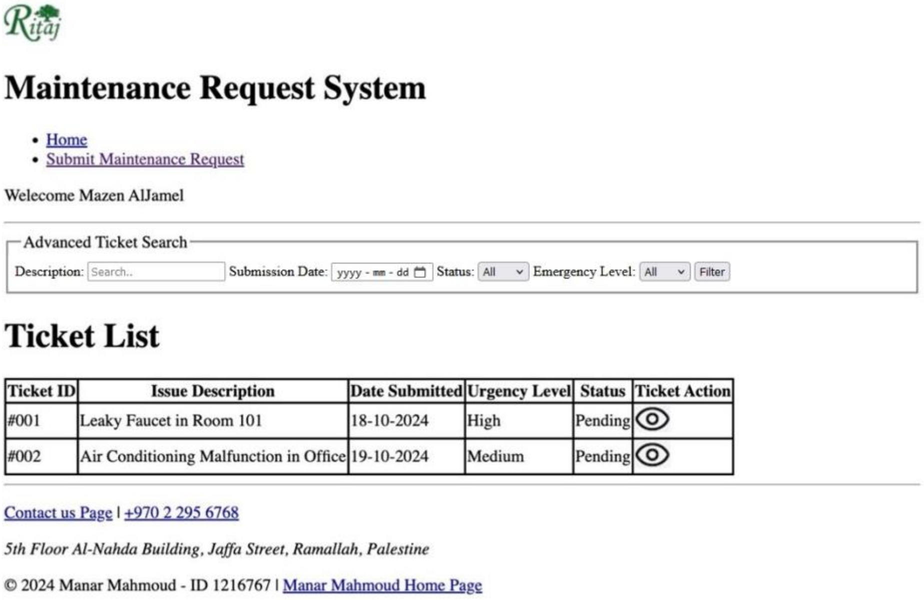
Assign to Staff Member: Maher Ahmed

© 2024 Ticket Management System | Privacy Policy

Contact us at support@ticketsystem.com

Figure 4: Assign Ticket

✓ The customer dashboard is similar to the manager dashboard page; customers can view and search only on their tickets only, and submit a maintenance request, as shown in Figure 5



Maintenance Request System

- Home
- Submit Maintenance Request

Welecome Mazen AlJamel

Advanced Ticket Search

Ticket List

Ticket ID	Issue Description	Date Submitted	Urgency Level	Status	Ticket Action
#001	Leaky Faucet in Room 101	18-10-2024	High	Pending	👁
#002	Air Conditioning Malfunction in Office	19-10-2024	Medium	Pending	👁

Contact us Page | +970 2 295 6768

5th Floor Al-Nahda Building, Jaffa Street, Ramallah, Palestine

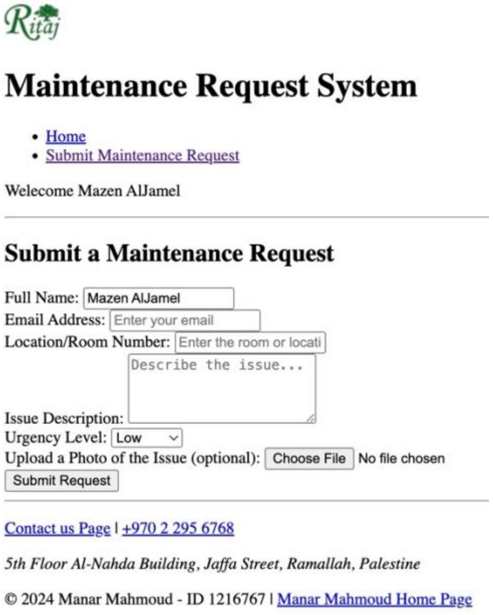
© 2024 Manar Mahmoud - ID 1216767 | Manar Mahmoud Home Page

Figure 5: Customer Dashboard

Maintenance Request action is linked to “request.php,” which is a self-reference script; if no data has been sent, an HTML page containing an empty form is generated to allow customers to submit their maintenance requests by filling out the form, as shown in Figure 6, the form includes the following fields:

- Name: (Full name of the user reporting the issue; *this should be disabled and filled by the script*)
- Email: (Contact email address)
- Location: (Room or area where the problem exists)
- Issue Description: (Detailed description of the fault or maintenance problem)
- Urgency Level: (A dropdown to select the priority: Low, Medium, High)
- Upload Photo: (An input field)

The submit request button sends the data using the post method to the “request.php,” which retrieves the sent data and then stores it in the database. The script should generate the ticket ID, add the submission date, and the default ticket status is “Pending”. The fault photo should be uploaded to a folder called “images”, only accept an image of type “jpeg”, and rename it to be the same as the ticket ID. For instance, if the ticket id is ‘112’, the file name should be ‘112.jpeg’. Also, you should save the file name in the database. After successfully submitting to the maintenance ticket, the script should be re-direct to the “confirm.php” script, which generates the confirmation page as shown in Figure 7.



Maintenance Request System

- Home
- Submit Maintenance Request

Welecome Mazen AlJamel

Submit a Maintenance Request

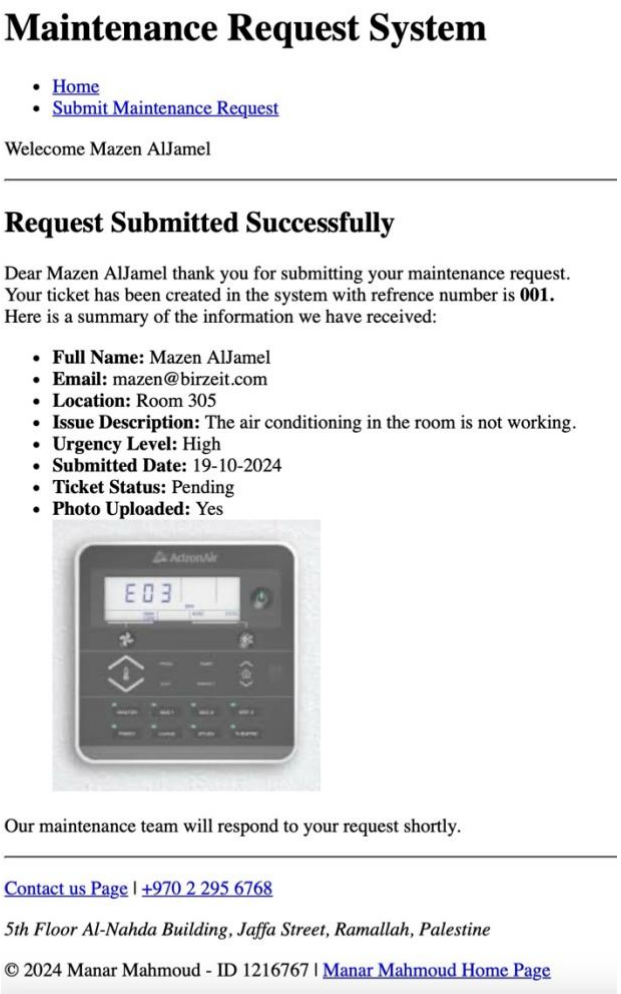
Full Name: Mazen AlJamel
Email Address: Enter your email
Location/Room Number: Enter the room or locati
Issue Description: Describe the issue...
Urgency Level: Low
Upload a Photo of the Issue (optional): Choose File No file chosen

Contact us Page | +970 2 295 6768

5th Floor Al-Nahda Building, Jaffa Street, Ramallah, Palestine

© 2024 Manar Mahmoud - ID 1216767 | Manar Mahmoud Home Page

Figure 6: Maintenance Request



Maintenance Request System

- Home
- Submit Maintenance Request

Welecome Mazen AlJamel

Request Submitted Successfully

Dear Mazen AlJamel thank you for submitting your maintenance request.
Your ticket has been created in the system with refrence number is **001.**
Here is a summary of the information we have received:

- **Full Name:** Mazen AlJamel
- **Email:** mazen@birzeit.com
- **Location:** Room 305
- **Issue Description:** The air conditioning in the room is not working.
- **Urgency Level:** High
- **Submitted Date:** 19-10-2024
- **Ticket Status:** Pending
- **Photo Uploaded:** Yes

Our maintenance team will respond to your request shortly.

Contact us Page | +970 2 295 6768

5th Floor Al-Nahda Building, Jaffa Street, Ramallah, Palestine

© 2024 Manar Mahmoud - ID 1216767 | Manar Mahmoud Home Page

Figure 7: Maintenance Request Confirmation Page

General Requirements for all pages.

- In your web pages, you should use semantic tags like <article>, <nav>, or <footer> (for example), and some parts make sense to wrap inside a tag such as <section> or <figure> instead of generic HTML tags like <div>.
- You must use relative addresses for all links to the documents and resources within your site.

Placement of Assignment Files

- You must submit your files to CS Host.
- In the “public_html/assignments” folder, create a subfolder called *assTwo and upload all the assignment* files to it.

- You must update your home page (index.htm) file by *adding a link to the assignment Two main page*.

- You must create a database on the server named as “ticketSystem” and load it with at least 10 records for testing. Also, the database Schema should be exported as SQL, the file name should be"students_yourNumber.sql".
- You should create a user table and load it with some records, 3 managers, 10 customers and ten staff. User table schema is
  {name: string, id: integer, email: email, password: string, user type:string}, email should be unique, id is the primary key, and type could be manager, customer, or staff.
- For testing purposes, create a manager user name with {manger@maktoob.com, password: comp@334, cust@maktoob.com , comp#334}. The rest of the fields are left to you to complete, so the grader will use them for testing. Make sure they are working to avoid ZERO marks.
- **You must compress (Zipped) all the assignment’s two files, including the SQL file, into a file named assTwo-stID.zip and submit it to ITC before the due date.**

⚠ You must submit your work before the due date *which is on 09/12/2024 at 22:00 PM*, by uploading it to the **CS host and submitting it to the ITC**.