PHP OOP

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WHAT WE DID ?

We developed a PHP-based login system using Object-Oriented Programming (OOP).
The system supports different user roles (Manager, Developer, Intern), each with a specific view and access level.

IT WAS DESIGNED TO SIMULATE A REAL-WORLD EMPLOYEE PORTAL WHERE:

01

- Managers can view all employees

02

- Developers can view interns without salaries

03

- Interns can only view their own data

HOW WE DID IT ?

- We used core OOP principles like inheritance, encapsulation, and polymorphism.
- Each user role is represented as a class that extends the base User class.
- A UserFactory dynamically creates the appropriate object based on the user’s role

THE LOGIN FLOW:

- User logs in from the login page
- The session stores their user object
- Based on their role, the dashboard displays different data
- Manager sees full employee list, Developer sees intern list (without salary), Intern sees only their info

CLASSES AND THE PURPOSE OF IT

- user:

Parent class for all users (Manager, Developer, Intern)

- Manager (Inherits from User):

Represents a manager role with access to all employee data

- Developer (Inherits from User):

Represents a developer role with access to intern data only.

- UserFactory:

Factory class to create the appropriate user object based on their role.

- Autoloader:

Uses spl_autoload_register() to automatically include class files from the classes/ directory.

- Data Source:

users_data.php → associative array that holds all mock user records used during login.

UI Files:

- index.php → login form
- dashboard.php → shows user-specific dashboard based on role
- logout.php → session destroy
- includes/employee_table.php → shows full employees table
- includes/intern_table.php → shows interns (without salary)

CONCLUSION

This project allowed me to deeply understand how to apply Object-Oriented Programming (OOP) in a practical, real-world scenario using PHP.

I learned how to:

1- Design reusable and scalable class structures

2- Use inheritance to simplify role-specific logic

3- Implement role-based access control in a secure way

4- Apply the Factory Pattern to dynamically generate objects It also helped me understand the importance of:

- Code organization and separation of concerns
- Encapsulation and hiding sensitive data (like salaries)
- Building user-specific experiences based on access level

THANK YOU