Currently, there are 2 types of users on the website: visitors (guest users) and registered users. In order to control permissions on the website, 2 roles are implemented - visitor and customer.

Guest/Visitor users (Role: Visitor)

A guest user (visitor) has access to the homepage, about page, artists list and artist pages, artwork list and artwork pages, and the cart page.

A visitor user can add items to the cart, update the quantity of the items and change the shipping address.

Visitor users don't have access to the order history, account page, wish-list page, and they cannot place an order (they need to sign up to complete an order. Once the user is registered, they get a new role – customer (registered user)).

Registered users (Role: Customer)

Registered users have all permissions of the visitor role plus they have access to the customer account page, order history, Wishlist pages. They also can place orders and add, remove items from the wishlist.

Upcoming roles (employee, manager)

Currently, roles and permissions are implemented in the class.user.php file. Where roles and permissions are stored in the PERMISSIONS and ROLES arrays. And then on pages where we need to check if a user has permission for the page or action, we use hasPermission() method of the user class to check if the user has permission and we use getUserRole() method of the user class if we need to get the user's role.

We can add new roles to the ROLES array and then assign permissions in the PERMISSIONS array.

We also can store roles and permissions in the database – this will give the manager or admin the ability to assign permissions and roles through a web interface (which we will need to implement). Right now, managers or admins cannot change permissions or roles as they are hardcoded in the ROLES and PERMISSIONS array.

Example of use of the hasPermission method of the user class

```
if(!User::hasPermission(User::PERMISSION_VIEW_CART)){
   $page = new PageNotFound();
   $page->displayPage();
   exit;
}
```

Example of use of the getUserRole method of the user class

```
if(User::getUserRole() == USER::ROLE_CUSTOMER){
   // ...
}
```