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package fi.paatti.paattiloginutils;

import com.vaadin.data.Container;
import com.vaadin.data.Item;
import com.vaadin.data.util.sqlcontainer.SQLContainer;
import fi.paatti.paattidatabasutils.dbobjects.User;
import fi.paatti.paattidatabasutils.dbobjects.UserGroup;
import fi.paatti.paattidatabasutils.dbservice.PaattiDBService;
import fi.paatti.paattidatabasutils.names.PaattiColumnNames;
import fi.paatti.paattidatabasutils.names.PaattiTableNames;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * The helper class for user login. It handles the login and controls the
 * cookies. It creates an User object that has users groups, roles and
 * researches.
 *
 * @author Toni Salminen, toni.a.j.salminen@student.jyu.fi
 * @author Lauri Satokangas, lauri.n.satokangas@student.jyu.fi
 */
public class LoginHelper {

    private PaattiDBService dbService;
    private HttpServletRequest request;
    private HttpServletResponse response;

    /**
     * The constructor.
     *
     * @param db the database service to be used.
     * @param request the HttpServletRequest.
     * @param response the HttpServletResponse.
     */
    public LoginHelper(PaattiDBService db, HttpServletRequest request, HttpServletResponse response) {
        this.dbService = db;
        this.request = request;
        this.response = response;
    }

    /**
     * Sets the HttpServletRequest.
     */
}
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* @param request the HttpServletRequest to be set.
*/
public void setRequest(HttpServletRequest request) {
    this.request = request;
}

/**
 * Sets the HttpServletResponse.
 *
 * @param response the HttpServletResponse to be set.
 */
public void setResponse(HttpServletRequest response) {
    this.response = response;
}

/**
 * Returns the User object using the given username and password.
 *
 * @param username the user's name.
 * @param password the user's password.
 * @return The User object if successful or null if not successful.
 */
public User getUser(String username, String password) {

    boolean succesful = false;
    SQLContainer container = dbService.getSQLContainerFromDBTable(PaattiTableNames.USER, PaattiColumnNames.USER_userID,
        true);
    Item item;
    Integer userID = null;

    for (Object id : container.getItemIds()) {
        item = container.getItem(id);
        if (item.getItemProperty(PaattiColumnNames.USER_name).getValue().toString().equals(username)
            && item.getItemProperty(PaattiColumnNames.USER_password).getValue().toString().equals(password)) {
            userID = (Integer) item.getItemProperty(PaattiColumnNames.USER_userID).getValue();
            succesful = true;
            break;
        }
    }
    if (succesful) {
        User user = new User(userID);
        user.setUsername(username);
        setUserGroupsRolesAndResearches(user, dbService.getUserGroupsRolesAndResearches(userID));
        return user;
    } else {

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        return null;
    }
}

/**
 * Tries to log in with the browser cookies.
 *
 * @param usernameCookieName the name of the cookie containing the user name.
 * @param passwordCookieName the name of the cookie containing the user password.
 * @return The user matching the given (cookie) values, otherwise null.
 */
public User TryLoginWithCookies(String usernameCookieName, String passwordCookieName) {
    String username = getCookieValue(usernameCookieName);
    String password = getCookieValue(passwordCookieName);

    if (username != null && password != null) {
        // Cookies found. Try login.
        return getUser(username, password);
    }
    // No cookies found. Login failed.
    return null;
}

/**
 * Sets the login cookies in the browser memory.
 *
 * @param usernameCookieName the user name cookie name.
 * @param username the user name.
 * @param passwordCookieName the password cookie name.
 * @param cookieLifetime the lifetime of the cookie.
 * @param password the user's password.
 * @param cookiePath the path to cookie.
 */
public void setLoginCookie(String usernameCookieName, String username,
    String passwordCookieName, String password, String cookiePath,
    int cookieLifetime) {
    setCookie(usernameCookieName, username, cookiePath, cookieLifetime);
    setCookie(passwordCookieName, password, cookiePath, cookieLifetime);
}

/**
 * Removes the specified login cookie from the browser memory.
 *
 * @param usernameCookieName the user name cookie name.
 * @param passwordCookieName the password cookie name.

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* @param cookiePath the path for the cookie.
*/
public void deleteLoginCookie(String usernameCookieName,
    String passwordCookieName, String cookiePath) {
    int cookieLifetime = 0;
    setCookie(usernameCookieName, "", cookiePath, cookieLifetime);
    setCookie(passwordCookieName, "", cookiePath, cookieLifetime);
}
/**
 * Sets the cookie in browser memory.
 */
* @param cookieName the name for the cookie.
* @param cookieValue the value for the cookie.
*/
private void setCookie(String cookieName, String cookieValue,
    String cookiePath, int cookieLifetime) {
    Cookie cookie = new Cookie(cookieName, cookieValue);
    cookie.setPath(cookiePath);
    cookie.setMaxAge(cookieLifetime);
    response.addCookie(cookie);
}
/**
 * Returns the cookies value from browser memory.
 * <p/>
 * @param cookieName The name of the cookie
 * @return The cookie
 */
private String getCookieValue(String cookieName) {
    String cookieValue = null;
    Cookie[] cookies = request.getCookies();
    if (cookies == null) {
        return cookieValue;
    }
    for (int i = 0; i < cookies.length; i++) {
        Cookie cookie = cookies[i];
        if (cookie.getName().equals(cookieName)) {
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        cookieValue = cookie.getValue();
    }
}

    return cookieValue;
}

/**
 * Gets the users groups, roles and researches from the container and sets
 * them to the User-object.
 * <p/>
 * @param user The user object
 * @param ugContainer The container containing the user's groups
 */
private void setUserGroupsRolesAndResearches(User user, Container.Indexed ugContainer) {
    Object ugItemId = ugContainer.firstItemId();
    Item ugItem;

    while (ugItemId != null) {
        ugItem = ugContainer.getItem(ugItemId);

        int usergroupId = (Integer) ugItem.getItemProperty(PaattiColumnNames.USERGROUP_usergroupId).getValue();
        int roleId = (Integer) ugItem.getItemProperty(PaattiColumnNames.ROLE_roleID).getValue();
        int researchID = (Integer) ugItem.getItemProperty(PaattiColumnNames.RESEARCH_researchID).getValue();

        UserGroup ugGroup = new UserGroup(usergroupId, roleId);

        ugGroup.setUsergroupId(researchID);
        user.addUserGroup(ugGroup);

        ugItemId = ugContainer.nextItemId(ugItemId);
    }
}
```