

```
package fi.paatti.research.paattiapplication.views.userview;

import com.vaadin.data.Item;
import com.vaadin.ui.*;
import com.vaadin.ui.Button.ClickEvent;
import fi.paatti.paattidatabasutils.dbService.PaattiResearchDBService;
import fi.paatti.paattidatabasutils.names.PaattiColumnNames;
import fi.paatti.paattidatabasutils.names.PaattiTableNames;
import fi.paatti.research.applicationinfo.Resources;
import fi.paatti.research.paattiapplication.ElementNames;
import fi.paatti.research.paattiapplication.views.ApplicationView;
import fi.paatti.research.paattiapplication.views.ApplicationViewTab;

/**
 * The tab shows the user's basic information.
 */
* @author Jari Salokangas
* @author Tapio Keränen, t.tapio.keranen@student.jyu.fi
*/
public class UserInfoTab extends ApplicationViewTab {

    private Embedded image;
    private TextField usernameField;
    private TextField firstNameField;
    private TextField lastNameField;
    private TextField userPasswordField;
    private TextArea userDescriptionArea;
    private Button saveButton;
    private Button removeButton;

    /**
     * Constructor of the class.
     *
     * @param view the parent view.
     */
    public UserInfoTab(ApplicationView view) {
        super(view);
        createLayout();
    }

    /**
     * {@inheritDoc}
     */
    @Override
```

```
protected void createLayout() {
    image = new Embedded();
    image.setSource(Resources.getThemeResource(Resources.IMG_USER));
    image.setWidth("125px");

    usernameField = new TextField(ElementNames.USER_VIEW_USERNAME_FIELD_LABEL);
    usernameField.setWidth("100%");
    usernameField.setInputPrompt(ElementNames.USER_VIEW_USERNAME_FIELD_PROMPT);
    usernameField.setRequired(true);

    userPasswordField = new TextField(ElementNames.USER_VIEW_PASSWORD_FIELD_LABEL);
    userPasswordField.setWidth("100%");
    userPasswordField.setInputPrompt(ElementNames.USER_VIEW_PASSWORD_FIELD_PROMPT);
    userPasswordField.setRequired(true);

    firstNameField = new TextField(ElementNames.USER_VIEW_FIRSTNAME_FIELD_LABEL);
    firstNameField.setWidth("100%");
    firstNameField.setInputPrompt(ElementNames.USER_VIEW_FIRSTNAME_FIELD_PROMPT);
    firstNameField.setRequired(true);

    lastNameField = new TextField(ElementNames.USER_VIEW_LASTNAME_FIELD_LABEL);
    lastNameField.setWidth("100%");
    lastNameField.setInputPrompt(ElementNames.USER_VIEW_LASTNAME_FIELD_PROMPT);
    lastNameField.setRequired(true);

    userDescriptionArea = new TextArea(ElementNames.USER_VIEW_DESCRIPTION_AREA_LABEL);
    userDescriptionArea.setWidth("100%");
    userDescriptionArea.setInputPrompt(ElementNames.USER_VIEW_DESCRIPTION_AREA_PROMPT);

    saveButton = new Button(ElementNames.USER_VIEW_SAVE_USER_BUTTON_LABEL);
    saveButton.addListener(this);

    removeButton = new Button(ElementNames.USER_VIEW_REMOVE_USER_BUTTON_LABEL);
    removeButton.addListener(this);

    VerticalLayout layout = new VerticalLayout();

    layout.setMargin(true);
    layout.addComponent(image);
    layout.addComponent(usernameField);
    layout.addComponent(userPasswordField);
    layout.addComponent(firstNameField);
    layout.addComponent(lastNameField);
    layout.addComponent(userDescriptionArea);
    layout.addComponent(saveButton);
    layout.addComponent(removeButton);
}
```

```
        setCompositionRoot(layout);
    }

    /**
     * {@inheritDoc}
     */
    @Override
    protected void fillTab(Item user) {
        usernameField.setValue(user.getItemProperty(PaattiColumnNames.USER_name));
        firstNameField.setValue(user.getItemProperty(PaattiColumnNames.USER_firstName));
        lastNameField.setValue(user.getItemProperty(PaattiColumnNames.USER_lastName));
        userPasswordField.setValue(user.getItemProperty((PaattiColumnNames.USER_password)));
        userDescriptionArea.setValue(user.getItemProperty(PaattiColumnNames.USER_description));
        removeButton.setEnabled(true);
    }

    /**
     * {@inheritDoc}
     */
    @Override
    protected void clearTab() {
        usernameField.setValue("");
        firstNameField.setValue("");
        lastNameField.setValue("");
        userDescriptionArea.setValue("");
        userPasswordField.setValue("");
        removeButton.setEnabled(false);
    }

    /**
     * {@inheritDoc}
     * <p>
     * The handled button click events are:
     * <ul>
     * <li>save the user's information, and</li>
     * <li>remove the user.</li>
     * </ul>
     */
    @Override
    public void buttonClick(ClickEvent event) {
        String buttonCaption = event.getButton().getCaption();
        String msg = null;
        PaattiResearchDBService db = view.getDBConnection();

        if (buttonCaption.equals(ElementNames.USER_VIEW_SAVE_USER_BUTTON_LABEL)) {
```

```
if (usernameField.isValid() && firstNameField.isValid() && lastNameField.isValid() && userPasswordField.isValid()
    && userDescriptionArea.isValid()) {
    String username = usernameField.getValue().toString().trim();
    String firstName = firstNameField.getValue().toString().trim();
    String lastName = lastNameField.getValue().toString().trim();
    String password = userPasswordField.getValue().toString().trim();
    String description = userDescriptionArea.getValue().toString().trim();

    Object rowId = db.createUser(view.getSelectedItemId(), username, firstName, lastName, password, description);

    msg = (rowId != null) ? ElementNames.UPDATE_OK : ElementNames.UPDATE_FAIL;
    view.refresh(rowId);
} else {
    msg = ElementNames.SOMETHING_REQUIRED;
}
} else if (buttonCaption.equals(ElementNames.USER_VIEW_REMOVE_USER_BUTTON_LABEL)) {
    if (db.removeRowFromTable(view.getSelectedItemId(), PaattiTableNames.USER, PaattiColumnNames.USER_userID)) {
        msg = ElementNames.UPDATE_OK;
        view.refresh(null);
        view.setTabsEnabled(false);
    } else {
        msg = ElementNames.UPDATE_FAIL;
    }
}
if (msg != null) {
    getWindow().showNotification(msg);
}
}
```