

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

import com.vaadin.data.Item;
import com.vaadin.data.util.sqlcontainer.SQLContainer;
import com.vaadin.ui.Button.ClickEvent;
import com.vaadin.ui.*;
import fi.paatti.paattidatabasutils.dbobjects.User;
import fi.paatti.paattidatabasutils.dbsevice.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 basic information of the selected group.
 */
* @author Toni Salminen, toni.a.j.salminen@student.jyu.fi
 */
public class GroupInfoTab extends ApplicationViewTab {

    private EmbeddedImage;
    private TextField groupNameField;
    private TextArea groupDescriptionArea;
    private Select researchSelect;
    private Select roleSelect;
    private Button saveButton;
    private Button removeButton;
    private SQLContainer researchContainer;
    private SQLContainer roleContainer;

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

    /**
     * @inheritDoc
     */
}
```

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

    groupNameField = new TextField(ElementNames.GROUP_VIEW_NAME_FIELD_LABEL);
    groupNameField.setInputPrompt(ElementNames.GROUP_VIEW_NAME_FIELD_PROMPT);
    groupNameField.setWidth("100%");
    groupNameField.setRequired(true);

    researchSelect = new Select(ElementNames.GROUP_VIEW_RESEARCH_LABEL);
    researchContainer = view.getConnection().getSQLContainerFromDBTable(PaattiTableNames.RESEARCH,
        PaattiColumnNames.RESEARCH_researchID, true);
    researchSelect.setContainerDataSource(researchContainer);
    researchSelect.setWidth("100%");
    researchSelect.setNullSelectionAllowed(false);
    researchSelect.setRequired(true);
    researchSelect.setItemCaptionPropertyId(PaattiColumnNames.RESEARCH_name);

    roleSelect = new Select(ElementNames.GROUP_VIEW_ROLE_LABEL);
    roleContainer = view.getConnection().getSQLContainerFromDBTable(PaattiTableNames.ROLE,
        PaattiColumnNames.ROLE_roleID, true);
    roleSelect.setContainerDataSource(roleContainer);
    roleSelect.setWidth("100%");
    roleSelect.setNullSelectionAllowed(false);
    roleSelect.setImmediate(true);
    roleSelect.setRequired(true);
    roleSelect.setItemCaptionPropertyId(PaattiColumnNames.ROLE_name);

    groupDescriptionArea = new TextArea(ElementNames.GROUP_VIEW_DESCRIPTION_AREA_LABEL);
    groupDescriptionArea.setWidth("100%");
    groupDescriptionArea.setInputPrompt(ElementNames.GROUP_VIEW_DESCRIPTION_AREA_PROMPT);

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

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

    VerticalLayout layout = new VerticalLayout();

    layout.setMargin(true);
    layout.addComponent(image);
    layout.addComponent(groupNameField);
```

```
layout.addComponent(roleSelect);
layout.addComponent(researchSelect);
layout.addComponent(groupDescriptionArea);
layout.addComponent(saveButton);
layout.addComponent(removeButton);

setCompositionRoot(layout);

/**
 * {@inheritDoc}
 */
@Override
protected void fillTab(Item group) {
    groupNameField.setValue(group.getItemProperty(PaattiColumnNames.USERGROUP_name));
    groupDescriptionArea.setValue(group.getItemProperty(PaattiColumnNames.USERGROUP_description));

    for (Object itemID : researchSelect.getItemIds()) {
        if (itemID.toString().equals(
            group.getItemProperty(PaattiColumnNames.USERGROUP_RESEARCH_researchID).getValue().toString())) {
            researchSelect.select(itemID);
        }
    }

    for (Object itemID : roleSelect.getItemIds()) {
        if (itemID.toString().equals(group.getItemProperty(PaattiColumnNames.USERGROUP_ROLE_roleID).getValue().toString())) {
            roleSelect.select(itemID);
        }
    }
    removeButton.setEnabled(true);
}

/**
 * {@inheritDoc}
 */
@Override
protected void clearTab() {
    groupNameField.setValue("");
    groupDescriptionArea.setValue("");
    researchSelect.setValue(null);
    roleSelect.setValue(null);
    removeButton.setEnabled(false);
}

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

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

    if (buttonCaption.equals(ElementNames.GROUP_VIEW_SAVE_GROUP_BUTTON_LABEL)) {
        if (groupNameField.isValid() && groupDescriptionArea.isValid() && roleSelect.isValid() && researchSelect.isValid()) {
            String groupName = groupNameField.getValue().toString().trim();
            String groupDescription = groupDescriptionArea.getValue().toString().trim();

            Object rowID = db.createGroup(groupName, groupDescription, roleSelect.getValue(), researchSelect.getValue(),
                ((User) getApplication().getUser()).getUserID(), view.getSelectedItemId());

            msg = (rowID != null) ? ElementNames.UPDATE_OK : ElementNames.UPDATE_FAIL;
            view.refresh(rowID);
        } else {
            msg = ElementNames.SOMETHING_REQUIRED;
        }
    } else if (buttonCaption.equals(ElementNames.GROUP_VIEW_REMOVE_GROUP_BUTTON)) {
        if (db.removeRowFromTable(view.getSelectedItemId(), PaattiTableNames.USERGROUP,
            PaattiColumnNames.USERGROUP_userid)) {
            msg = ElementNames.UPDATE_OK;
            view.refresh(null);
            view.setTabsEnabled(false);
        } else {
            msg = ElementNames.UPDATE_FAIL;
        }
    }
}

if (msg != null) {
    getWindow().showNotification(msg);
}
}
```