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package fi.paatti.research.paattiapplication.views.researchview;

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.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.ApplicationTabSheet;
import fi.paatti.research.paattiapplication.views.ApplicationView;
import fi.paatti.research.paattiapplication.views.ApplicationViewTab;

/**
 * The tab shows the basic information of the research.
 */
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*/
public class ResearchInfoTab extends ApplicationViewTab {

    private Embedded image;
    private TextField researchNameField;
    private TextArea researchDescriptionArea;
    private Table groupsTable;
    private Button saveButton;
    private Button removeButton;
    private Button examineGroupButton;
    private final String[] visibleColumns = new String[] {
        PaattiColumnNames.USERGROUP_name,
        PaattiColumnNames.USERGROUP_description};
    private final String[] visibleHeaders = new String[] { "Nimi", "Kuvaus" };

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

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

    researchNameField = new TextField(ElementNames.RESEARCH_VIEW_NAME_FIELD_LABEL);
    researchNameField.setWidth("100%");
    researchNameField.setInputPrompt(ElementNames.RESEARCH_VIEW_NAME_FIELD_PROMPT);
    researchNameField.setRequired(true);

    researchDescriptionArea = new TextArea(ElementNames.RESEARCH_VIEW_DESCRIPTION_AREA_LABEL);
    researchDescriptionArea.setWidth("100%");
    researchDescriptionArea.setInputPrompt(ElementNames.RESEARCH_VIEW_DESCRIPTION_AREA_PROMPT);
    researchDescriptionArea.setRequired(true);

    groupsTable = new Table(ElementNames.RESEARCH_VIEW_GROUPS_TABLE_LABEL);
    groupsTable.selectable(true);
    groupsTable.setSizeFull();
    groupsTable.setRequired(true);

    saveButton = new Button(ElementNames.RESEARCH_VIEW_SAVE_BUTTON_LABEL);
    saveButton.addListener(this);
    saveButton.setWidth("100%");

    removeButton = new Button(ElementNames.RESEARCH_VIEW_REMOVE_BUTTON_LABEL);
    removeButton.addListener(this);
    removeButton.setWidth("100%");

    examineGroupButton = new Button(ElementNames.RESEARCH_VIEW_EXAMINE_GROUP_BUTTON_LABEL);
    examineGroupButton.addListener(this);
    examineGroupButton.setWidth("100%");

    VerticalLayout layout = new VerticalLayout();

    layout.setMargin(true);
    layout.addComponent(image);
    layout.addComponent(researchNameField);
    layout.addComponent(researchDescriptionArea);
    layout.addComponent(groupsTable);
    layout.addComponent(saveButton);
    layout.addComponent(removeButton);
    layout.addComponent(examineGroupButton);
}
```

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layout.setComponentAlignment(saveButton, Alignment.MIDDLE_CENTER);
layout.setComponentAlignment(removeButton, Alignment.MIDDLE_CENTER);
layout.setComponentAlignment(examineGroupButton, Alignment.BOTTOM_CENTER);
layout.setExpandRatio(researchNameField, 1);
layout.setExpandRatio(researchDescriptionArea, 3);
layout.setExpandRatio(saveButton, 1);
layout.setExpandRatio(removeButton, 1);
layout.setExpandRatio(groupsTable, 26);
layout.setExpandRatio(examineGroupButton, 1);

setCompositionRoot(layout);
}

/**
 * {@inheritDoc}
 */
@Override
protected void fillTab(Item research) {
    researchNameField.setValue(research.getItemProperty(PaattiColumnNames.RESEARCH_name));
    researchDescriptionArea.setValue(research.getItemProperty(PaattiColumnNames.RESEARCH_description));
    removeButton.setEnabled(true);
    examineGroupButton.setEnabled(true);

    SQLContainer researchGroups = view.getConnection().getResearchGroups(
        research.getItemProperty(PaattiColumnNames.RESEARCH_researchID));

    groupsTable.setContainerDataSource(researchGroups);
    groupsTable.setVisibleColumns(visibleColumns);
    groupsTable.setColumnHeaders(visibleHeaders);
}

/**
 * {@inheritDoc}
 */
@Override
protected void clearTab() {
    researchNameField.setValue("");
    researchDescriptionArea.setValue("");
    groupsTable.setContainerDataSource(null);
    removeButton.setEnabled(false);
    examineGroupButton.setEnabled(false);
}

/**
 * {@inheritDoc}
 * <p/>
```

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

    if (buttonCaption.equals(ElementNames.RESEARCH_VIEW_REMOVE_BUTTON_LABEL)) {
        if (db.removeRowFromTable(view.getSelectedItemId(), PaattiTableNames.RESEARCH,
            PaattiColumnNames.RESEARCH_researchID)) {
            msg = ElementNames.UPDATE_OK;
            view.refresh(null);
            view.setTabsEnabled(false);
        } else {
            msg = ElementNames.UPDATE_FAIL;
        }
    } else if (buttonCaption.equals(ElementNames.RESEARCH_VIEW_SAVE_BUTTON_LABEL)) {
        if (researchNameField.isValid() && researchDescriptionArea.isValid()) {
            String name = researchNameField.getValue().toString().trim();
            String description = researchDescriptionArea.getValue().toString().trim();

            Object rowId = db.createResearch(name, description, view.getSelectedItemId());

            msg = (rowId != null) ? ElementNames.UPDATE_OK : ElementNames.UPDATE_FAIL;
            view.refresh(rowId);
        } else {
            msg = ElementNames.SOMETHING_REQUIRED;
        }
    } else if (buttonCaption.equals(ElementNames.RESEARCH_VIEW_EXAMINE_GROUP_BUTTON_LABEL)) {
        if (groupsTable.isValid()) {
            view.setActiveTab(ApplicationTabSheet.GROUP_TAB, groupsTable.getItem(groupsTable.getValue()));
        } else {
            msg = ElementNames.SOMETHING_REQUIRED;
        }
    }
    if (msg != null) {
        getWindow().showNotification(msg);
    }
}
}
```