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package fi.paatti.research.paattiapplication.components;

import com.vaadin.data.Container.Filter;
import com.vaadin.data.util.filter.Compare;
import com.vaadin.data.util.filter.Like;
import com.vaadin.data.util.sqlcontainer.RowId;
import com.vaadin.data.util.sqlcontainer.SQLContainer;
import com.vaadin.event.ItemClickEvent;
import com.vaadin.ui.Button.ClickEvent;
import com.vaadin.ui.Button.ClickListener;
import com.vaadin.ui.*;
import fi.paatti.paattidatabaseutils.dbService.querydelegates.PaattiQueryDelegate;
import fi.paatti.paattidatabaseutils.names.PaattiColumnNames;
import fi.paatti.paattidatabaseutils.names.PaattiTableNames;
import fi.paatti.research.paattiapplication.ElementNames;
import fi.paatti.research.paattiapplication.views.ApplicationView;

/**
 * The search component is used to search adequate database items in various
 * views.
 *
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 */
public class SearchComponent extends VerticalLayout {

    private ApplicationView applicationView;
    private String tableName;
    private String queryTableIdColumn;
    private String[] visibleColumns;
    private TextField searchField;
    private CheckBox toggleShowDeleted;
    private Table searchQueryContents;
    private Button createButton;
    private Button searchButton;
    private Button selectButton;
    private Filter searchFilter;
    private Filter activeRowFilter;
    private SQLContainer queryResults;

    public static final String[] USER_COLUMNS = new String[] { PaattiColumnNames.USER_userID, PaattiColumnNames.USER_name };
    public static final String[] GROUP_COLUMNS = new String[] {
        PaattiColumnNames.USERGROUP_usergroupId,
        PaattiColumnNames.USERGROUP_name };
}
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public static final String[] SCHEDULE_COLUMNS = new String[] {
    PaattiColumnNames.SCHEDULE_scheduleID,
    PaattiColumnNames.SCHEDULE_description};
public static final String[] RESEARCH_COLUMNS = new String[] {
    PaattiColumnNames.RESEARCH_researchID,
    PaattiColumnNames.RESEARCH_name};
public static final String[] EVENT_COLUMNS = new String[] {
    PaattiColumnNames.EVENT_eventID,
    PaattiColumnNames.EVENT_title};

/**
 * SearchComponent constructor.
 *
 * @param view the view that owns this component instance.
 * @param tableName the name of the query target table.
 * @param tableIdColumn the name of the table's id column.
 */
public SearchComponent(Application view, String tableName, String tableIdColumn) {
    applicationView = view;
    queryTableName = tableName;
    queryTableIdColumn = tableIdColumn;
    visibleColumns = getVisibleColumns(tableName);

    searchField = new TextField(ElementNames.SEARCH_COMPONENT_SEARCH_FIELD_LABEL);
    searchField.setWidth("100%");
    searchField.setEnabled(true);

    toggleShowDeleted = new CheckBox(ElementNames.SEARCH_COMPONENT_TOGGLE_SHOW_DELETED, false);

    searchQueryContents = new Table();
    searchQueryContents.selectable(true);
    searchQueryContents.setSizeFull();
    searchQueryContents.setEnabled(false);
    searchQueryContents.setNullSelectionAllowed(false);
    searchQueryContents.addListener(new ItemClickEvent.ItemClickListener() {
        public void itemClick(ItemClickEvent event) {
            if (event.isDoubleClick()) {
                setViewContents();
            }
        }
    });
    createButton = new Button(ElementNames.SEARCH_COMPONENT_NEW_BUTTON_LABEL);
    createButton.addListener(new ClickListener() {
        public void buttonClick(ClickEvent event) {
            applicationView.setContents(null);
        }
    });
}
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        searchQueryContents.setValue(null);
        selectButton.setEnabled(false);
    }
    });
    createButton.setWidth("100%");
    createButton.setHeight("30px");

    searchButton = new Button(ElementNames.SEARCH_COMPONENT_SEARCH_BUTTON_LABEL);
    searchButton.addListener(new ClickListener() {

        public void buttonClick(ClickEvent event) {
            searchQueryContents.setEnabled(true);
            selectButton.setEnabled(true);
            refresh(null);
        }
    });
    searchButton.setWidth("100%");
    searchButton.setHeight("30px");

    selectButton = new Button(ElementNames.SEARCH_COMPONENT_SELECT_BUTTON_LABEL);
    selectButton.addListener(new ClickListener() {

        public void buttonClick(ClickEvent event) {
            setViewContents();
        }
    });
    selectButton.setEnabled(false);
    selectButton.setWidth("100%");
    selectButton.setHeight("30px");

    addComponent(createButton);
    addComponent(searchField);
    addComponent(toggleShowDeleted);
    addComponent(searchButton);
    addComponent(searchQueryContents);
    addComponent(selectButton);

    setExpandRatio(createButton, 0);
    setExpandRatio(searchField, 0);
    setExpandRatio(toggleShowDeleted, 0);
    setExpandRatio(searchButton, 0);
    setExpandRatio(searchQueryContents, 1);
    setExpandRatio(selectButton, 0);

    setSizeFull();
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activeRowFilter = new Compare.Equal(tableName + "_rowstatus", PaattiQueryDelegate.ROWSTATUS_ACTIVE);
fillSearchTable();
}
/**
 * Returns the visible columns matching the query table.
 */
private String[] getVisibleColumns(String tableName) {
    if (tableName.equals(PaattiTableNames.USER)) {
        return USER_COLUMNS;
    } else if (tableName.equals(PaattiTableNames.USERGROUP)) {
        return GROUP_COLUMNS;
    } else if (tableName.equals(PaattiTableNames.SCHEDULE)) {
        return SCHEDULE_COLUMNS;
    } else if (tableName.equals(PaattiTableNames.RESEARCH)) {
        return RESEARCH_COLUMNS;
    } else if (tableName.equals(PaattiTableNames.EVENT)) {
        return EVENT_COLUMNS;
    }
    return null;
}
/**
 * Fills the search table.
 */
private void fillSearchTable() {
    queryResults = applicationView.getConnection().getSQLContainerFromDBTable(queryTableName, queryTableIdColumn, true);
    searchQueryContents.setContainerDataSource(queryResults);
    searchQueryContents.setVisibleColumns(visibleColumns);
    searchQueryContents.setColumnExpandRatio(visibleColumns[0], 0);
    searchQueryContents.setColumnExpandRatio(visibleColumns[1], 1);
    searchQueryContents.setEnabled(true);
    selectButton.setEnabled(true);
}
/**
 * Sets the filter for the search.
 */
private void setSearchFilter() {
    queryResults.removeContainerFilter(searchFilter);
    queryResults.removeContainerFilter(activeRowFilter);
    searchFilter = new Like(visibleColumns[1], "%" + searchField.getValue().toString().trim() + "%", false);
}
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queryResults.addContainerFilter(searchFilter);

if (!toggleShowDeleted.booleanValue()) {
    queryResults.addContainerFilter(activeRowFilter);
}

/**
 * Refreshes the component's searchQueryContents table by fetching new
 * contents into the table from the database.
 *
 * @param id The row's id that should be set as the selected value. If null,
 * no value is selected.
 */
public void refresh(Object id) {
    setSearchFilter();
    setSelected(id);
    setViewContents();
}

/**
 * Sets the row with the given id as the selected row in searchQueryContents
 * table.
 *
 * @param id The row's id.
 */
private void setSelected(Object id) {
    if (id == null) {
        return;
    }

    RowId itemId = (RowId) searchQueryContents.firstItemId();

    while (itemId != null) {
        if (itemId.toString().equals(id.toString())) {
            searchQueryContents.setValue(itemId);
            searchQueryContents.setCurrentPageFirstItemId(itemId);
            break;
        }
        itemId = (RowId) searchQueryContents.nextItemId();
    }

    /**
     * Sets the content of the parent view.
     */
}
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private void setViewContents() {  
    if (searchQueryContents.getValue() != null) {  
        applicationView.setContents(searchQueryContents.getItem(searchQueryContents.getValue()));  
    }  
}
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