

Project Ivanhoe

Design Document

Group 16

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4. Graphical User Interface

4.1 Graphical User Interface Overview

Ivanhoe uses Java Swing to implement the graphical user interface. The main view consists of a frame with a menu bar and a few fields with access to the main functionality of the program.

The tabbed pane to the right provides access to multiple functionalities of the program, including tools for creating, displaying and analyzing the user's finances.

To assist the user in navigating their budgeted posts, a tree structure is shown in the left part of the main frame. The tree will show the user's financial categories and the corresponding posts.

In the "Visningsläge" tab, a table is displayed, showing a simple analysis of a budget.

In the "Lägg till post" tab, the user can add their expenses and incomes to their profile.

In the "Analys" tab, the user can set a number of parameters for "advanced" analysis of their finances.

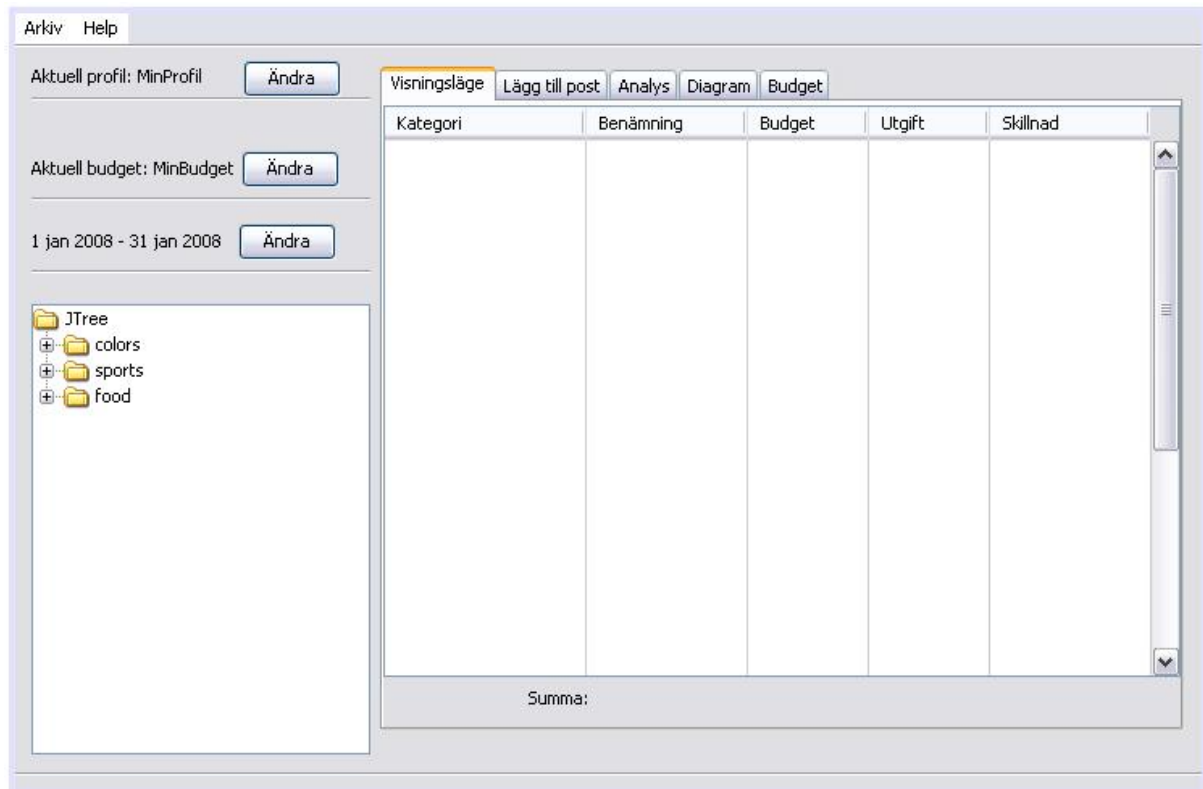
In the "Budget" tab, the user can create, modify and manage their budgets.

The time setting to the left in the main frame will define the time period for display in "Visningsläge", and decide which categories will be displayed in the tree, depending on when the categories were entered.

4.2 Screen shots

JPanel *mainPanel*

title: "Ivanhoe"



is the main view of the program and is called upon system startup.

Fields:

JMenuBar *menuBar*

JTree *mainTree*

JTabbedPane *mainTabs*

Controls:

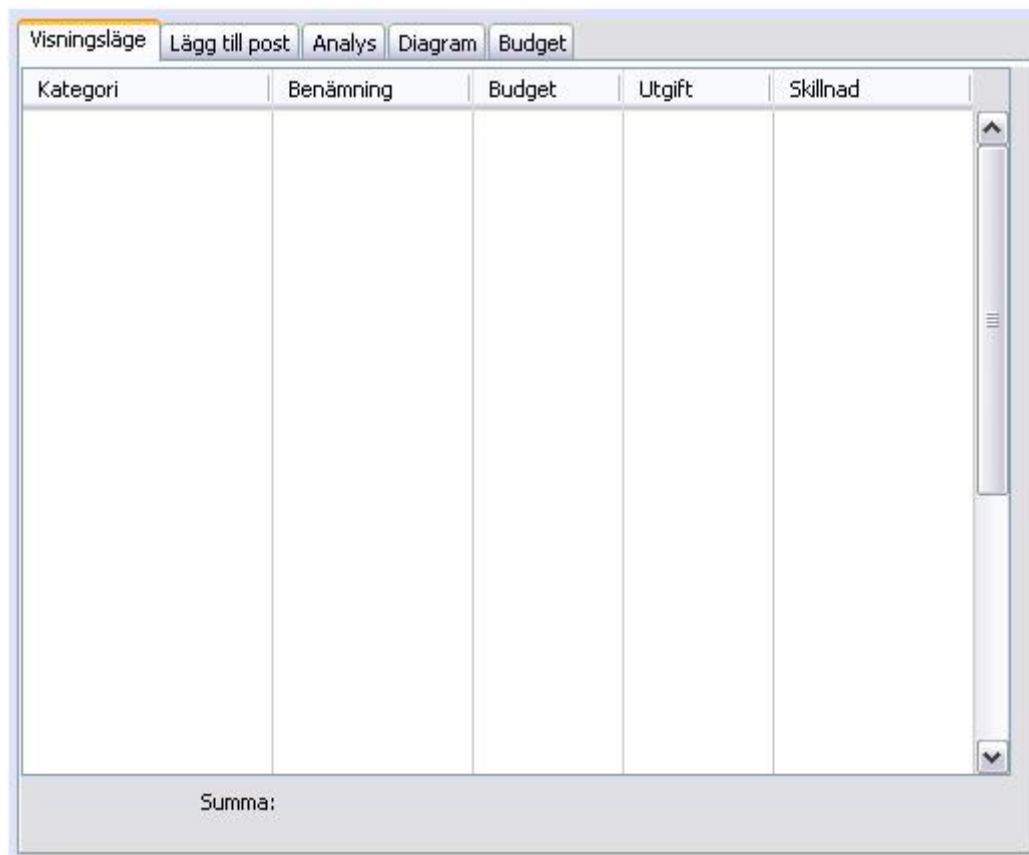
JButton *changeProfileButton* "Ändra" calls *chooseProfileDialog*

JButton *changeBudgetButton* "Ändra" calls *chooseBudgetDialog*

JButton *changeDateButton* "Ändra" calls *chooseDateDialog*

References to Requirements Document: All points.

JPanel *showPanel*
title: "visningsläge"



Kategori	Benämning	Budget	Utgift	Skillnad
Summa:				

is chosen from the *mainPanel*

Fields:

JTable showTable

Controls:

References to Requirements Document: 4.1.1.6, 4.1.1.7

JPanel addPostPanel
title: "lägg till post"

Visningsläge **Lägg till post** Analys Diagram Budget

Lägg till ny post i din profil

Kategori Benämning Inkomst Utgift

Utgift

Summa kr Datum &MMDD

Kategori	Benämning	Utgift	Datum

is chosen in the mainPanel.

Fields:

JComboBox name

JComboBox category

JRadioButton income

JRadioButton expenditure

JTable postTable

Controls:

JButton addButton "lägg till" calls *addPost()*

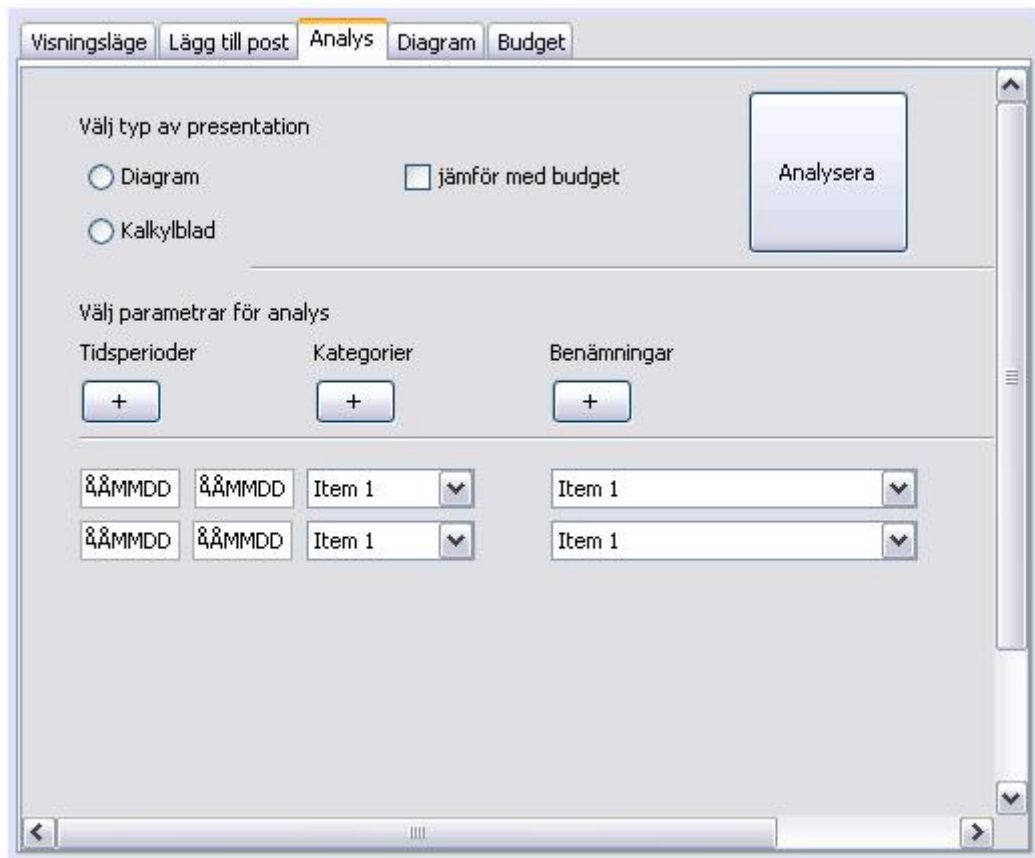
JButton save "spara" calls *save()*

JButton remote "ta bort" calls *remove()*

JButton change "ändra" calls *change()*

References to Requirements Document: 4.1.1.4, 4.1.1.5

JPanel *analysisPanel*
title: "Analys"



chosen from the 5 different JPanels in the main view

Fields:

JTextField startDate

JTextField endDate

JComboBox categoryBox

JComboBox subCategoryBox

JRadioButton diagramButton

JRadioButton calculusButton

JCheckBox compareCheckbox

Controls:

JButton analysis calls *dataAnalysis()*

JButton timePeriod calls *addTimePeriod()*

JButton category calls *addCategory()*

JButton subCategory calls *addSubCategory()*

References to Requirements Document: 4.1.1.7

JPanel showDiagramPanel
title: "Diagram"



is chosen in the mainPanel.

Fields:

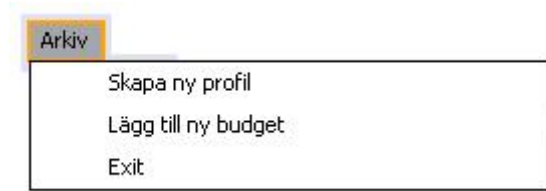
JPanel diagramPanel

Controls:

References to Requirements Document: 4.1.1.7.1

JMenu *fileMenu*

title: "Arkiv"



is chosen from the *menuBar*

Fields:

JMenu *fileMenu* "Arkiv"

Controls:

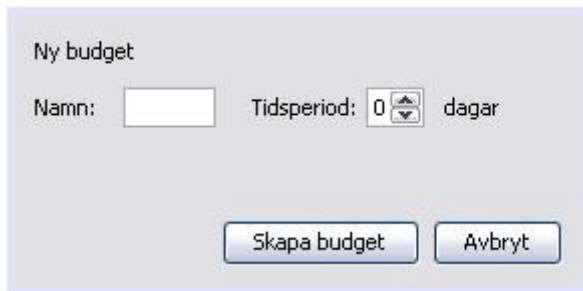
JMenuItem *createNewProfile* "skapa ny profil" calls *createNewProfileDialog()*

JMenuItem *addNewBudget* "lägg till ny budget" calls *addNewBudget()*

JMenuItem *exit* "exit" calls the *exit()*, quits the application

References to Requirements Document: 4.1.1.1, 4.1.1.2

JDialog createNewBudgetDialog
title: "skapa ny budget"



is chosen from the *mainPanel*

Fields:

JTextField budgetName

JSpinner daySpinner

Controls:

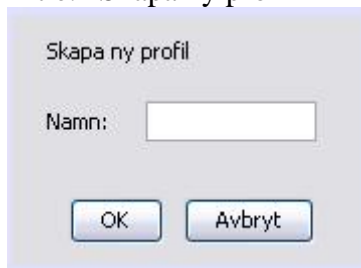
JButton createBudget "skapa budget" calls *createBudget()*

JButton cancel "avbryt" quits the dialog

References to Requirements Document: 4.1.1.2

JDialog *createProfileDialog*

Title: "Skapa ny profil"



Is called from *createNewProfile*

Fields:

JTextField *profileNameField*

Controls:

JButton *okButton* "OK" calls *createProfile()* and closes the dialog.

JButton *cancelButton* "Avbryt" closes the dialog.

Reference to Requirements Document: 4.1.1.1

JDialog *chooseBudgetDialog*
title: "Välj budget"



is chosen from the *menuBar*, and *changeBudgetButton*

Fields:

JList *budgetList*

Controls:

JButton *newBudgetButton* "Skapa ny budget" calls *createNewBudgetDialog()*

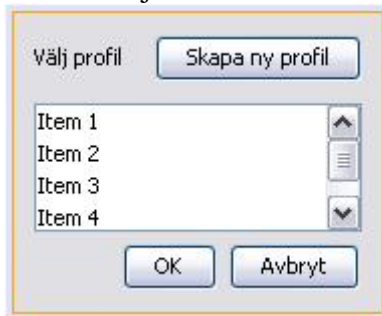
JButton *okButton* "OK" calls *createBudgetPanel()*

JButton *cancelButton* "Avbryt" exits dialog

References to Requirements Document: 4.1.1.2, 4.1.1.3

JDialog chooseProfileDialog

Title: "Välj Profil"



is called from *createNewProfileButton*.

Fields:

JList profileList

Controls:

JButton createProfile "Skapa ny profil" calls *JDialog createProfileDialog*

JButton okButton "OK" calls *createNewProfile()*

JButton cancelButton "Avbryt" closes the dialog

Reference to Requirements Document: 4.1.1.1

JDialog chooseDateDialog
title: "Välj tidsperiod för visning"



is called from JPanel "visningsläge" button "ändra"

Fields:

JTextField startDate

JTextField endDate

Controls:

JButton okButton "OK" calls *changeTimePeriod()*

JButton cancelButton "Avbryt" quits the dialog

References to Requirements Document: 4.1.1.6, 4.1.1.7