



IEGULDĪJUMS TAVĀ NĀKOTNĒ

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Pārskats Nr.4 par periodu no 2014.gada 1.septembra līdz 2015.gada 28.februārim.

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1. Kopsavilkums

Pārskata periodā (2014-09-01 – 2015-02-28) projekta „Programmatūras izstrādes rezultātu apstrādes un interpretācijas tehnoloģija” (Krabis) aktivitātes "Web serveris" ietvaros veikti šādi darbi:

1. Tīmekļa servera prasību analīze.
2. Tīmekļa servera izstrāde, tai skaitā šādu pakotņu izstrāde:
 - a. com.sets.krabis.controller
 - b. com.sets.krabis.data.ddo
 - c. com.sets.krabis.enums
 - d. com.sets.krabis.util
 - e. com.sets.krabis.validator
3. Darbs apspriests regulārās projekta sanāksmēs.

2. Ievads

Dokuments uzskaita izstrādātos tīmekļa servera elementus aktivitātes ietvaros.

3. Tīmekļa lapas

Izstrādātās tīmekļa lapas:

- webapp\error.xhtml
- webapp\frame.xhtml
- webapp\index.xhtml
- webapp\login.xhtml
- webapp\loginOrRegister.xhtml
- webapp\restricted\areaChartOptions.xhtml
- webapp\restricted\auditLogs.xhtml
- webapp\restricted\donutChartOptions.xhtml
- webapp\restricted\gppRuns.xhtml
- webapp\restricted\home.xhtml
- webapp\restricted\pendingUsersOptions.xhtml
- webapp\restricted\pieChartOptions.xhtml
- webapp\restricted\scBubbleOptions.xhtml
- webapp\restricted\testRuns.xhtml
- webapp\restricted\admin\editUser.xhtml
- webapp\restricted\admin\newUser.xhtml
- webapp\restricted\admin\users.xhtml
- webapp\restricted\superadmin\classifier.xhtml
- webapp\restricted\write\classifier.xhtml
- webapp\restricted\write\import.xhtml

4. Pielāgotās vadīklas

- webapp\resources\krabc\areaChart.xhtml
- webapp\resources\krabc\classifier.xhtml
- webapp\resources\krabc\donutChart.xhtml
- webapp\resources\krabc\inputField.xhtml
- webapp\resources\krabc\logEntryList.xhtml
- webapp\resources\krabc\pendingUsersList.xhtml
- webapp\resources\krabc\pieChart.xhtml
- webapp\resources\krabc\rightsTable.xhtml
- webapp\resources\krabc\rowEdit.xhtml
- webapp\resources\krabc\scBubble.xhtml
- webapp\resources\krabc\table.xhtml

5. Klienta puses programmatūra

- `webapp\resources\js\columntoggler.js`
- `webapp\resources\js\krabis.js`

6. Pakotne: com.sets.krabis.controller

Pakotne satur tīmekļa lapu kontrolierus.

6.1. Klase AreaChartOptionsCtrl

java.lang.Object

com.sets.krabis.controller.AreaChartOptionsCtrl

@Named

@ViewScoped

public class AreaChartOptionsCtrl extends Object implements Serializable

6.1.1. Lauki

- protected transient GPPService gppService
- protected transient User user

6.1.2. Konstruktori

- public AreaChartOptionsCtrl()

6.1.3. Metodes

- public com.sets.krabis.data.ddo.AreaChartOptions getOpts()
- public void setOpts(com.sets.krabis.data.ddo.AreaChartOptions opts)
- public org.primefaces.model.TreeNode getGppTreeRoot()
- public void setGppTreeRoot(org.primefaces.model.TreeNode gppTreeRoot)
- public com.sets.krabis.data.ddo.AreaChartModel getPrevModel()
- public org.primefaces.model.TreeNode getSelectedNode()
- public void setSelectedNode(org.primefaces.model.TreeNode selectedNode)
- public void preview()
- public void onNodeSelect(org.primefaces.event.NodeSelectEvent event)
- public void onNodeUnselect(org.primefaces.event.NodeUnselectEvent event)
- public List<com.sets.krabis.data.model.view.FullTestStatusGpp> getTestStats()
- public List<com.sets.krabis.data.model.Environment> getEnvironments()
- public List<com.sets.krabis.data.model.EnvironmentProperty> getEnvProps()
- public String save()

6.2. Klase AuditLogCtrl

java.lang.Object

com.sets.krabis.controller.AuditLogCtrl

@Named

@ViewScoped

public class AuditLogCtrl extends Object implements Serializable

6.2.1. Konstruktori

- public AuditLogCtrl()

6.2.2. Metodes

- public int getRowsPerPage()
- public void setRowsPerPage(int rowsPerPage)
- public com.sets.krabis.data.dto.AuditLogOptions getOpts()
- public void setOpts(com.sets.krabis.data.dto.AuditLogOptions opts)
- public List<com.sets.krabis.data.dto.AuditLogEntry> getLogs()
- public void setLogs(List<com.sets.krabis.data.dto.AuditLogEntry> logs)
- public com.sets.krabis.enums.LogMessageType[] getLogMessageTypes()
- public void readAuditLogList()

6.3. Klase ClassifierCtrl

java.lang.Object

com.sets.krabis.controller.ClassifierCtrl

@Named

@ViewScoped

public class ClassifierCtrl extends Object implements Serializable

6.3.1. Konstruktori

- public ClassifierCtrl()

6.3.2. Metodes

- public String getClassName()
- public List<org.primefaces.model.SortMeta> getPreSortOrder()
- public List getClsfrList()
- public void setClsfrList(List clsfrList)

- public List getFilteredClsfrList()
- public void setFilteredClsfrList(List filteredClsfrList)
- public List getSelectedClsfrList()
- public void setSelectedClsfrList(List selectedClsfrList)
- public String getNewName()
- public void setNewName(String newName)
- public String getNewOdType()
- public void setNewOdType(String newOdType)
- public com.sets.krabis.data.model.EnvironmentPropertyType
getNewEnvPropType()
- public void setNewEnvPropType
(com.sets.krabis.data.model.EnvironmentPropertyType newEnvPropType)
- public List<String> getEpColumns()
- public List<com.sets.krabis.data.model.EnvironmentPropertyType>
getEnvPropTypeList()
- public List<String> getOdColumns()
- public List<String> getOdTypeList()
- public void onRowEdit(org.primefaces.event.RowEditEvent event)
- public void delete()
- public void addRow()
- public javax.faces.component.UIComponent findComponentInRoot(String id)

6.4. Klase DonutChartOptionsCtrl

java.lang.Object

com.sets.krabis.controller.DonutChartOptionsCtrl

@Named

@ViewScoped

public class DonutChartOptionsCtrl extends Object implements Serializable

6.4.1. Lauki

- @Inject
protected transient com.sets.krabis.service.GPPService gppService
- @Inject
protected transient com.sets.krabis.data.model.User user

6.4.2. Konstruktori

- public DonutChartOptionsCtrl()

6.4.3. Metodes

- public DonutChartOptions getOpts()
- public void setOpts(DonutChartOptions opts)
- public org.primefaces.model.TreeNode getGppTreeRoot()
- public void setGppTreeRoot(org.primefaces.model.TreeNode gppTreeRoot)
- public DonutChartModel getPrevModel()
- public org.primefaces.model.TreeNode getSelectedNode()
- public void setSelectedNode(org.primefaces.model.TreeNode selectedNode)
- public void preview()
- public void onNodeSelect(org.primefaces.event.NodeSelectEvent event)
- public void onNodeUnselect(org.primefaces.event.NodeUnselectEvent event)
- public List<com.sets.krabis.data.model.view.FullTestStatusGpp> getTestStats()
- public List<com.sets.krabis.data.model.Environment> getEnvironments()
- public String save()

6.5. Klase EntityTableController<T>

java.lang.Object

com.sets.krabis.controller.EntityTableController<T>

public class EntityTableController<T> extends Object implements Serializable

6.5.1. Ligzdotas klases

- static class EntityTableController.ColumnSubset
- class EntityTableController.SubsetColumnList

6.5.2. Lauki

- @Inject
protected com.sets.krabis.service.EntityHelperService ehService
- @Inject
protected com.sets.krabis.service.GenericService service
- protected TableController sup
- protected Class<T> type
- protected String orderBy
- protected List<List<com.sets.krabis.metamodel.ColumnModel>> filters
- protected List<T> list
- protected List<T> filteredList
- protected List<com.sets.krabis.metamodel.ColumnModel> columns

- protected final List<com.sets.krabis.metamodel.ColumnModel> tableColumns
- protected final List<com.sets.krabis.metamodel.ColumnModel> filterFields
- protected HashMap<String,Object> dbFilter
- protected HashMap<String,Boolean> dbFilterRecurseFlag
- protected T selectedRow
- protected List<org.apache.commons.lang3.tuple.Pair<String,String>> dependsOn
- protected HashMap<String,Object> depFilter
- protected com.sets.krabis.metamodel.TableModel tableModel
- protected final Map<String,List<Object>> valueListMap

6.5.3. Konstruktori

- public EntityTableController()

6.5.4. Metodes

- public void init(Class<T> type, String pageId, String dependsOn)
- protected void readEntities()
- public List<T> getFullList()
- public List<T> getList()
- public com.sets.krabis.metamodel.TableModel getTableModel()
- public List<List<com.sets.krabis.metamodel.ColumnModel>> getFilters()
- public List valueList(String field)
- public List<org.apache.commons.lang3.tuple.Pair<String,String>> getDependsOn()
- public boolean isDependenciesSet()
- public void readFiltered()
- public void clearFilter()
- public boolean isScrollable()
- public int getScrollHeight()
- public List<T> getFilteredList()
- public void setFilteredList(List<T> filteredList)
- public HashMap<String,Object> getDbFilter()
- public void setDbFilter(HashMap<String,Object> dbFilter)
- public HashMap<String,Boolean> getDbFilterRecurseFlag()
- public void setDbFilterRecurseFlag(HashMap<String,Boolean> dbFilterRecurseFlag)
- public List<com.sets.krabis.metamodel.ColumnModel> getColumns()
- public List<com.sets.krabis.metamodel.ColumnModel> getTableColumns()
- public List<com.sets.krabis.metamodel.ColumnModel> getFilterFields()

- public T getSelectedRow()
- public void setSelectedRow(T selectedRow)
- public String selectBtnIcon(Object currentRow)
- public void edit(T selected, String editCols, boolean editable)
- public void add(String editCols)
- protected void openDialog(Map<String,List<String>> params, String editCols)
- protected int calendarHeight()
- public void refreshLine(int ind)
- public void addLine()
- public void deleteLine(int ind)
- public void onToggle(org.primefaces.event.ToggleEvent e)
- public javax.faces.convert.Converter propConverter(String prop)
- public Class propType(String prop)
- public void setSup(TableController sup)

6.6. Klase GppRunsCtrl

java.lang.Object
com.sets.krabis.controller.TableController
com.sets.krabis.controller.GppRunsCtrl

@Named

@ViewScoped

public class GppRunsCtrl extends TableController

6.6.1. Konstruktori

- public GppRunsCtrl()

6.6.2. Metodes

- @Produces
public GppRunsTableController getEntityTableController(@New
GppRunsTableController ctrl)
- public EntityTableController table(String pageId, String className, String
dependsOn) Overrides: table in class TableController

6.7. Klase GppRunsTableController

```
java.lang.Object  
com.sets.krabis.controller.EntityTableController<com.sets.krabis.data.model.GppRun>  
com.sets.krabis.controller.GppRunsTableController
```

```
public class GppRunsTableController  
extends EntityTableController<com.sets.krabis.data.model.GppRun>
```

6.7.1. Ligzdototas klases

- class GppRunsTableController.FullColumnList

6.7.2. Konstruktori

- public GppRunsTableController()

6.7.3. Metodes

- public List<com.sets.krabis.metamodel.ColumnModel> getTableColumns()
Overrides: getTableColumns in class
EntityTableController<com.sets.krabis.data.model.GppRun>
- public void readFiltered() Overrides: readFiltered in class
EntityTableController<com.sets.krabis.data.model.GppRun>
- public void readEntities() Overrides: readEntities in class
EntityTableController<com.sets.krabis.data.model.GppRun>

6.8. Klase HomeCtrl

```
java.lang.Object  
com.sets.krabis.controller.HomeCtrl
```

```
@Named
```

```
@ViewScoped
```

```
public class HomeCtrl extends Object implements Serializable
```

6.8.1. Konstruktori

- public HomeCtrl()

6.8.2. Metodes

- public org.primefaces.model.DashboardModel getModel()
- public Map<String,GadgetModel> getGadgetModels()

- public void onClose(org.primefaces.event.CloseEvent event)
- public void onToggle(org.primefaces.event.ToggleEvent event)
- public void onReorder(org.primefaces.event.DashboardReorderEvent event)

6.9. Klase LoginCtrl

java.lang.Object
com.sets.krabis.controller.LoginCtrl

@Named
@ViewScoped
public class LoginCtrl extends Object implements Serializable

6.9.1. Konstruktori

- public LoginCtrl()

6.9.2. Metodes

- public void login()
- public void logout()
- public String getUsername()
- public void setUsername(String username)
- public String getPassword()
- public void setPassword(String password)

6.10. Klase LoginOrRegisterCtrl

java.lang.Object
com.sets.krabis.controller.LoginOrRegisterCtrl

@Named
@ViewScoped
public class LoginOrRegisterCtrl extends Object implements Serializable

6.10.1. Lauki

- @Inject
protected transient com.sets.krabis.service.UserService userService

6.10.2. Konstruktori

- public LoginOrRegisterCtrl()

6.10.3. Metodes

- public void login()
- public void register()
- public String getUsername()
- public void setUsername(String username)
- public String getPassword()
- public void setPassword(String password)
- public com.sets.krabis.data.model.User getInvUser()
- public void setInvUser(com.sets.krabis.data.model.User invUser)

6.11. Klase PendingUsersOptionsCtrl

```
java.lang.Object  
com.sets.krabis.controller.PendingUsersOptionsCtrl
```

```
@Named
```

```
@ViewScoped
```

```
public class PendingUsersOptionsCtrl extends Object implements Serializable
```

6.11.1. Lauki

- @Inject
protected transient com.sets.krabis.service.GPPService gppService
- @Inject
protected transient com.sets.krabis.data.model.User user

6.11.2. Konstruktori

- public PendingUsersOptionsCtrl()

6.11.3. Metodes

- public PendingUsersOptions getOpts()
- public void setOpts(PendingUsersOptions opts)
- public org.primefaces.model.TreeNode getGppTreeRoot()
- public void setGppTreeRoot(org.primefaces.model.TreeNode gppTreeRoot)
- public PendingUsersModel getPrevModel()
- public org.primefaces.model.TreeNode getSelectedNode()
- public void setSelectedNode(org.primefaces.model.TreeNode selectedNode)
- public void preview()
- public void onNodeSelect(org.primefaces.event.NodeSelectEvent event)

- public void onNodeUnselect(org.primefaces.event.NodeUnselectEvent event)
- public String save()

6.12. Klase PieChartOptionsCtrl

```
java.lang.Object
com.sets.krabis.controller.PieChartOptionsCtrl
```

```
@Named
```

```
@ViewScoped
```

```
public class PieChartOptionsCtrl extends Object implements Serializable
```

6.12.1. Lauki

- @Inject
protected transient com.sets.krabis.service.GPPService gppService
- @Inject
protected transient com.sets.krabis.data.model.User user

6.12.2. Konstruktori

- public PieChartOptionsCtrl()

6.12.3. Metodes

- public PieChartOptions getOpts()
- public void setOpts(PieChartOptions opts)
- public org.primefaces.model.TreeNode getGppTreeRoot()
- public void setGppTreeRoot(org.primefaces.model.TreeNode gppTreeRoot)
- public PieChartModel getPrevModel()
- public org.primefaces.model.TreeNode getSelectedNode()
- public void setSelectedNode(org.primefaces.model.TreeNode selectedNode)
- public void preview()
- public void onNodeSelect(org.primefaces.event.NodeSelectEvent event)
- public void onNodeUnselect(org.primefaces.event.NodeUnselectEvent event)
- public List<com.sets.krabis.data.model.view.FullTestStatusGpp> getTestStats()
- public List<com.sets.krabis.data.model.Environment> getEnvironments()
- public String save()

6.13. Klase ScBubbleOptionsCtrl

java.lang.Object
com.sets.krabis.controller.ScBubbleOptionsCtrl

@Named
@ViewScoped
public class ScBubbleOptionsCtrl extends Object implements Serializable

6.13.1. Lauki

- @Inject
protected transient com.sets.krabis.service.GPPService gppService
- @Inject
protected transient com.sets.krabis.data.model.User user

6.13.2. Konstruktori

- public ScBubbleOptionsCtrl()

6.13.3. Metodes

- public ScBubbleOptions getOpts()
- public void setOpts(ScBubbleOptions opts)
- public org.primefaces.model.TreeNode getGppTreeRoot()
- public void setGppTreeRoot(org.primefaces.model.TreeNode gppTreeRoot)
- public org.primefaces.model.TreeNode[] getSelectedNodes()
- public void setSelectedNodes(org.primefaces.model.TreeNode[] selectedNodes)
- public ScBubbleModel getPrevModel()
- public void preview()
- public void onNodeSelect(org.primefaces.event.NodeSelectEvent event)
- public void onNodeUnselect(org.primefaces.event.NodeUnselectEvent event)
- public String save()
- public List<String> getBenchmarks()
- public Set<ScBubbleOptions.SelectedBuild> getScBubbleRun1Options()
- public Set<ScBubbleOptions.SelectedBuild> getScBubbleRun2Options()

6.14. Klase TableController

java.lang.Object
com.sets.krabis.controller.TableController

@Named

@ViewScoped

public class TableController extends Object implements Serializable

6.14.1. Lauki

- @Inject
protected com.sets.krabis.service.GenericService service
- protected transient Map<String,Map<String,EntityTableController>> cMap

6.14.2. Konstruktori

- public TableController()

6.14.3. Metodes

- public EntityTableController table(String pageId, String className, String dependsOn)
- public void notify(String pageId, String clazz)
- public Object getSelection(String pageId, String clazz)

6.15. Klase TestRunsCtrl

java.lang.Object

com.sets.krabis.controller.TableController

com.sets.krabis.controller.TestRunsCtrl

@Named

@ViewScoped

public class TestRunsCtrl extends TableController

6.15.1. Konstruktori

- public TestRunsCtrl()

6.16. Klase UserData

java.lang.Object

com.sets.krabis.controller.UserData

@Named

@SessionScoped

public class UserData extends Object implements Serializable

6.16.1. Ligzdotas klases

- static class UserData.Language

6.16.2. Konstruktori

- public UserData()

6.16.3. Metodes

- public Locale getLocale()
- public com.sets.krabis.data.model.User getUser()
- public void setUser(com.sets.krabis.data.model.User user)
- public UserData.Language getLanguage()
- public void setLanguage(UserData.Language language)
- public UserData.Language[] getLanguages()
- public @Produces @SessionScoped public List<Long> getGppIds()
- public org.primefaces.model.TreeNode getGppTreeRoot()
- public org.primefaces.model.TreeNode getSelectedNode()
- public void setSelectedNode(org.primefaces.model.TreeNode selectedNode)

7. Pakotne: `com.sets.krabis.data.ddo`

Pakotne satur datu attēlošanas objektus:

- Klase `AreaChartModel`
- Klase `AreaChartOptions`
- Klase `DonutChartModel`
- Klase `DonutChartOptions`
- Klase `GadgetModel`
- Klase `GadgetOptions`
- Klase `GPPTreeNode`
- Klase `PendingUsersModel`
- Klase `PendingUsersOptions`
- Klase `PieChartModel`
- Klase `PieChartOptions`
- Klase `ScBubbleModel`
- Klase `ScBubbleOptions`

8. Pakotne: com.sets.krabis.enums

Pakotne satur šādus uzskaitījumus.

8.1. Uzskaitījums Gadget

```
java.lang.Object  
java.lang.Enum<Gadget>  
com.sets.krabis.enums.Gadget
```

```
public enum Gadget extends Enum<Gadget>
```

8.1.1. Uzskaitījuma konstantes

- public static final Gadget DonutChart
- public static final Gadget AreaChart
- public static final Gadget PieChart
- public static final Gadget PendingUsers
- public static final Gadget ScBubble

8.1.2. Metodes

- public String getOptionsPage()
- public String getOptionsPageIcon()
- public static Gadget valueOf(String name)
Returns the enum constant of this type with the specified name.
- public static Gadget[] values()
Returns an array containing the constants of this enum type, in the order they are declared.

9. Pakotne: com.sets.krabis.util

Pakotne satur palīgklases:

- Klase CustomChartRenderer
- Klase EntityConverter
- Klase EntityListConverter
- Klase EntityTableColumnTogglerRenderer
- Klase Resources
- Klase ScBubbleChartSeries
- Klase ScBubbleRenderer
- Klase StringTrimConverter

10. Pakotne: `com.sets.krabis.validator`

Pakotne satur validācijas klases:

- Klase `EmailValidator`
- Klase `UniqueFieldValidator`

11. Rezultāti

Aktivitātes ietvaros ir izstrādāts tīmekļa serveris un tā komponentes.