



Power User Reporting Enhancements

Project Plan

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Project Description:

Power users in organizations often wish to report on custom data sources. Traditionally power user reporting tools connect to a back-end database and allow the definition of an SQL query and then reports are built on the resultset from this query.

Kiwiplan wishes to allow the user to link together business objects in a SQLjoin style fashion to achieve custom data sources based on the business objects, rather than just a SQL query on the database backend. This will mean that the joins are on business attributes or associations, rather than on foreign key columns.

Project Goal:

To create a data source definition tool and integrate this with the existing reporting facilities in the Kiwiplan Java GUI framework.

The project is roughly divided into five stages:

- Stage One: Project familiarization and planning
- Stage Two: Design/Analysis
- Stage Three: Implementing prototype
- Stage Four: Improve the prototype into fully-functioned application.
- Stage Five: Testing and re-work

Stage One: Project familiarization and planning (started 15/March/07)		
Proposed Tasks	Deliverables	Estimated Duration
1. Read and understand the project outline, identify the goal and scope of the project.	N/A	2 days
2. Research standard reporting tools, in particular, look at JasperReport and DataVision , identifying how reporting tool works in general.	N/A	1 weeks
3. Research on how the joins of business objects can be done, looking at similar systems.	N/A	1 weeks
4. Set up project website (to be viewed inside university intranet).	Project website	2 days
5. Prepare introductory seminar presentation. (scheduled on 21/March/2007 at 9:30am in room 731.324, Tamaki Campus).	Presentation slides	1 day
6. Prepare project plan.	Project plan	1 day
7. Investigate how the current reporting facility is supported in Kiwiplan framework.	N/A	1-2 days
8. Identify requirements (functional/non-functional)	Requirement specifications	3 days
Estimated completion: 13/April/07		

Stage Two: Design and Analysis (estimated start on: 16/April/07)		
Proposed Tasks	Deliverables	Estimated Duration
a) Identify user cases. Prepare system architecture diagram, OO design class diagram, sequence diagram, etc	UML diagrams	1.5 weeks
b) Design user interface (look and feel) for the data source definition tools, talk to Kiwiplan about it.	UI-structure diagram	3 days
Estimated completion: 27/April/2007		

Stage Three: Implementing prototype application (Implementation Phase 1) (estimated start on: 1/May/07)		
Proposed Tasks	Deliverables	Estimated Duration
My current plan is to implement the underlying system completely outside Kiwiplan framework. i.e. to make a stand-alone application which I can experiment with it and investigate lots of pros and cons out of it. The bottom line is: the application should successfully show it does what are required. This prototype version: (a) Do not emphasize on UI design. (b) May only contain minimum features (c) Not fully tested. (d) Does not depend on Kiwiplan framework.	1. Working prototype application 2. End of semester report 3. End of semester presentation	1 month (approx.)
Estimated completion: 25/May/2007		

Stage Four: Improve the prototype into fully-functioned application (Implementation Phase 2)

(estimated start on: 18/June/07)

Proposed Tasks	Deliverables	Estimated Duration
1. Continue the work from the prototype, develop a set of improved version of previous UML diagrams.	Improved UML design diagrams	1 week
2. Coding the application inside Kiwiplan framework. It should: (a) Fully integrated into Kiwiplan framework (b) Fixed the previous bugs/limitations from the prototype version	Fully-functioned application	1.5 months
Estimated completion: 10/August/2007		

Stage Five: Testing and re-work

(estimated start on: 13/August/07)

Proposed Tasks	Deliverables	Estimated Duration
1. Writing test cases	Code passes JUnit tests	2 week
2. Make improvements as directed by QA.	Commercial quality software	2 weeks (Estimated coding end: 14/Sep/2007)
3. Writing documentations	Documentation: user manual etc.	2 weeks
4. Prepare final report for Kiwiplan and university	Final report	1 Month
5. Prepare final presentation	Final presentation	3 days
Estimated project completion: 9/Nov/2007		