

CSSE 490 – Model-Based Software Engineering

Project Milestone 2

This second project milestone entails developing the basic Model-Based Software Engineering environment platform for assembling pieces from the first iteration of the “FacePamphlet” system. As the milestones proceed through the term, the environment will move from a relatively simple component assembly environment to one that can do more automation in the development process through increasing levels of transformation.

The “FacePamphlet” software developed in Milestone 1 must be componentized into pieces that can be stored in a repository and later assembled into the project using basic mappings. Components in the repository have a couple types of forms:

1. Models (e.g., analysis, architecture, design, implementation, etc.)
2. Language (e.g., source code, scripts, XML, etc.)

Using the components captured in the repository, the “FacePamphlet” system should be generated using the mappings for assembling the product.

Objective

To design and build a basic Model-Based Software Engineering environment platform for assembling pieces from the first iteration of the FacePamphlet application from Milestone 1.

Due Dates

Review of approach on Tasks 1-3, Week 4 in class Tuesday, (March 29th, 2011).

Documents and code: 11:59 p.m., Friday, Week 4, (April 1st, 2011 – no foolin’!).

Demonstration of the capability should be given at the project lab also Friday, Week 4.

Tasks

This is a summary of tasks that are detailed in the pages that follow.

1. Organize the “FacePamphlet” components for storage in and retrieval from a repository. These should include model and language components similar to those described above in the introduction. The repository should have a design that can be evolved to accommodate transformations later as the term progresses.
2. Design an initial metamodel that accommodates mappings from the components identified in the repository. This is a basic metamodel similar to the one that the Eclipse Modeling Project uses. The layers can be simple now, but should be able to be adapted later for more transforms.

3. Using the metamodel and repository, develop a reasonable scenario with the requisite mappings and interfaces to assemble the FacePamphlet application.
4. Demonstrate that the environment you produced can assemble and produce the FacePamphlet application at your project lab on Friday of 4th week. Please make sure your instructor is able to access your code on SVN.

Submitting Your Work

Please submit your Milestone 2 document with your operational scenarios, Logical Architecture, Interaction Diagrams, Design Class Diagrams, and the like as a single document to the appropriate Angel dropbox. Please submit a **pdf** file with a cover page containing your Names, Assignment Title, Date, and Campus Mail number. Please name the document:

MS2-BasicAssemblyEnvironment.pdf.