

## Check-List

### Senior Project

#### Assessment of Student Outcomes of the BS in Computer Science of the School of Computing and Information Sciences Florida International University

The School of Computing and Information Sciences evaluates the Senior Projects of its graduating seniors for the purpose of assessing the level of attainment of the Student Outcomes of the BS in Computer Science program.

To assist the evaluators, the project team is asked to identify aspects of the project related to the various Student Outcomes. For each Student Outcome, a checklist of 4 typical project features related to the outcome is provided. There is no requirement or expectation that any particular feature must be present in your particular project. Nor is the checklist exhaustive. Please add to the lists any additional features of your project that relate to any of the Student Outcomes.

For each checklist item represented in your project, please document where that item is evidenced in your project by noting the **deliverable** (*Feasibility Study, Requirements Specification, Design Document or Final Document*) and **section** or **page number**.

**Your responses to this survey will be used solely for the purpose of assessing the Student Outcomes of the BS in Computer Science program of the School of Computing and Information Sciences at FIU. This survey is expressly NOT for assessment of student performance in the SCIS Senior Project course for assignment of letter grade, nor for assessment of the instructor(s).**

Project Title: CVM Mediator

Semester & Year: Fall 2010

Moderator (Faculty / Industry Sponsor): Clarke, Peter.

Team Members: Ivan Olmos

Jandry Guerra

Eduardo Flores

Luis Bautista

**Student Outcome (a):** *Demonstrate proficiency in the foundation areas of Computer Science including mathematics, discrete structures, logic and the theory of algorithms*

\_\_\_ Project utilizes some knowledge of mathematics

Graphs that are in Pg35, Final Deliverable.

\_\_\_ Project utilizes some statistical techniques

N/A

\_\_\_ Project utilizes some elements of computational or mathematical logic

N/A

\_\_\_ Project utilizes some aspects of theoretical computer science (e.g. automata)

State Machines Diagrams, Pg 96, Final Deliverable.

Other

**Student Outcome (b):** *Demonstrate proficiency in various areas of Computer Science including data structures and algorithms, concepts of programming languages and computer systems*

\_\_\_ Project demonstrates knowledge of data structures

Graphs Structures, and Runtimes in Pg35, Final Deliverable.

\_\_\_ Project demonstrates knowledge of algorithm development

Depth First Search in Pg35, Final Deliverable.

\_\_\_ Project demonstrates knowledge of programming language concepts

Java and C# in CD->Projects.

\_\_\_ Project demonstrates knowledge of computer systems

N/A

Other \_\_\_\_\_

**Student Outcome (c): Demonstrate proficiency in problem solving and application of software engineering techniques**

\_\_\_ Project objectives are clearly specified and analyzed

Project Plan, Pg 10, Deliverable 1

\_\_\_ Project evidences consideration of design alternatives

Fesibility Study, Pg 6 -5, Deliverable 1.

\_\_\_ Project utilizes sound implementation techniques

Design Patterns(Pg 13 Deliverable3), Architecture Patterns(Pg8, Deliverable 3),  
JavaDocs(CD->CVM Mediator Software->Project->Documentation->JavaDoc\_CVM\_M),  
.NET XML Document(CD->CVM Mediator Software->Project->Documentation->CVMM-  
HealthVault).

\_\_\_ There is evidence that the implementation was tested and/or evaluated

Test Case in Pg39-49, Final Deliverable.

Other \_\_\_\_\_

**Student Outcome (d): Demonstrate mastery of at least one modern programming language [and proficiency in at least one other]**

\_\_\_ Project was implemented using a modern programming language

C# and Java under CD->Projects

\_\_\_ Project code is modular and/or reusable and is documented

Use a COM exposed object for use with in a Windows System(Reusable) in CD->CVM  
Mediator Software->Project->Visual Studio 2010 Project->CVMM-HealthVault  
Use 2-Tier and MVC in the Java implementation of the CVM-Mediator in CD-> CVM  
Mediator Software->Project->Eclipse Project-> CVM Mediator2

\_\_\_ Project code is reasonably efficient rather than “brute force”

Use Inheritance in the CCD\_DS Object and MSHealth\_DS object, transfer instantiated objects between different object by using references. (CD-> CVM Mediator Software-> Project->Eclipse Project-> CVM Mediator2)

\_\_\_ Project code is understandable and meets specifications

Have Test Case in Pg39, Final Deliverable. \_\_\_

Other \_\_\_\_\_  
\_\_\_\_\_

***Student Outcome (e): Demonstrate understanding of the social and ethical concerns of the practicing computer scientist***

\_\_\_ Project documents sources and references

References and Bibliography in Pg67-68, in Deliverable III.

\_\_\_ Project identifies and addresses any relevant ethical issues

FCopyright Trademarks in Pages i-v in Final Deliverable.

\_\_\_ Project identifies and addresses any relevant social issues

\_Medical Records, dealing with Privacy and Security issues, Pg 1, in Final Deliverable.

\_\_\_ Project documents anticipated impact on users/clients

N/A \_\_\_\_\_

Other \_\_\_\_\_  
\_\_\_\_\_

***Student Outcome (f): Demonstrate the ability to work cooperatively in teams***

\_\_\_ Project evidences equitable participation by team members

Team Roles in Deliverable I. and Presentations in First Slide.

\_\_\_ Project team negotiated consensus and/or compromise

Diaries, Pg 106 in Final Deliverable.

\_\_\_ Project team set out and followed a schedule for timely completion

Project Planning , page 12-13 in Deliverable I.

\_\_\_ Project team activity is documented

Diaries, Pg 106 in Final Deliverable.

Other \_\_\_\_\_

**Program Outcome (g): *Demonstrate effective communication skills***

\_\_\_ Project presentations captured the essential features of the project

All Presentation I, II, III and Final. And Videos in CD-> CVM Mediator Software->Application->CVM-Mediator Training Videos

\_\_\_ Project artifacts communicate and/or project the project essentials

All Presentation I, II, III and Final. And Videos in CD-> CVM Mediator Software->Application->CVM-Mediator Training Videos

\_\_\_ Project reports are well organized and written

All Deliverables have Table of Contents.

\_\_\_ Project presenters are able to communicate their ideas to a non-CS audience

Not Applicable.

Other \_\_\_\_\_

**Program Outcome (j): *Have experience with contemporary environments and tools necessary for the practice of computing***

\_\_\_ Project utilizes contemporary design tools

\_Start UML

\_\_\_ Project implementation utilized a modern IDE  
Use of Eclipse™ and Visual Studio® 2010 under CD->Projects

\_\_\_ Project utilized validation/testing tools  
Testing tools: JUnit Coverage Tools: EclEmma.

\_\_\_ Project was demonstrated using appropriate presentation aids  
Projector, Power Points, and Audio/Video Aids \_\_\_\_\_

Other \_\_\_\_\_  
\_\_\_\_\_

Your further observations about of the BS in CS Student Outcomes **evidenced in this project** would be appreciated.