

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 PantherCare

Semester & Year Fall 2010

Moderator (Faculty / Industry Sponsor): Peter Clarke

Team Members: Fernando Escobar Marcial Donet

Michael Tracy

Juan Obregon

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

Chapter 3 section 3 Project cost.

___ Project utilizes some statistical techniques

___ Project utilizes some elements of computational or mathematical logic

Chapter 6 section 3 Dynamic model. Design of the algorithms used in the problem solution.

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

Detail design

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

Chapter 6 section 4 Code specification. Creation of an xml file.

___ Project demonstrates knowledge of algorithm development

Chapter 6 section 3 Dynamic model. Design of the algorithms used in the problem solution.

___ Project demonstrates knowledge of programming language concepts
Deployment mobile design e.g. Android Emulator Android OS.

___ Project demonstrates knowledge of computer systems

Other _____

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

___ Project objectives are clearly specified and analyzed

Appendix B. Use cases with nonfunctional requirements. Summary is Chapter 2

___ Project evidences consideration of design alternatives

Chapter 2 section 2. Feasibility study, Detailed design, design patterns. Specify classes interface. Description of alternative solutions considered.

___ Project utilizes sound implementation techniques

Chapter 5 section 1. Overview of system decomposition.

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

Chapter 7 System validation.

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

Chapter 6 section 4 Code specification. Use of java + Java Android

___ Project code is modular and/or reusable and is documented

Appendix F. Documented Class interfaces. Detailed design

___ Project code is reasonably efficient rather than “brute force”

Chapter 6 section 4 Code specification. Use of methods + libraries

___ Project code is understandable and meets specifications

Chapter 6 section 4 Code specification. Documentation + tested

Other _____

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

___ Project documents sources and references

References section at the end. Deliverable 4

___ Project identifies and addresses any relevant ethical issues

Page with copyright and trademark notices.

___ Project identifies and addresses any relevant social issues

Chapter 1 section 1. Problem definition.

___ Project documents anticipated impact on users/clients

Chapter 1 section 2. Scope of system. Design of senior interface

Other _____

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

___ Project evidences equitable participation by team members

Appendix H diary of meetings. Deliverable 1, 2, 3, 4.

___ Project team negotiated consensus and/or compromise

Appendix H diary of meetings.

___ Project team set out and followed a schedule for timely completion

Appendix H diary of meetings.

___ Project team activity is documented

Appendix H diary of meetings. Deliverable 1, 2, 3, 4.

Other _____

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

___ Project presentations captured the essential features of the project

Project final presentation. Docs, Input, test

___ Project artifacts communicate and/or project the project essentials

Project final presentation.

___ Project reports are well organized and written

Project final deliverable. Documents

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

Other _____

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

___ Project utilizes contemporary design tools

Chapter 3 section 1.2 Hardware and Software resources. E.g. star UML

___ Project implementation utilized a modern IDE

Chapter 3 section 1.2 Hardware and Software resources. Eclipse IDE with Android plug in.

___ Project utilized validation/testing tools

___ Project was demonstrated using appropriate presentation aids

Video tape

Other _____

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