

SG430 Game Porting Basics

Cross-Platform Game Porting Project

This assignment supports the following outcomes:

Examine the various software and hardware issues associated with game porting.

Apply porting techniques and methodologies such as abstraction, commonality, limitations, modularization, granularity, separation, isolation, debugging, and predictability to the game development process.

Assignment Overview:

Of all the games recently released to the market, most were released simultaneously on multiple platforms. Cross-Platform techniques are still evolving and soon most of the games developed will have portability as one of the main priorities in the game development process.

In this assignment, you will create a simple game targeting two platforms, the PC and Linux. You will examine software and hardware issues and apply as many cross-platform porting techniques as possible.

Deliverables:

1. Write a one page report about a simple game you would like to develop for this project. The game should be playable on a PC and on the same hardware running Linux. **DUE 10/16/2006**
2. Draw diagrams representing the game (UML preferably). Make sure the diagrams represent Abstraction since the same set of code should be used for the Pocket PC code. **DUE 10/30/2006**
3. A PC program which runs without defects and code containing cross platform techniques. **DUE 11/20/2006**
4. A Linux program which runs without defects and code containing cross platform techniques. **DUE 12/11/2006**
5. A final 2-3 page report containing assessment of cross-platform techniques which were applied. Some of the points which should be addressed in the report are:
 - Description and assessment of techniques applied
 - Any specific hardware and/or software issues or challenges encountered**DUE 12/12/2006**

Grading:

The following grading rubrics will be used to evaluate your assignment. Your instructor will provide you with these rubrics along with this assignment handout.

100% -- Content Rubric

Resources

Course Textbook, Chapter 2

Linux.

Textbook – Game Programming All in One, Jonathan Harbour, ISBN: 1-59200-383-4 © 2004

SG430 Game Porting Basics
Cross-Platform Game Porting Project – Content Rubric

Student Name: _____ **Date** _____

Project: Game Porting

Element	5	3-4	1-2	Score
Concept Report	Report details the game that will be created and discusses the ability for this game to be playable on a PC and on Linux	Report details the game that will be created, but does not discuss the ability for this game to be playable on a PC and on Linux.	Report provides limited or no details on the game that will be created for the project.	
Project Diagrams	Provides high quality diagrams representing the game. Diagrams represent Abstraction.	Provides diagrams representing the game, but lacks quality and/or diagrams representing abstraction.	Provides little or no diagrams representing the game.	
PC Game and Code	PC program runs without any noticeable defect and code that is well designed and contains most of the cross-platform learned in class.	PC program runs but crashes after few interactions. Code is somewhat complete. Design lack structure.	PC Game does not run at all. Code lacks structure and it is not documented.	
Linux Game and Code	Linux program runs without any noticeable defect. Code is well designed and contains most of the cross-platform learned in class.	Linux program runs but crashes after few interactions. Code is somewhat complete. Design lack structure.	Linux Game does not run at all. Code lacks structure and it is not documented.	

Assessment of cross-platform techniques used	Provided a report outlining the entire process and includes many specific details and examples.	Provided a report outlining the entire process but includes little or no specific details and examples.	Report does not outline the process well and include little or no details or examples.	
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Based on the above scoring grid, determine the student’s grade percentage or grade number, then write the **grade number** below:

Grade Number for this paper: _____

Grade Number	Grade Percentage
5 – Excellent	90 – 100%
4 – Proficient	80 - 89%
3 – Adequate	70 – 79%
2 – Needs Improvement	60 – 69%
1 – Insufficient	59% and below

Comments to the Student: