ANIMATION AND SIMULATION PROGRAMMING (VIS2052-N)
FIRST-SIT ASSIGNMENT 2010/11

This task is worth 35% of your overall mark for this module.

TASK 3 DETAILS

Title: PigDust (a.k.a. Wheel Dust Effect for WartPig)

Publication Date: Tuesday 15th March 2011

Submission Date: Tuesday May 3rd 2011 by 12pm (noon)

INTRODUCTION

This is the third task for your assignment. It is a problem for which you must design and implement a solution. A full description of the assessment process for this module can be found in the module guide. Assuming you are up-to-date with the module work and self study, you should aim to spend approximately 15-25 hours working on this over 5 weeks.

BRIEF

Your task is to develop a dust effect system for the user-controlled WartPig vehicle. The dust represents sand/dust kicked up by the WartPig as it drives around the terrain; it should be affected by wind and gravity. The WartPig should displace the dust cloud when it drives through it. A prototype framework is provided with two working user-controlled WartPigs and a working camera system.

REQUIREMENTS

This is an individual assignment so what you submit must be your own work and not that created in collaboration with others. You must use Visual Studio 2010, the TWM library, and the prototype framework provided. The framework and data files are on *Blackboard* as is a link to the latest version of the TWM library.

Do not spend time modifying the prototype framework behaviour, your task is the dust effect system and as such most work will be in the PigDust controller class.

CRITERIA

Task 3 (35%)	
28-35	An exemplar attempt at the assignment with all requirements met and in some way exceeded. Crashes do not occur and output from the demo exceeds the brief with no glitches. The code contains highly reusable, well designed classes and/or functions using good coding practices.
21-28	A good attempt at the assignment with all requirements met. Crashes do not occur and output from the demo fulfils the brief with no significant faults. The code demonstrates an attempt at using good coding practices although some aspects may fall short.
14-21	A satisfactory attempt at the assignment with most requirements met successfully. Crashes do not occur and output from the demo fulfils the brief satisfactorily. There are some bugs and/or occasional failings. The code fails to demonstrate good coding practices.
7-14	A genuine but flawed attempt at the assignment with few requirements met successfully. Crashes are rare and output from the demo fulfils some aspects of the brief in a rudimentary way. There are significant bugs and failings. The code shows poor coding practices.
0-7	A cursory attempt at the assignment with few requirements attempted or successful. Crashes occur or other fundamental faults prevent any meaningful output from the demo.

DELIVERABLES

You must submit your work as a ZIP file via *Blackboard*.

Your ZIP file should include the following directory structure:

- ***Demo***: this directory should contain a working release build of the application. All the required data files should be included.

- ***Source***: this directory should contain the entire source code for the assignment task. A Microsoft Visual Studio 2010 solution must be included to enable building of the project. All code will be compiled, so ensure that everything required is provided, but do not include a copy of the TWM or prototype libraries. Ensure that you have *cleaned* (i.e. intermediate and non-essential files are deleted) both the *release* and *debug* builds and project directory before submission.

Include a *readme* file at the root of your ZIP structure containing your name, user id, and the name of an SCM lab machine that you have successfully tested your work on.

FEEDBACK

You will receive individual electronic feedback on your work. This feedback will include comments and marks which are provided to help you improve. The marks will not be final until they are combined with the marks from the other assignment tasks and then approved by the assessment board.