Procedural Modelling of Cities implemented as a Blender Plug-In

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1 Previous Short Term Objectives

1.1 Literature Review

A literature review was to be written to cover all other related work in the procedural city generation field. The literature review is to form the basis from which this research project can progress. The formal submission of this document was to have occurred shortly subsequent to the previous progress meeting of the 22 of May 2007.

1.2 Code Implementation

Due to the extended period between the previous and this progress meeting, specifically due to university vacation, significant amounts of code implementation for this project were to have occurred. This code implementation was aimed at developing an initial prototype of the final system which in a simplistic manner would illustrate the final product.

2 Progress

2.1 Literature Review

The full and final literature review portion of this research project was drawn up and formally submitted. This literature review discussed the various methodologies and approaches that have been taken by other research work into the field of procedural city generation. An in-depth discussion of the various aspects of the project as well as the individual solutions suggested in related work was drawn up. This resulted in the finalization of the methodologies which are to be employed in this research project.

2.2 Code Implementation:

The code implementation objective was not as successfully met. Due to bad time management and unclear individual objectives for the code implementation process, very little actual progress was made in this area of the project. Much time was wasted in attempts to code up solutions to problems which were not appropriate and thus were unsuccessful. Actual objectives achieved include the completion of a simple branching and grid road creation system as well as the integration of some basic cube shapes within the model to represent structures. The combination of the simple branching and grid structures as well as the simple cube representations allows for the generation of a fairly simple yet representative scene of a procedurally generated city.

3 Problems

A major problem with effective time planning and objective establishment has arisen within this project. This will need to be sorted out in the coming week in order to allow for the further development of the project.

4 Objectives for Next Week

4.1 Code Implementation

Further work will need to be done on the code implementation aspect of this project in the coming week. Specifically the road segment generation function will need to be completed and optimized to allow for a single function which generates all forms of road segments dependent upon their parametrized input. Once this has been effectively implemented, both the grid and branching patterns will have to be implemented through this interface. This will allow for any further forms of road generation to be easily implemented in the coming weeks.

4.2 Longer Term Project Objectives and Goals

A full and detailed set of the remaining objectives for this project will have to be decided upon this week in order to ease the future progress of this project. Specifically each individual objective that remains for the successful completion of the city generation system will have to be identified and quantified. These objectives can then be mapped down to specific time based deadlines in order to ensure the timeous completeion of the project. The benefits of this planning step will be to allow for the re-evaultion of the overall project goal with respect to the time frame which remains for the completeion of the project.