Implementation Outline - Team Project

COMP 371: Computer Graphics, 2016 Fall

Team Members

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Description

Walk Through a Procedurally Modelled World

This project will be implemented using OpenGL as presented in lectures and the lab to produce a procedurally created world that the user can walk through. The terrain will be generated through a randomized seeding process based on user defined parameters. From this terrain, local features will be extracted to determine location, type and density of elements to be populated. These elements will be procedurally/fractally generated according to surrounding features. The user will be able to walk through the world without colliding with objects or conduct a flyover.

Workflow

Github will be our main repository hosting service where we will manage and control our source code. Meetings will be scheduled weekly/bi-weekly or simply when members are available to discuss the project development. The project will be split in 3 modules, each of which will be championed by an individual team member, but collaborative work will be done on all as needed.

Modules

Rendering

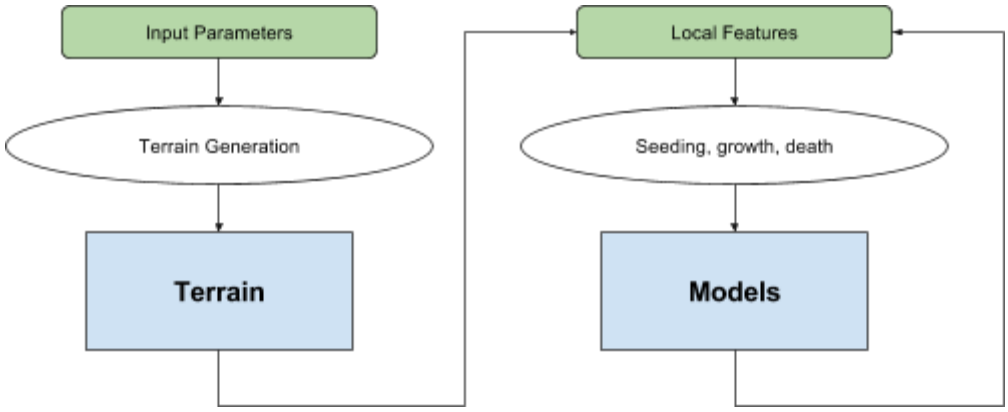
The rendering module will render models and terrain and handle lighting.
Champion: Mike

Interaction

The interaction module will allow the user to navigate through the world by implementing input handling, camera movement and collision detection.
Champion: Kendy

World Generation

The world generation module will consist of terrain generation, texture generation, model placement (“seeding”) and model generation (“growth/death”).
Champion: Pat



Procedural element interaction

Timeline

Milestone	Deliverable		
	World Generation	**Interaction**	**Rendering**
Week 5 - 7	Define terrain input parameters, terrain -> model interaction, model <-> model interaction	Allow user to travel along terrain surface	Predefined terrain and models
Week 8 - 9	Terrain generation, standalone model generation, texture definitions	Implement collision detection, walkthrough mode finalized	Lighting
Week 10 - 11	Model generation with terrain->model and model<->model interaction, texture generation	Implement flyover mode, refine input handling	Textures
Week 12	● Finalise documentation ● Prepare report and presentation ● Prepare and debug demo		