



6/4/2021

Group-Based Game: Development Diary

Technical Games Production



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This development diary outlines all the systems that I helped create throughout the development process of our group project. I have cross-referenced this with the Git history and the original development log that was created by our team.

Links to the GitHub repository, commit history and contributions have also been provided below which redirect to different parts of the same repository.

January

Week Starting	Work Completed
Thursday 21 st	<ul style="list-style-type: none"> • Win32 setup and DirectX initialization. • Vertex and pixel shaders added. • Basic textured primitives. • Basic font rendering. • ImGui debug windows implemented. • Camera system added.
Thursday 28 th	<ul style="list-style-type: none"> • Assimp model loading added. • ECS implemented to manage model loading. • Basic flashlight implemented. • Dynamic point light implementation.

February

Week Starting	Work Completed
Thursday 4 th	<ul style="list-style-type: none"> • Improved camera system. • Model billboard. • Abstracted DirectX pipeline creation. • Box texture switching.
Thursday 11 th	<ul style="list-style-type: none"> • Stencil outlining added to cube. • Camera world collisions. • Alpha blending added. • Directional and spotlights added.
Thursday 18 th	<ul style="list-style-type: none"> • Circle collision detection/resolution added. • Cube pick-up and move system added. • Multiple cameras added each with mouse picking. • Skybox implemented. • "Resize" and "Convert" tool modes added. • Fog implementation.
Thursday 25 th	<ul style="list-style-type: none"> • Simple physics – mass aggregate system. • Refactoring of cube properties.

March

Week Starting	Work Completed
Thursday 2 nd	<ul style="list-style-type: none"> • Render to texture (RTT) added. • Multi-viewport system implemented. • Basic post-processing effects added.

Thursday 11 th	<ul style="list-style-type: none"> • AABB cube collision detection. • Cube collision resolution. • Pressure plate added with collisions.
Thursday 18 th	<ul style="list-style-type: none"> • Event system implemented. • Player jumping.
Thursday 25 th	<ul style="list-style-type: none"> • Level system implemented. • Multi-threading added.

April

Week Starting	Work Completed
Thursday 8 th	<ul style="list-style-type: none"> • EASTER BREAK
Thursday 15 th	<ul style="list-style-type: none"> • EASTER BREAK
Thursday 22 nd	<ul style="list-style-type: none"> • Security camera with billboarding added.
Thursday 29 th	<ul style="list-style-type: none"> • Cube throwing added.

May

Week Starting	Work Completed
Thursday 6 th	<ul style="list-style-type: none"> • Updated cube textures and collisions. • Cleaned up code and bug fixes. • Simple anti-aliasing.
Thursday 13 th	<ul style="list-style-type: none"> • 1st level implemented. • Updated cube world collisions. • Cube can now be dropped into the sludge.
Thursday 20 th	<ul style="list-style-type: none"> • Cube bouncing added. • 2nd level implemented. • Updated stencil outline, spotlight, and model colours.
Thursday 27 th	<ul style="list-style-type: none"> • 3rd level implemented. • Camera and cube collisions updated. • Player crouching added. • Cleaned up codebase.

GitHub Repository: <https://github.com/kyle-robinson/molecularity>

Commit History: <https://github.com/kyle-robinson/molecularity/commits/master>

Team Member Contributions: <https://github.com/kyle-robinson/molecularity/graphs/contributors>