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ECE 101-02 MATLAB and C Programming

Mr. Watchorn

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Mr. Watchorn,

Executive Summary

I have prototyped some asset ideas for our next video game. Given that it will have both 2d and 3d stages, I have created a potential tutorial ramp for each type of gameplay. Pending your approval/feedback, I will begin modeling the stages for actual use in game.

Discussion

I have included two scripts that each output a potential stage for use in our game.

Map2d.mlx generates a map that is represented by an array of 1’s and 0’s, where 1 represents an object with a collider (i.e., a wall), and 0 represents the absence of such. The player will spawn at the location of the 2 and be guided to the location of the 3.

Map3d.mlx generates a mesh that represents a larger ramp. The primary differences in design between this and the 2d version are:

* No ramp ceiling in 3d
* A curve at the bottom of the ramp in 3d

This is because I would like to take special care to highlight the freedom and fluidity of our movement system in our 3d engine.

Outcomes

The scripts each output the maps exactly as expected. As there are no input variables, no further testing is required.

Conclusions

Overall, I think these assets will aid the development process, as even if we choose not to include them in the final game, they can find use as test stages.

Hope to hear from you soon,

Dylan