Team ID: 04: doge

Milestone: 1

Instructions

This document helps you to plan your game development process. Enter the features you have worked on in the current milestone column and specify a plan for future milestones to roughly plan out the features you game will need. You will likely get new ideas and refine your game during the course. Always update your development plan at milestone submission time.

Each feature you implement allots your team a specified number of points, for each milestone you must attain 100 points to receive full marks for that milestone. Certain features are required for specific milestones, others you can complete as you see fit. Required features can be completed early but never late, meaning if you finish the required features for future milestones in an earlier milestone submission, you will be credited at the earlier milestone, leaving room for additional optional features in the future one.

The list below includes both required and suggested features, with the amount of points each will award when implemented fully. We highly encourage you to work on your own custom features, beyond what has been suggested here. **Important:** Please discuss the amount of points custom feature are worth with the TAs before working on them.

Grading

You will receive full credit for features only if they are fully operational. We deduct points for sloppy, buggy and incomplete implementation. More complex features or those better fitting into the overall game will be rewarded with more points. Bonus points can be gained for features exceeding 100 points. The relation of bonus to excess feature points in sub-linear and at the markers discretion (quality > quantity).

Development Plan

Fill in the table below, entering the maximum number of points possible for each feature (as specified for each feature in the Points column) and add the initials of the author who implements the feature to the right of the table, under 'Initials'. Our grading will replace these with the actual points awarded, based on functionality and completeness. An entry is disabled if a feature cannot be implemented for a certain milestone, either because it is late and cannot be claimed for credit, or if it is too early in development and the foundations needed to implement a certain feature are missing (eg. doing gameplay III before gameplay II etc).

A comment attached to every row of the table explains the feature and links to additional resources if available.

Legend

Mandatory Feature

Recommended Feature

Feature lacks required content

Category	Title	Points	M1	M2	M3	M4	Initials
Game mechanic & content	Delay-agnostic design	10	10				all
	Gameplay I	10		10			all
	Gameplay II	10					
	Gameplay III	10					
	Level editor	10					
AI	Random/coded action	5	5				HW
	State machine	10		10			LB
	Behaviour tree	10					
	Simple path finding	10					
	Swarm behaviour	10					
	Advanced decision-making	10					
	Cooperative planning	10					
Animation	Keyframe animation	5					
	Sprite animation	10	10				LB
	Free-form deformation	10					
	Articulated motion	10					
	Inverse kinematics	10					
	Complex prescribed motion	10					
Rendering	Textured geometry	5	5				LB
	Adaptive resolution	5		5			MI
	Debugging graphics	5					
	Parallax scrolling background	10	10				JC
	Advanced fragment shader	10		10			LB
	Advanced geometry shader	10					
	Light	10					
	Particle systems	10					
Software eng.	Observer pattern	10	10				YY
	Level loading	10					
	Save and reload	10		10			YY
	External integration	10					
	Advanced ECS	10					
	Multi-treading job system	10					
User Experience	Help	5	5				LB, YY
	Tutorial	10					
	Story	10					
	Game balance	5					
UI and IO	Keyboard/mouse control	10	10				HW, LB
	Camera control	5	5				
	Mouse gestures	10					
	Audio feedback	5		5			LB
Physics & Simulation	Basic collision detection	10	10				WC,
	Collision Resolution	10		10			HW,WC,MI
	Precise collision	10					
	Non-convex collision	10					
	Precise physics	10		10			MI
	Constrained physics	10					
Assets & Quality	Graphics assets**	5	5	5			LB
	Lag mitigation**	5	5	5			all
	Crash free**	5	5	5			all
	Memory management**	5					
	Bug and feature fixes**	5		5			all
Custom Features	Project Management	10	10				JC, HW
	Scene Management System	10	10				YY, JC
	Multiplayer System	10	10				MI
	Advanced Scene System	10		10			JC
Total			125	100	0	0	

**These quality points are mandatory at every marked milestone. Fulfillment of these yields the 5 points at every milestone marked as mandatory.