

Team ID:

Milestone:

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

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

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