

Milestone 2 Report

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Advanced Games Engineering(SET10110)

<http://nn1098.github.io/adved-games/github-pages/>

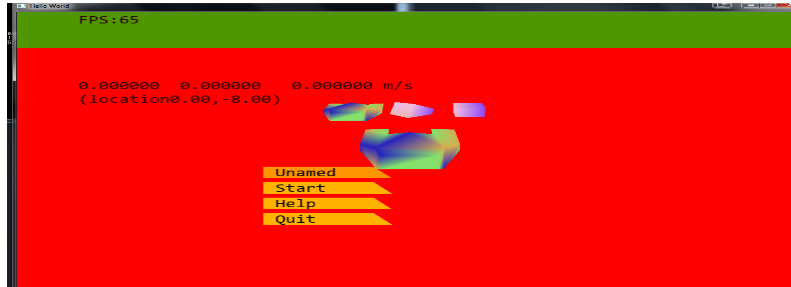


Figure 1: This is the main menu screen of the game

Keywords: Game, Engine, racing, space

1 Introduction

The aim of this report and following implementation is to create a game with that conforms to industry standards and contains an agreed list of key functions the report will be used to detail current features and list future work for the next milestone.

This project was initially based as a group however this has now been reduced to a solo implementation which has strained the development process due to the splitting of work and use of engine developed by the group however the focus for the remainder of the project will be on key features for playability of the game.

The game itself is currently unnamed but the original idea was for the game to be a 3d space based racer with area's for both racing and free flight with multi-player functionality this will feature a split screen mode.

2 Current features

The game currently features a full menu system including the help menu and ability to render the current controls which is shown below:

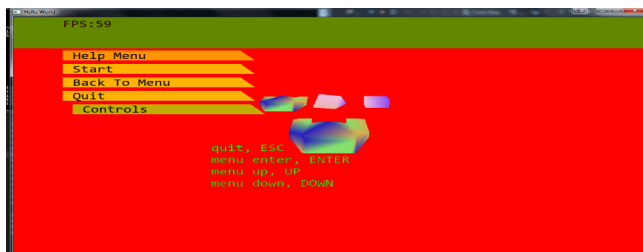


Figure 2: This shows the help menu and controls

There is graphical developments such as model loading mesh and font rendering with a variety of basic shaders to allow this will be

developed further towards the final release to improve the look of the game.

There are multiple input methods including command parsing using the command line there is also gamepad input and keyboard handling which allows for movement of the player with velocity based integration.

There is basic sound loading and playing functionality provided by the FMOD API.

The red plane shown in 1 is redrawn based on the current position of the player this gives the effect of a horizon and will be utilised to separate the racing and flying elements of the game.

3 features for milestone 3

As work continues towards the next milestone the main focus will be getting the racing and flying elements implemented with start and end point to give the game an end state and AI to give the player competition also as shown in 3 there are some features which have been selected to be excluded from the game as these are non key components as they add to the game rather than add gameplay elements.

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Name	Description				Milestone 1				Milestone 2					Milestone 3				Submission	Notes
	Features																		
		Week No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Installer	Installer (ps4/win32/win64/mac/linux...) - run on		1	1	2	2	2	2	2	2	2	2	2						full windows no additional platforms
Wiki page	Wiki page (weekly milestones, tasks, known bugs)		1	1	1	1	1	1	2	2	2	2	2						no issue tracking however has installer link
Planning	"SCRUM" model/weekly builds/task allocation		1	1	1	1	1	1	2	2	3	3							
Cross Platform	Keeping both platforms working																		Ps4 No longer required
PC																			
PS4																			
Asset Pipeline	Asset pipeline management (zlib, project man																		
Saving/Loading Progress	Saving players progress		0	0	0	0	0	0	0	0	0	0	0						
Networking	Networking (online playing)		0	0	0	0	0	0	0	0	0	0	0						
Downloadable Content	Downloadable updates		0	0	0	0	0	0	0	0	0	0	0						
Videos/Screenshots	Videos/screenshots (on website)		0	0	0	0	0	0	0	0	0	0	0						will be updated soon
Sound (FMod)	Sound (FMod)Sound (FMod)Sound (FMod)		1	1	2	2	2	2	2	2	2	2	2						basic sound handling playing/pause
Scripts	Scripts (i.e., not hardcoded, levels, assets)		1	1	2	2	2	3	3	3	3	3	3						grabbing git dat
Crash Log	Debug/release/crash reports																		
Optimisation	Performance/optimisation																		
Memory Management	Memory managementMemory management		1	1	3	2	2	2	3	2	2	2	2						no leaks or problems moves down as memory is dealt with just before milestones
Graphics	Graphical techniquesGraphical techniques		1	1	1	1	2	2	2	2	2	2	2						basic renderer and shaders
AI	Artificial intelligence techniques		0	0	0	0	0	0	0	0	0	0	0						to be implemented
Parallelism	Parallelism/multithreading		1	1	1	1	1	1	1	1	1	1	1						basic and pre built threading(FMOD)
Physics	Physics-based technique		1	1	2	2	2	2	2	2	2	2	2						velocity integration flight to be added
Controllers	Controllers (gamepads, keyboard, customizat		1	1	2	2	2	2	2	2	2	2	2						
Dynamic Resolution	Dynamic resolution (1080p, 720p, ...)		1	2	2	2	2	2	2	2	2	2	2						
Menus	Menus/HudsMenus/HudsMenus/Huds																		
Hud			0	0	0	0	0	0	0	0	0	0	0						hud to be implemented
In-Game			0	0	0	0	0	0	0	0	0	0	0						still need to fine tune getting the game controls
Front			1	2	2	2	2	2	2	2	2	2	2						pause menu to be implemented
Load Screen			0	0	0	0	0	0	0	0	0	0	0						not currently implemented
In-Game Content	In game news/adverts/dynamic content (e.g., pe		0	0	0	0	0	0	0	0	0	0	0						not implementing
Cutscenes	Cutscenes (storylines)Cutscenes (storylines)		0	0	0	0	0	0	0	0	0	0	0						not implementing
Technologies	Incorporation of technologies (e.g., Oculus, K																		not implementing
Localization	Localization (e.g., English,French,...)		0	0	0	0	0	0	0	0	1	1	1						to be implemented
Documentation/Reports																			
Milestone 1						3													
Milestone 2														3					
Milestone 3														2					
Final Report														0					
Weekly Builds	Weekly builds (to be shown in weekly meetings		3	3	3	3	3	3	3	3	3	3	3						
QA/TRC Checking	TRC compliant (Microsoft/Sony checklist)		2	2	2	2	2	2	2	2	2	2	2						ongoing analysis
Play Testing	Play-testing - user feedback reports (e.g., per		0	0	0	0	0	0	0	0	0	0	0						installer is live but due to content is not being playtested yet
Code Quality	Code quality/evaluation (e.g., warnings, sanity		2	2	2	2	2	2	2	2	2	2	2						opengl cast warings
Feature Management	Feature organisation (e.g., enabling/disable fe		1	1	1	1	1	2	2	2	2	2	2						
QA/Innovation	QA/Innovation (throughout project)		0	0	0	0	0	0	0	0	0	0	0						this will be analysed for final build
[0,1,2,3]																			
0-None																			
1-Implementing																			
2-Working																			
3-Finished																			

Figure 3: This is full feature list and weekly progress