Weekly Production Report

Team Name: Firework Games

Game Name: TBD

Report number: #02

Report Date: 18 September 2019

Upcoming Milestone:

    Title: Engine Proof

    Date: 02 October 2019

High Concept:

A Sentient Magnet who got lost and is finding its way home.

·   Puzzle Platformer

·   Interesting Puzzles and Narrative

·   Reference Games: Teslagrad

Producer Name: John Wang Yidi

Producer Email: w.yidi@digipen.edu.sg

Overall Status: Green

(Green = on track, Yellow = behind, Red = in trouble; Silver = ahead, Gold = shipped)

- Week At A Glance:

    o 1-3 sentences summarizing the past week, split into Design, Art and Tech

    o Design

    - We are able to Implement the core and secondary mechanic into the demo
    - We are able to finalise the game matrix for world building with the Artist
    - We create a list of mechanics to showcase during demo (Mechanic Gym)

    o Tech

    - Currently graphics is still trying to get texture rendering properly.
    - Physics and collision just started

    o Art

    - Rendering art assets for Character (after silhouette and design, research) and Environment (after design, research)
    - Researched into existing UI aesthetics for this project

- MVP progress (**M**inimum **V**iable **P**roduct)

    o List of last week's minimum goal/expectation you aim to achieve for Design, Art and Tech

    - Design
        o A demo with working core and secondary mechanics
        o Finalise the game matrix for world building
    - Tech
        o Graphics System must be up.
    - Art
        o Render out at least one Environment background
        o Shortlist Character silhouettes to develop and design further
        o Plan out UI elements, together with the designers.

    o Which MVP goal/task were not met?

    - Art
        o UI elements planning

Team Rosters and Signatures:

Ong Yong Zheng

    Major: BAGD

    Championing/Responsibilities: Prototype, Mechanics

    DigiPen Email: Yongzheng.o@digipen.edu

Leok Boon Siang

    Major: BAGD

    Championing/Responsibilities: Narrative, UI

    DigiPen Email: B.leok@digipen.edu

Tan Xing Hao

    Major: BFA

    Championing/Responsibilities: Art characters, Art Concept, Art Environment

    DigiPen Email: xinghao.tan@digipen.edu

Tan Yong Wee

    Major: RTIS

    Championing/Responsibilities: Engine architecture, Object Factory

    DigiPen Email: yongwee.tan@digipen.edu

Calvin Boey Siu Hoe

    Major: BSGD

    Championing/Responsibilities: Rendering, Windows, Math

    DigiPen Email: s.boey@digipen.edu

Wang YiDi

    Major: BSGD
    Championing/Responsibilities: Physics/Collision, AI
    DigiPen Email: w.yidi@digipend.edu

Leong Jun Ming

    Major: BSGD
    Championing/Responsibilities: Input, Serialization, Level Editor (TBD)
    DigiPen Email: l.junming

Ong Yong Zheng – Report

Team Grade: 10

Major: BAGD

Championing/responsibilities: Mechanic Champion / Design Lead

1. PREVIOUS WEEK – ACCOMPLISHMENT

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Finalizing Setting, Story Outline	2	100%	Done with Boon Siang and Xing Hao
Demo- Core Mechanic Coding	1	100%	When through with micheal already
Demo- Secondary Mechanic Coding	1	100%	When through with micheal already
Create a list of mechanic to showcase during demo	0.5	100%	Done with Boon Siang

NOT ACCOMPLISHED TASKS

TASK	REASON

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Demo- Mechanic Gym (Features) Coding	5	Must Have(1)	7 Mechanic Showcase **Rumbles** - Remove obstacle by attracting metals /Magnet

			Platform- use metal/magnet as a platform **Electromagnet**- Electrify metal to convert it to magnet **Magnet climbing** - able to stick onto metal wall **Switch activation** - use metal/magnet to activate switches **Repel Projectile** - Repel projectile **Demagnetize** - Convert magnet into metal
Demo- Mechanic Gym (Features) Coding	5	Would have(3)	5 Cool Concept **Jumping platform -** use polarity to jump higher on magnetic object **Magnetic field -** an area that only allow object of certain polarity to enter **Metal sand -** Sand will harden to create a platform to stand on **Vertical wall climb -** similar to Magnet Climbing **Swing -** Able to swing off from a metal object

Leok Boon Siang : Report

Team Grade: 10

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Further Mechanics Research: Looked into Platformers with Magnetic Mechanics for Mechanics Gym	1	100%	Games Researched: Teslagrad, Push and Pull, Ouya
Finalizing Setting, Story Outline,	2	100%	Done with Yong Zheng and Xing Hao
Crafting of Storyline	1	40%	Overall Spine of the story is Crafted
Mockup of Game Mechanics	2	25%	Did a mock up version of the game Mechanic
Create a list of mechanic to showcase during demo	0.5	100%	Done with Yong Zheng
Presentation Slides	0.5	50%	Outline of Presentation Slides

NOT ACCOMPLISHED TASKS

TASK	REASON
Integrate all the	

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Start Menu and Pause menu for the Game	1.5	MUST HAVE	Integrate the Start and Pause Menu into the game
Research: Integrating story elements into the gameplay	2	SHOULD HAVE	Research on platforming games that did well into integrating story elements
Game Mechanics Mockup	6	SHOULD HAVE	Back Up in Case Demo is not ready

Tan Xing Hao – Report

Team Grade: 8

Major: BFA

Championing/responsibilities: Art Lead

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Research into UI treatment	3	20%	Looked into materials, textures of UI elements to be featured in-game.
Render >=2 variations of environment	6	50%	Applying settled style to designs of the first level.
Render various poses of the main character	5	50%	Shortlisted silhouettes further developed with action poses.
Research into colour palette treatment	3	75%	Revisited appropriate colour palettes after firming up story outline.

NOT ACCOMPLISHED TASKS

TASK	REASON
Create variations of in-game prototypes	Characters, environment, UI concept assets not done to be applied into an in-game prototype; putting the task on hold until asset ready.

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Finish up character renderings	4	MUST HAVE (1)	Final rendering to be done, inclusive of various poses.

Finish up environment rendering	6	MUST HAVE (2)	Final rendering to be done, inclusive of props.
Apply colour palettes to all art assets	5	MUST HAVE (3)	For colour palettes of character, environment, UIs.
Create UI assets	4	MUST HAVE(4)	Inclusive of starting screen assets and other assets for in-game prototype; work with Boon Siang over layout.
Create variations of in-game prototypes	4	SHOULD HAVE	To be done immediately after remaining assets are done and ready-to-go.
Animate main character sprite - walking motion	6	WOULD HAVE	To be done if critical objectives done; to test production process suitable/visualise character in motion.

Tan Yong Wee – Report

Team Grade: 10

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Framework	8	90%	Needs some optimisation
Object factory	2	30%	Half done
Graphics API	4	ongoing	Help other members with graphics
Code review	2	ongoing	Conduct code review with team members

NOT ACCOMPLISHED TASKS

TASK	REASON

NEXT WEEK – OBJECTIVES

TASK		ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Object factory		8	MUST HAVE	Build serialised game objects
Optimise framework and Integrate framework with other modules	Module Integration and optimisation	4	MUST HAVE	Clean up spaghetti code
	Snap-to-grid	2-4	SHOULD HAVE	Game objects should have snap to grid behaviour; Grid should be data driven
	Basic physics	1-2	SHOULD HAVE	Game objects should have basic physics applied to them (gravity)
	Collision	1-2	SHOULD HAVE	Game objects should have basic

				AABB collision detection
	Renderer	1-2	SHOULD HAVE	Render Game objects; need graphics API from Calvin
	Input manager	1-4	WISH TO HAVE	Input manager that uses JunMing's input API to map user input to some form of basic output; If time permits
Help Calvin with opengl, I think he's dying		1+	SHOULD HAVE	
Code review		2	SHOULD HAVE	Conduct code review with team members

Calvin Boey Siu Hoe – Report

Team Grade: 10

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Research on OPENGL(Including reading through provided OpenGL sample)	6	100%	Have a better understanding and have already started on graphic system, however texture seems to be problematic.
Research on OpenGL Shader Language	4	100%	More or less know what the shader does and what can I do to lessen CPU load.
Math Library Wrapper on GLM	0	No idea	Passed to john, reason below in not accomplished task.
Windows Class to integrate WinAPI	4	100%	Windows information on configuration file is able to be serialized.
Graphic system (including shader class/textures)	12	50%	Having trouble getting texture to load and render.

NOT ACCOMPLISHED TASKS

TASK	REASON
Math Library Wrapper on GLM	John was saying he wanted to do math since he was doing physics so it was passed to him.
Graphic	Having problem with loading and rendering texture, not sure is it shader or I been using it wrongly, might have to approach Elie if it still can't be rendered.

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Graphics System	10+	Must have	Make it able to load texture properly.

Wang yidi – Report

Team Grade: 10

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Helping Calvin on graphics	6	90%	We went to find TA and stayed for ASC, now we only have problem for texture. After the texture is done, calvin will integrate it into the engine
Math library	10	99%	Tried to understand how the glm library works, spend long hours reading it. I am trying to make my vectors the glm vectors, so that the graphics and use my functions as well. The library is already done. I might add in some more functions if i found it not enough.
Physics and collision	2	20%	Read up the collisions i made from cs230. Trying to make my math library compatible with that.

NOT ACCOMPLISHED TASKS

TASK	REASON
Physics and collision	Planned to finish it by last week, but I spent too much time on math library.

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS

polishing	10	Want to have	By next wednesday, all basic systems should be up and running. We should be able to create an object and control it to move around. It can jump and push boxes. The rest of the time should be dedicated to risks, such as if we can't finish our physics or graphics in time. If the basics are there, we are planning to have a simple level editor.

Leong Jun Ming – Report

Team Grade: 10

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Implemented a basic Text Serializer.	8	100%	Basic Text Serializer that can save and load data. Reads word by word currently. Overwriting is done through a buffer to avoid loss of data.
Studying/ Working on a basic Messaging System.	8	50%	Reuses a lot of the sample given. Was a massive pain figuring out how to workaround passing the polymorphic parameter functions. Currently attempting to fix templating issues and trying to use member functions instead.

NOT ACCOMPLISHED TASKS

TASK	REASON
Finishing Messaging System	Basic system is derived from sample messaging system. Still attempting to upgrade it to decent usability.

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Complete Messaging System	5	Should Have	Decent enough Messaging System. May not need to update any further.
Help Other Team Members	N.A	Must Have	Most Peripheral Systems and requirements have been met - Rest is highly

			dependent on main systems.
ImGUI Studying, Optimizations	5	Should Have	More marks

Team Risks & Mitigations (optional): (Risks, and for each risk, ideas/plans for how to address that risk. If you don't have any mitigations, say "None.")

- List the risks and their mitigations here
- Optional: you can also list for major bugs and how to plan for solution

Number of hours the team worked together during the last week:

Wang Yidi, Calvin Boey has being working together for graphics for 6hour, we stay back for 2 days in the week and for around 2 to 3 hours.

Team meeting: 2 times, each time 1 to 2 hours

Code Review:

Reviewed one this week

Next week's MVP :

List the minimum goal/expectation you aim to achieve next week

· Design

· Tech

Physics and collision system up and running

Graphics up and running

· Art

UI Elements (in-game and starting screen) to be ready

Colour palette to be applied in rendered assets

At least one in-game prototype ready by the next report

Blocker (optional):

· List anything that might be blocking you from doing your work.

Example, "build currently crashes when run, hence we were not able to test the new jumping feature integrated. We will need to fix the bug first, but it will take us X days"

Comments (optional):

- Add any general comment or feedback