

# Weekly Production Report

**Team Name:** Firework Games

**Game Name:** Aris

**Report number:** #03

**Report Date:** 25 September 2019

## **Upcoming Milestone:**

**Title:** Engine Proof

**Date:** 02 October 2019

## **High Concept:**

A Sentient Magnet looking for its past.

- 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 important mechanic features into the mechanic gym
  - We are able to finalise the game UI and consulted michael for feedback
  - Implemented Main UI Features into demo
- o Tech
  - Debug drawing is almost finished and animation is about done.
  - Physics and collision just started
- o Art
  - Rendered final (first version) art assets for Character and Environment
  - Designed some bare-boned mockups in-game UIs

### · MVP progress (Minimum Viable Product)

- o List of last week's minimum goal/expectation you aim to achieve for Design, Art and Tech
  - Design
    - o A mechanic gym level will all important feature implemented
    - o Implement UI
  - 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 Designing UI for Starting Screen was incomplete

## Team Rosters and Signatures:

### Ong Yong Zheng

Major: BAGD  
Championing/Responsibilities: Prototype, Mechanics  
DigiPen Email: Yongzheng.o@digipen.edu



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### Leok Boon Siang

Major: BAGD  
Championing/Responsibilities: Narrative, UI  
DigiPen Email: B.leok@digipen.edu



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### Tan Xing Hao

Major: BFA  
Championing/Responsibilities: Art characters, Art Concept, Art Environment  
DigiPen Email: xinghao.tan@digipen.edu



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### Tan Yong Wee

Major: RTIS  
Championing/Responsibilities: Engine architecture, Object Factory  
DigiPen Email: yongwee.tan@digipen.edu



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### Calvin Boey Siu Hoe

Major: BSGD  
Championing/Responsibilities: Rendering, Windows, Math  
DigiPen Email: s.boey@digipen.edu



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**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
Demo- Mechanic Gym (Features) Coding	5	100%	<u>6 Mechanic added</u> <b>Rumbles</b> - Remove obstacle by attracting metals /Magnet  <b>Platform</b> - use metal/magnet as a platform  <b>Electromagnet</b> - Electrify metal to convert it to magnet  <b>Magnet climbing</b> - able to stick onto metal wall  <b>Switch activation</b> - use metal/magnet to activate switches  <b>Repel Projectile</b> - Repel projectile
Demo- Implementation of Placeholder Art assets	1	100%	<u>Placeholder Sprite added</u> <b>Character</b> <ul style="list-style-type: none"><li>- <b>Main Character</b></li></ul> <b>Prop</b> <ul style="list-style-type: none"><li>- <b>Metal Crate</b></li><li>- <b>Magnetic Crate</b></li></ul> <b>UI</b> <ul style="list-style-type: none"><li>- <b>Health icon</b></li><li>- <b>Polarity icon</b></li></ul>

Demo- Implementation of Placeholder Animation	2	100%	<u>Placeholder Animation added</u> <b>Main Character</b> <ul style="list-style-type: none"><li>- <b>Movement</b></li><li>- <b>Power</b></li><li>- <b>Idle</b></li></ul>
Research in game UI for Demo	3	100%	Work with Artist & Designer
NOT ACCOMPLISHED TASKS			
TASK	REASON		
Demo- Mechanic Gym (Secondary) Coding	<ul style="list-style-type: none"><li>- We have enough mechanic showcase for the gym level</li></ul>		
NEXT WEEK – OBJECTIVES			
TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Preparation for presentation	1	Must Have	Work on slides
Ideation - More uses for game mechanic	3	Should Have	Working with Designer

# Leok Boon Siang : Report

Major: BAGD

Championing/responsibilities: Narrative Champion

Team Grade: **10**

PREVIOUS WEEK – ACCOMPLISHMENTS			
TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Start Menu Implemented Into Demo	1	100%	Added Game Logo and Place Holder Buttons onto the Demo
Pause Menu Implemented with UI	1.5	100%	Added Pause Menu With Placeholder Buttons that allows player to quit into Main Menu
Research in game UI for Demo	3	100%	
Simple Mechanics Mockup	2	25%	To be placed into presentation
NOT ACCOMPLISHED TASKS			
TASK	REASON		
NEXT WEEK – OBJECTIVES			
TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Presentation slides	2	Must have	Rehearse and finish up slides

## Tan Xing Hao – Report

**Team Grade: 8**

**Major: BFA**

**Championing/responsibilities: Art Lead**

### PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Create UI assets	2	70%	Worked with Boon Siang to sort out layout and drafted out mockups for in-game and start screen UI.
Finish up environment rendering (with colour)	6	70%	Made two first-version variations of background, pending feedback from art faculty.
Finish up character renderings (with colour)	4	90%	Made first-version final character design with poses, pending feedback from art faculty.
Create variations of in-game prototypes	3	50%	Made one prototype piece with current assets, pending feedback from art faculty..

### NOT ACCOMPLISHED TASKS

TASK	REASON
Animate main character sprite - walking motion	It is a Would-Have task so it is not a big priority to work on, will scrap this task to prioritise others for PoC next week

### NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Touch up character designs	3	MUST HAVE (1)	Pending art faculty feedback, touch ups to be



			done before Monday deadline.
Touch up environment background	8	MUST HAVE (2)	Pending art faculty feedback, touch ups to be done before Monday deadline.
Create UI assets	2	MUST HAVE(3)	Priority on Start Screen UI elements.
Create variations of in-game prototypes	2	MUST HAVE(4)	To be done immediately after remaining assets are done and ready-to-go.
Create (1) team logo and (2) game logo	2	MUST HAVE(5)	Priority on team logo over game logo

## Tan Yong Wee – Report

Team Grade: **10**

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK		HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Object factory		8	80%	Needs polishing
Optimise framework and Integrate framework with other modules	Module Integration and optimisation	4	75%	Most modules for milestone integrated, needs polishing
	Snap-to-grid	2	50%	Integrated into framework; Some behaviour not implemented
	Basic physics	2	75%	Integrated into framework; More complex physics behaviour not implemented
	Collision	2	50%	Integrated into framework; Some behaviour not implemented
	Renderer	2	60%	Integrated into framework; Some behaviour not implemented
Help Calvin with graphics		2	ongoing	Fixed many issues with rendering gfx
Code review		2	ongoing	Conduct code review with team members

NOT ACCOMPLISHED TASKS

TASK		REASON
Optimise framework and Integrate framework with other modules	Input manager	Not enough time; Encountered various issues with other modules; Was a stretch goal

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
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Optimise framework and ensure all modules are working in sync; prepare for milestone	Object factory	2	SHOULD HAVE	Optimise for runtime	
	Output objects	2-4	WISH TO HAVE	Object factory able to serialise and output object or map data	
	Framework	2	MUST HAVE	Optimise for runtime; ORGANISE FILES AND FOLDERS (!); REMOVE WARNINGS (!)	
	Snap-to-grid; Environment / Map	2-4	MUST HAVE	Map and background should render and behave as intended in conjunction with physics	
	Basic physics	1-10	WISH TO HAVE	Better physics behaviour; Player interaction etc.	
	Collision	2-4	MUST HAVE	Collision response must work in conjunction with physics	
	Renderer	1-2	MUST HAVE	Render debug information; Proper camera; Optimise and handle window resize	
	Player input	1-4	MUST HAVE	Basic player input	
	Logic	2-6	WISH TO HAVE	Some form of designer logic and scripts if time permits	
Help Calvin with graphics		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
Animation system	6	100%	Currently working however might be edited in the future to suit the designer's needs.
Debug Drawing	4	100%	Basic debug drawing for physics and collision.
Windows Class to implement full screen	4	100%	Windows resize and OpenGL is rescaled.
Graphic system (including shader class/textures)	10	100%	Finished and working.
NOT ACCOMPLISHED TASKS			
TASK	REASON		
NEXT WEEK – OBJECTIVES			
TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
Debug codes	4	Must have	Clear all warnings
Clean up codes	4	Must have	Comments for easier reading
Prepare for submission And presentation	4	Must have	Including optimizing my own systems codes
Optimize codes that can be optimized	4	Should have	E.g redundant re-calculation and having a proper camera component.
Help with other modules	4	Should have	

## Wang yidi – Report

Team Grade: **10**

PREVIOUS WEEK – ACCOMPLISHMENTS

TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Physics and collision	10	60%	Physics is working, but collision is still testing, objects are able to collide with each other but the reaction after collision is not correct. Asked jun ming to provide some help.

NOT ACCOMPLISHED TASKS

TASK	REASON
Physics and collision	Graphics is only up this week, i have no time to test for collision because i have to revise math 258 exam and cs180 quiz.

NEXT WEEK – OBJECTIVES

TASK	ESTIMATED HOURS REQUIRED	PRIORITY	REMARKS
polishing	6	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.

## Leong Jun Ming – Report

Team Grade: **10**

PREVIOUS WEEK – ACCOMPLISHMENTS			
TASK	HOURS SPENT	PERCENTAGE COMPLETED	REMARKS
Messaging System Completed	8	100%	Now accepts member functions and static functions. Listeners now auto unregister themselves on destruction. Could be better optimized - A LOT of rebinding to store functions - SFINAE also implemented - Compiler error on failure to provide acceptable pointers. Unfortunately won't be integrated into Engine yet since collision/physics are being merged and systems don't require it yet.
Basic Integration of Collision Detection and Response AABB	4	50%	Integration of Collision Detection and Response into Systems. Mostly piggybacking off YW's earlier code that only looped through components and didn't really do proper check. Still trying to get proper detection up and running.
Studying ImGui	4	100%	Stopped since Graphics Context loading wasn't up yet.
Minor Optimizations and updates to previously made systems	2	100%	Mostly renaming conventions, file placements, minor code optimizations etc.

**NOT ACCOMPLISHED TASKS**

<b>TASK</b>	<b>REASON</b>
Collision Detection and Response AABB	Detection is working-ish, numbers need to be adjusted. Response needs to be properly worked in.

**NEXT WEEK – OBJECTIVES**

<b>TASK</b>	<b>ESTIMATED HOURS REQUIRED</b>	<b>PRIORITY</b>	<b>REMARKS</b>
Collision Detection Response AABB	5	Must Have	IMPORTANT MUST HAVE
Help Other Team Members	N.A	Must Have	Most goals are achieved, now helping integrate other people's systems inside.

**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:**

Team meeting: 3 times, each time 3 to 4 hours

**Code Review:**

Reviewed one this week

**Next week's MVP :**

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

- Design

Presentation preparation

Have Demo ready for submission

Brainstorm more ways to utilise core and secondary mechanic in game

- Tech

Physics and collision system up and running

Graphics up and running

- Art

Finalise remaining assets (Environment, Character, UI, in-game prototype) before Milestone presentation.

Shape up Proof-of-Concept before Week 5

**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):**

- Design
  - o Need to consult michael regarding the game mock up
    - what is he looking for in the game mechanic mock up