# Internal Assessment Resource

## Digital Technologies & Hangarau Matihiko Level 2

This resource supports assessment against Achievement Standards 91893, 91896 and 91897

## Philosophy

“Make amazing things and the credits will take care of themselves.”

This assessment task and marking schedule is designed so that students don’t have to talk about what they are doing, or gather information about their planning. The concept is that if we make an amazing game, we will generate the evidence required. Every decision made in designing this task has this philosophy as it’s guiding principle.

At all times students doing amazing things is prioritised over students talking about what they did. The assessment task and marking schedules keep this in the forefront at all times.

# Teacher Notes

# Standards:

* 91893 Use advanced techniques to develop a digital media outcome (4 credits)
* 91896 Use advanced programming techniques to develop a computer program (6 credits)
* 91897 Use advanced processes to develop a digital technologies outcome (6 credits)

Credits: 16

# Resource title: Arcade Game Development

Teachers/kaiako need to be very familiar with the outcome being assessed by the achievement standards. The achievement criteria and the explanatory notes contain information, definitions, and requirements that are crucial when interpreting the standard and assessing students/ākonga against it.

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## Context/Te Horopaki

This is an integrated assessment activity supporting a project approach that assesses against three achievement standards.

This activity requires students to plan, design and manage the development of an arcade game computer program using complex programming and media techniques.

The aim of this assessment is for students to create an Arcade Game that they are very proud of and that showcases both their game design, character design and level design skills as well as their programming ability. A large project like this requires some form of project management. Students at all times are encouraged to get excited by the product and not to focus on the assessment criteria. Students who develop a refined arcade game, using user feedback and testing to refine it and project management techniques to manage the project will have the evidence required.

All the assessment requirements should fall out of the students creating an amazing Arcade Game.

The assessment task will be broken up into 10 two week long sprints. The program will be incrementally designed following a minimum viable product and incremental development. This allows the students to test the game and decide on the next things to add or how to refine the game at all stages through the game's development.

The format of the final outcome is an arcade game.

## Resource requirements/Ngā Rauemi

Students will need access to computers that have Python and the Arcade library installed. Pycharm is not required, however, it is strongly recommended as it helps to ensure PEP-8 guidelines are being followed. Students will need to be able to take screenshots and screencasts. Students will need to be able to record sounds, music as well as create backdrops, sprites and environmental assets for their games.

# Student Task

# Standards:

* 91893 Use advanced techniques to develop a digital media outcome (4 credits)
* 91896 Use advanced programming techniques to develop a computer program (6 credits)
* 91897 Use advanced processes to develop a digital technologies outcome (6 credits)

Credits: 16

# Resource title: Arcade Game Development

## Introduction/Kupu Arataki

Your task is to create an amazing Arcade Game that you are very proud of. This should be of such a quality that you can use it for job interviews and as part of your portfolio of work.

You will be starting with a minimum viable game product that will be created together in class. You will then incrementally improving this game using two week Sprint cycles of development. At the end of each sprint you will have a functioning game that is an improvement on the game from the last sprint.

During these sprint cycles, to ensure you create the best game you can you will need to test it and gather feedback from players.

## Timeframe

This is a project that runs for most of the year. It will be split into a number of Sprints to help manage the complexity of the project. It is anticipated that there will be 10 Sprints required to develop a high quality outcome.

Teacher note: Students negotiate due dates with their teacher that fall within the school year. This will be earlier if the students are choosing to be assessed against the external.

## Task/Hei Mahi

Arcade Game Development. Arcade games have a rich history and are fun to make and play. Arcade games lead into careers within the rapidly growing game development industry. This year you will be creating a refined Arcade Game, designing all the assets, sounds, blocks and backdrops. You will be crafting and refining the game play, while adding features.

Starting with a minimum viable product, you will incrementally create and develop your game based on the results of user testing and feedback.

It is recommended that your game is an arcade platformer style of game. Other styles may be negotiated with your teacher.

You will be required to complete a Sprint Tracking document at the end of each Sprint. This document will capture your process.

You and your teacher will review each sprint to ensure that you are on track and to capture evidence required for the standards.

You will be required to capture your evolving list of features and ideas. This will change over time and will be captured in the sprint cycles. You will use a KANBAN board to capture this process.

Go and make something amazing!