**Internal Assessment Resource**

**Achievement Standards:** 91906 and 91907

**Standard title:**  91906 Use complex programming techniques to develop a computer program (6 credits)

91907 Use complex processes to develop a digital technologies outcome (6 credits)

**Credits:** 12

**Resource title:** Solve a Problem

**Resource reference:** Digital Technologies & Hangarau Matihiko 3.7A\_3.8A Version 1

**Ākonga/Student instructions**

## Kupu Arataki / Introduction

Your task is to form a small app development studio that creates an amazing app or program 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.

The Studio: In small groups of 3-4 you will be forming a small app/program development studio that will be collectively designing and developing the app/program. Each student will have specific responsibilities within the studio, although each student will contribute to each aspect.

**Due Date**: 23 September 2024 @ 08:00

The suggested roles are:

**Artistic Director:**

Responsible for the overall look and feel of the app and that the individual contributions cohere visually and the look and feel of the app is consistent with the relevant conventions for apps for Android/Apple/Web.

**Scrum Master:**

Responsible for running studio scrum meetings and keeping sprint docs organized, maintaining the Trello board and supporting the progress of each studio member.

**The Git:**

Maintains the codebase on GitHub and makes sure each team member can correctly push / pull create issues, pull requests, create and resolve issues, and deal with merge conflicts. Keeps new development isolated in branches and merges when complete.

**Quality Assurance**:

Manages the testing and robustness of the project. Works with the other developers in the studio to find, log, and resolve issues.

Each student needs to contribute to each aspect of the project i.e. each student needs to have created visual \ audio assets \ animations \ sections, completed their own components in the codebase and completed their own testing and trailing and sprint docs.

You will be starting with an App Design Document that outlines the core aspects of the App including the overall purpose, art style, key components etc. and why your app should be developed.

Development will take place in 2 week sprint cycles. During these sprint cycles, to ensure you create the best app you can you will need to test it and gather feedback from users. At the end of the sprint you will meet as a studio and report back.

## Timeframe

This is a project that runs for most of the rest 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.

## Hei Mahi / Task

The number of apps that are available to us is growing each day and many in some way or the other find solutions to problems that user experience. This year you will be creating a refined app. You will be crafting and refining the app interface, while adding features.

Starting with an App Design Document, you will incrementally create and develop your app based on the results of user testing and feedback.

It is recommended that your app is a problem-solving app. Other apps 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, and the progress of your studio.

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!