Game Building with Radiant Worlds

A guide to delivery

Introduction

This project is one of our suite of design projects – as our employers believe that understanding the design process is just as important as building solutions – focusing on the games industry, and introducing game building.

The outcome of this project is to inspire young people in possible future careers in the games industry, whilst also showing them that learning coding is one way in which they can become games developers of the future.

Students work through an e-learning module that features the Radiant World team members, and work through activities that test their learning along the way. They find out about the gaming industry, including where it all started, and meet key members of Radiant Worlds who are currently building one of the world's largest games, SkySaga. They hear about programming, art and design, quality assurance, and social media marketing and how all of these different skills come together to create and market major game titles. They also hear from the Oliver twins – Philip and Andrew – who are very well known in the gaming industry, and are owners of Radiant Worlds.

They are also introduced to some key aspects of programming such as iteration, functions, variables, Boolean operators and data types, and how these work in simple programs.

Earning Open Badges for work on this project

The Tech Partnership Badge Academy is directly aligned to the TechFuture Classroom. You can find the Badge Academy by clicking on the Badges link at the top of the Learning Hub window.

Within each TechFuture Classroom project, badges are available for students to earn for the work they complete within the projects. In this project, there is one available badge:

Radiant Worlds Beginning Gamer – this is automatically awarded when students complete the e-learning module on the course page.

Resources provided

On the course page, there is a bank of resources underneath the e-learning modules that scroll using the arrows at each end of the row.

You are provided with the following resources:

- The e-learning module which students can work through individually in the classroom or at home
- Links to documents and websites where students can find out more about building games, including Scratch, Kodu and Game Maker.

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Using the Student Log

There is no Student Log for this project.

Steps in the e-learning content

The following table shows the steps in the e-learning and the knowledge that students are gaining along the way. Students have a section in the Student Log where they can add information about each tag as a reference.

Steps in the e-learning content	Learning outcomes
Hearing about the games industry, with pieces of video from designers, artists, programmers, quality assurance experts and social media engagement managers. They also hear from Philip and Andrew Oliver – the Oliver twins – who own Radiant Worlds.	What the games industry is and how it is made up from many different roles and skills.
The importance of coding in games development	Why coding is important, what types of languages are used to program games
What iteration is including an activity where the correct piece of code has to be inserted to make a game work	The use of iteration – loops – in programming and how this is used in game development
What functions are and how they are used in programming to produce a set of instructions or an algorithm	What a function is and how it works in a simple calculation program
What variables are and how important it is to name them appropriately and conventionally for them to be used by programs	Understanding the way that variables are used in programs
What Boolean operators are and they work in programs	Inputting to a program to see the influence of Boolean operators
The different data types in programming, including numbers, strings, arrays, objects and Boolean.	Distinguish different data types and identify a string
Link to the phaser.io website where students can play a game, change the code, and see the outcomes	Seeing the impact of changes in code on game performance

Timings for delivery

TechFuture Classroom projects are built for flexibility and different ways of use.

Students can work through the e-learning in one lesson. The Radiant Worlds Beginning Gamer open badge will be awarded automatically for its completion.

Note, for individual award of badges students must be logged into their own account.

When this project is complete, there is an associated project, also supported by Radiant Worlds, that looks at game design, with BAFTA. This project looks further at the processes involved in designing a game, and prepares students to submit an entry to the Young Game Designers' competition.

Flipped classroom delivery

It is possible to use TechFuture Classroom projects for flipped classroom delivery. When students have their login details, they can access the platform at any time from home and school. Students could complete the e-learning at home, and come to class to discuss coding and gaming with peers. Alternatively, this could be supplemented by a visit from a TechFuture Ambassador who can talk more about the opportunities in the industry.

If you have questions or queries about this project, contact helpdesk@techfuture.com and we will do our best to respond within 48 hours.