

# Game Design and Development | Module Resume

A module resume showcases the technical skills students gain in a PLTW module. Each resume outlines the computational skills, analytical skills, and knowledge students acquire in the module. Module resumes also detail student experience with tools, software, lab work, and engineering design. The skills listed in module resumes illustrate the immediate, applicable contributions that students can make within a workplace.

### **Creative Problem-Solving**

- · Narrative Design
- Storyboarding
- Iterative testing
- Creative Expression
- · Agile project development

#### **Tools and Software**

Roblox Studio

### **Programming Language**

• Lua Programming language

### **Production and Publication**

- Creative experiences given a set of parameters
- Design a unique world with a storyline
- Use Systeming analysis to decompose problems
- Perform iterative playtests for quality assurance during development
- Develop and reference technical documentation
- Evaluate game aesthetics, enjoyability, intrigue, and interest

#### **Art and Media**

- Use sound and visual effects to convey meaning
- · Use color effectively in a game

## **Game Design and Development Skills**

- Write scripts and functions to create game logic
- Create annotated programs with in-code commenting
- Create programs using procedural, eventdriven, and commonly used algorithms
- Use common algorithms to control game functionality
- Apply mathematical operations in program code
- Use conditional execution to change the flow of a game
- Handle events in a game
- Use sequential processing in game logic