GAD173 Game Programming

# Bring Me Data

| Deadline and Milestones: Week 7 | Duration: 4 Weeks | Autonomy Level: Facilitator Directed |
|---|---|---|

## Overview

As complexity and team size increases as does the need for content to be separated from code. Levels, assets, and even game logic often need to be modified independently of the core code library or engine itself. Allowing for content creators to work more autonomously and in a even grander sense, for a player to modify or expand the games content themselves. This is commonly referred to as Data Driven, often manifesting in human readable file formats, and tools such as level editors.

We as game programmers seek to create the foundation that allows the team to create the product, we do not do that alone. Much of our role is allowing or speeding the creation of content by others. We will get a our first insight into this process by creating a level editor for a simple game.

## Learning Outcomes associated to this project

L01,L02,L03,L04

## Project Brief and Process / Workflow

For this project, your facilitator will provide you with a simple 2D, C++ framework / engine. Your facilitator will also be guiding the initial technical designs that you are to implement. This will be a level editor, for a grid based platformer.

## Project Requirements

You will be extending the provided framework, and technical designs and documentation guided by your facilitator.

Using this framework as your starting point, you must design and implement the engine, system, and game logic for:
Serialisation of level data
Creation of Game Objects from data definitions
Placement, Removal, Configuration of game object elements within a level
Loading and Saving of a level file for editing
Simple Front end menu to select a level to edit or create

Note: We are concerned only with the level editor in this brief, not the gameplay.

You will be using the techniques shown in class and via assigned readings. These will include; use of language features, design patterns, technical design, software architecture, mathematical and geometrical formulae, serialisation, and file formats.

While the resulting application must fulfil the Criteria outlined above, you are encouraged to go beyond that. Your facilitator will assist in identifying areas for enhancement.

You will need to keep your technical design, including diagrams, up to date with the code that is being written. And, you will need to use a repository and source control to manage the projects files.

## Project Deliverables and Milestones

Technical Design and Planning
Archive of repository and all working files.
Release build of the project.
Readme and instructions for basic operation of your editor.

## Checklist

Milestones:
1.
A Build of your editor for a grid based platformer. This also needs to include; documentation of minimum and extra features or elements.Technical design and planning for your application. Full copy of repository and working files.
You will also need to confirm with your facilitator that access to any required assets or online tools has been granted.

## Naming Convention

Your folder should be named:
"GAD173.2_<Student Name>

Your zip file(s) should be named:
"GAD173.2_<Student Name>_<Contents>.zip"

# Bring Me Data

## Log of Changes to Project Brief

| Version Number and Trimester of Introduction | Description of changes |
|---|---|
| 101 - 19T2 | Document created |
| 102 - 19T2 | Re-org to remove scheme of work related material. |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |