WORKSHEET 3: COMPUTER GRAPHICS & VFX

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Introduction

In this worksheet, you will implement a VFX techniques which will demonstrate your understanding of the graphics pipeline.

Begin by **forking** the following git repository:

```
https://github.com/Falmouth-Games-Academy/comp280-worksheet-3
```

To complete this worksheet:

1. **Fork** the repository linked above.
2. **Implement** a basics VFX technique, this must include a procedural mesh element.
3. **Iterate** on your VFX technique.
4. **Open a pull request** by 6th of December to receive formative feedback.

Additional guidance

VFX in video games is a combination of art and programming practice, it is useful to have an understanding of how the graphics pipeline and how to exploit its feature to achieve an effect

The following are some ideas for VFX techniques you could implement

- Fireball
- Deflector Shield
- Liquid
- Flames
- Basic Animation (waving flags)

For more guidance, please read the over-arching assignment brief for this assignment on LearningSpace.

Marking Rubric

Criterion	Weight	Refer for Resubmission	Adequate	Competent	Very Good	Excellent	Outstanding
VFX Technique	60%	There is no VFX Technique implemented.	The VFX technique is very basic (e.g. some basic animation) and the procedural mesh is a basic primitive.	The VFX technique show efforts towards sophistication, but the procedural mesh is a basic primitive.	The VFX technique is moderately sophisticated, with some effort to link it into a game context (e.g. Fireball is cast by a player character).	The VFX technique is sophisticated, well thought out, and is linked to a game action.	The VFX technique is extremely sophisticated, well thought out, and would fit well into a game.
Sophistication and maintainability	40%	The project shows little or no understanding of relevant techniques and tools. Code is very poorly structured and commented, to the point of being unreadable.	The project shows basic understanding of relevant techniques and tools. Code is readable but lacking in structure and commenting.	The project shows some knowledge of relevant techniques and tools. Efforts towards structuring and commenting of code.	The project shows good knowledge of relevant techniques and tools. Code is well structured and commented. Some parameters of the VFX technique are easily tunable outside the code.	The project shows extensive knowledge of relevant techniques and tools. Code is very well structured and commented. Many parameters are easily tunable outside the code.	The project shows mastery of relevant techniques and tools. Code is extremely well structured and commented. All relevant parameters are easily tunable outside the code