FALMOUTH
UNIVERSITY

GAM250: Advanced Games Programming
3: Profiling and Analytics

Learning outcomes

- **Understand** the importance of gathering data in Game Development
- **Use** Unity's profiler to tweak the performance of your game
- **Use** Unity Analytics tool to understand player beahviour

Live Coding

Analytics

Exercise 1

- ► Track the score after every player death
- ► Track the amount of bullets the player has fired
- ► Track the Players position overtime (NB. Don't track every frame)
- ► Track how long the player, plays the game before exiting
- ► Implement a number of observers to support tracking of the above stats

Live Demo

Profiling

Exercise 2

- ▶ Profile the Shooter Games or your Game from 1st year
- ▶ Look at the **Time** column, see if you can reduce this value
- ▶ Look at the **GC** column, see if you can reduce this value

Further Reading

- Profiling (Unite 2017) -
  `https://www.youtube.com/watch?v=OSlOwJP8Z14`
- Unity Optimisation (Unite 2017) -
  `https://www.youtube.com/watch?v=_wxitgdx-UI`
- Unity Analytics and Player Behaviour (Unite 2016) -
  `https://www.youtube.com/watch?v=JzYkLzgdpWI`