FALMOUTH
UNIVERSITY

COMP110: Principles of Computing
Transition to C++ III

Learning outcomes

In this session you will learn how to...

- Define your own **classes** in C++
- Use **pointers**, and allocate objects on the **heap**
- Use **typecasting** to convert values from one type to another
- Use the **CImg** library to write basic GUI applications and image processing algorithms

Live coding: Image generation

CImg setup

1. Open Visual C++ 2015 and create a new "Win32 Console Application" (under Templates → Visual C++ → Win32)

2. Open a web browser to `http://cimg.eu/download.shtml` and download the "Standard Package"

3. Find the `CImg.h` file inside the downloaded zip, and copy it to the project folder created in Step 1 (next to the other `.cpp` and `.h` files)

4. Add the following to the bottom of `stdafx.h`:

```
#include "CImg.h"
using namespace cimg_library;
```