

## Lecture: 14-1

- Prerequisites for this lecture are: 13-1, 13-2 and 13-3.

# Overview of TouchGUI

- [documentation](http://floppsie.comp.glam.ac.uk/touchgui/homepage.html) `<http://floppsie.comp.glam.ac.uk/touchgui/homepage.html>`
- you can obtain a copy of the source code for touchgui by:
- ```
$ cd  
$ mkdir -p Sandpit  
$ cd Sandpit  
$ git clone https://github.com/gaiusm/touchgui
```

# Overview of TouchGUI

- touchgui is a simple tablet based gui for Python/Pygame
  - it allows tiles to be created from images, colours or glyphs
  - each tile has a number of callbacks which are called whenever a tap or double tap occurs

## Overview of TouchGUI

- a tile maybe in one of the following four states: images for the tile when in the frozen, active, activated or pressed state
  - the frozen state is when the tile cannot be pressed
    - (the application might choose to disable the tile)
- the active state is when the tile can be pressed by the user
  - the activated state is when the mouse pointer is hovering over the tile (but not pressed)
  - finally the pressed state is when the button is tapped.

## Touchgui on the vmware or R-pi image

- `touchgui` is installed in the images
- when running `touchmap` you need to explicitly alter the `PYTHONPATH`
  - so that the build directory can access the source directory for python libraries
- you can do this on the command line and run your `touchmap` by:
  - (this assumes you have already downloaded and configured `touchmap` from previous weeks)

## Touchgui on the vmware or R-pi image

```
$ cd  
$ cd Sandpit/build-touchmap  
$ PYTHONPATH=.../touchmap-0.1:../touchgui python3 ../touchmap-0.1/touchmap.py
```

- the PYTHONPATH environment variable is set to search the current directory (the first .)
  - then search ../touchmap-0.1 and lastly search ../touchgui for any python modules (before searching the system installed libraries)
  - note the path separator :
- after setting the PYTHONPATH the python interpreter is executed which inherits this PYTHONPATH and starts interpreting ../touchmap-0.1/touchmap.py

## Touchgui on the vmware or R-pi image

- you can use

- ```
$ cd $HOME/Sandpit/build-touchmap  
$ ./localrun.sh touchmap.py
```

- instead

## Touchgui on the vmware or R-pi image

- using a suitable file manager examine the contents of touchgui
- in particular examine the library of creative common images
- maybe make a note of icons you might find useful for your touchmap implementation