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`⟩
- 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