# Lecture: 17-1

Prerequisites for this lecture are: 16-1, 16-2 and 16-3.

### Implementation of Touchmap 0.2

- last week we adpated touchmap-0.1 to use an indirect function call to implement a spawn button
  - this worked and could be extended to implement many other buttons
- however it is an ugly implementation
  - although it was very minimal (in terms of code line changes)
- it would be cleaner to adopt an object oriented approach
  - albeit the number of lines of code will increase

#### Implementation of Touchmap 0.2

- one of the major issues of a touchmap implementation is the ability to change a tile in the grid
  - currently it changes:
    - a blank to a wall
    - a wall to a door
    - a door to a blank
- we need a spawn, hellknight, ammo, ticks etc
  - the indirect function call can do this but it will result in messy code

## Touchmap 0.2

- removes the indirect function call
  - but introduces a new class button
  - and about 20 lines of extra code

## Touchmap 0.2

■ touchmap-0.2 can be downloaded using:

```
$ cd
$ cd Sandpit
$ wget http://floppsie.comp.glam.ac.uk/download/targz/touchmap-0.2.tar.gz
$ tar zxf touchmap-0.2.tar.gz
$ ls touchmap-0.2
```

## Touchmap 0.2

and can be built using:

```
$ cd
$ cd Sandpit
$ rm -rf build-touchmap
$ mkdir build-touchmap
$ cd build-touchmap
$ ../touchmap-0.2/configure
$ make
```

and you can run it via:

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