

■ `$HOME/Sandpit/touchgui/touchgui.py`

```
#  
# create_cache - Pre-condition: None.  
#                 Post-condition: directory $HOME/.cache/touchgui created.  
#  
def _create_cache ():  
    d = os.path.join (os.path.join (os.environ["HOME"], ".cache"), "touchgui")  
    os.system ("mkdir -p %s" % (d))
```

■ `$HOME/Sandpit/touchgui/touchgui.py`

```
#  
# reset_cache - Pre-condition: None.  
#               Post-condition: all contents of $HOME/.cache/touchgui are deleted.  
#  
def reset_cache ():  
    d = os.path.join (os.path.join (os.environ["HOME"], ".cache"), "touchgui")  
    _safe_system ("rm -r %s" % (d))  
    _create_cache ()  
  
reset_cache ()
```

- you should enable `reset_cache ()` which will delete the cache and create an empty cache directory

Adding double tap to construct walls

- it would be good to add the ability for users to double tap and create walls along an axis
- requires a change to `cell_back` and keeping track of the `last_pos` tapped

Adding double tap to construct walls

```
last_pos = [] # the last saved position

#
# save_wall_pos - saves the coordinate [x, y] to last_pos
#

def save_wall_pos (x, y):
    global last_pos
    last_pos = [x, y]

#
# match_line - return True if [x, y] is the same as the last_pos
#

def match_line (x, y):
    return (last_pos != []) and ((last_pos[0] == x) or (last_pos[1] == y))
```

Adding double tap to construct walls

```
def cellback (param, tap):
    global clicked, cell_array, button_array, last_pos
    clicked = True
    mouse = pygame.mouse.get_pos ()
    x, y = get_cell (mouse)
    old = cell_array.get (x + xoffset, y + yoffset)
    button = button_array.get (x + xoffset, y + yoffset)
    if (old in ["v", " "] ) and (tap == 2):
        save_wall_pos (x + xoffset, y + yoffset)
    elif old == " ":
        # blank -> next_tile
        if match_line (x + xoffset, y + yoffset):
            draw_line (x + xoffset, y + yoffset)
        else:
            function_create[next_tile] (button)
            last_pos = [] # forget about last_pos
    ...
```


Adding double tap to construct walls

```
elif last_pos[1] == y:  
    for i in range (min (x, last_pos[0]), max (x, last_pos[0])+1):  
        old = cell_array.get (i, y)  
        button = button_array.get (i, y)  
        if old == " "  
            button.to_wall ()  
            cell_array.set_contents (i, y, "v")
```

Implementing a safe export

- it would be good if the export facility checked to see that the map exported was successfully converted by `chisel`
 - `chisel` like all GNU/Linux and Unix programs exits with status 0 on success
 - and non zero on failure
 - we can test this and change the `doom3` button (freeze it)

- we need to change: `myexport` and add `try_export` which can also be called from the `mydoom3` callback

Implementing a safe export

```
def myexport (name, tap):  
    pygame.display.update ()  
    save_map (current_map_name)  
    try_export (os.getcwd (), current_map_name)  
  
def try_export (directory, map_name):  
    os.chdir (os.path.join (os.getenv ("HOME"), "Sandpit/chisel/python"))  
    r = os.system ("./developer-txt2map " + os.path.join (directory, map_name))  
    os.chdir (directory)  
    if r == 0:  
        print "all ok"  
        doom_button.set_images (private_list ("doom3"))  
    else:  
        doom_button.set_images (error_list ("doom3"))
```

Implementing a safe export

```
def mydoom3 (param, tap):  
    pygame.display.update ()  
    pygame.time.delay (toggle_delay * 2)  
    try_export (os.getcwd (), "test.txt")  
    pygame.quit ()  
    dmap ()  
    exec_doom_map ()  
    quit ()
```