OOPZ Cheat Sheet

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| --- | --- | --- |
| Setup | Motion | Looks |
| from oopz import \* | actor.move\_forward(50) | actor.draw() |
| from random import \* | actor.move\_up(10) | actor.switch\_to\_image ("alien") |
| zufallszahl = randint(0, 400) | actor.move\_down(10) | actor.switch\_to images (["bild1", "bild2"]) |
|  | actor.move\_right(10) | actor.next\_image() |
| TITLE = "Alien im All" | actor.move\_left(10) | actor.flip\_x() |
| WIDTH = 400 | actor.turn\_right(90) | actor.flip\_y() |
| HEIGHT = 300 | actor.turn\_left(90) | actor.scale(0.5) |
| actor = Actor("bildname") | actor.go\_to(0, 0) |  |
|  | actor.point\_towards(actor2) | stage.draw() |
| mouse.hide() | actor.point\_in\_direction(45) | stage.switch\_to\_color ((0, 0, 255)) |
| mouse.show() | actor.set\_anchor("left", "top") | stage.switch\_to\_color ("blue") |
|  | actor.set\_anchor("center", "bottom") | stage.switch\_to\_image ("background") |
|  | actor.set\_anchor("right", "center") | stage.write\_text("text", (0,0)) |
| Events | **Sensing** | |
| def on\_mouse\_down(pos):  print("clicked at", pos) | actor.collide\_with((10,200))  actor.collide\_with(pos)  actor.collide\_with(actor2) | mouse.x\_position()  mouse.y\_position()  mouse.position() |
| def on\_mouse\_up(pos):  print(pos) | actor.distance\_to(actor2)  actor.distance\_to(pos) | key.left\_is\_pressed()  key.a\_is\_pressed() |
| def on\_mouse\_move(pos):  actor.go\_to(pos) | actor.position()  actor.x\_position()  actor.y\_position() | actor.angle\_to(actor2)  actor.angle\_to(pos) |
| def on\_key\_down(key):  if key == keys.DOWN:  actor.move\_down(50) | actor.get\_width()  actor.get\_height()  actor.get\_size() | actor.touching\_the\_edge()  actor.left\_the\_stage() |
| def on\_key\_up(key):  print(key) |  |  |

### Tastaturabfragen

|  |  |  |
| --- | --- | --- |
| key.a\_is\_pressed() | key.u\_is\_pressed() | key.k\_0\_is\_pressed() |
| key.b\_is\_pressed() | key.v\_is\_pressed() | key.k\_1\_is\_pressed() |
| key.c\_is\_pressed() | key.w\_is\_pressed() | key.k\_2\_is\_pressed() |
| key.d\_is\_pressed() | key.x\_is\_pressed() | key.k\_3\_is\_pressed() |
| key.e\_is\_pressed() | key.y\_is\_pressed() | key.k\_4\_is\_pressed() |
| key.f\_is\_pressed() | key.z\_is\_pressed() | key.k\_5\_is\_pressed() |
| key.g\_is\_pressed() |  | key.k\_6\_is\_pressed() |
| key.h\_is\_pressed() | key.up\_is\_pressed() | key.k\_7\_is\_pressed() |
| key.i\_is\_pressed() | key.down\_is\_pressed() | key.k\_8\_is\_pressed() |
| key.j\_is\_pressed() | key.right\_is\_pressed() | key.k\_9\_is\_pressed() |
| key.k\_is\_pressed() | key.left\_is\_pressed() | key.kp0\_is\_pressed() |
| key.l\_is\_pressed() | key.backspace\_is\_pressed() | key.kp1\_is\_pressed() |
| key.m\_is\_pressed() | key.space\_is\_pressed() | key.kp2\_is\_pressed() |
| key.n\_is\_pressed() | key.hash\_is\_pressed() | key.kp3\_is\_pressed() |
| key.o\_is\_pressed() | key.plus\_is\_pressed() | key.kp4\_is\_pressed() |
| key.p\_is\_pressed() | key.comma\_is\_pressed() | key.kp5\_is\_pressed() |
| key.q\_is\_pressed() | key.minus\_is\_pressed() | key.kp6\_is\_pressed() |
| key.r\_is\_pressed() | key.period\_is\_pressed() | key.kp7\_is\_pressed() |
| key.s\_is\_pressed() |  | key.kp8\_is\_pressed() |
| key.t\_is\_pressed() |  | key.kp9\_is\_pressed() |

# basic structure

**from** oopz.py **import** \*

TITLE = …

WIDTH = …

HEIGHT = …

*# Setup everything here*

**def** draw():

*# draw your objects here*

**def** update():

*# update your objects here*

# Beispiel

**from** oopz **import** \* # import the oopz file

TITLE = "example" # Setup everything

HEIGHT = 100

WIDTH = 400

alien = Actor("alien") # create an object with name alien

alien.go\_to(50, 50) # alien jumps to position(50,50)

stage.switch\_to\_color("white") # switch the background color to white

**def** draw(): # place the draw methods here

stage.draw() # draw the stage

alien.draw() # draw the alien

**def** update(): # manipulate the objects here

alien.move\_forward(2) # alien moves 2 pixel forward

**if** alien.x\_position() > 500: # if the x position of the alien is bigger 500

alien.go\_to(-50, 50) # alien jumps to (-50,50)

**if** key.r\_is\_pressed(): # if the key r is pressed

alien.switch\_to\_image("alien") # the image of the alien switch to "alien"

**def** on\_mouse\_down(pos): # gets called, if mouse button was pressed

**if** alien.collide\_with(pos): # if alien collide with mouse position

alien.switch\_to\_image("hurt") # change the image to "hurt"

print("got me :( ") # and print the text

**else**: # else:

print("you missed me :P") # print this text