ENGINEERING COMPUTER PROGRAMMING (SUPPLEMENTARY)

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USER INTERFACE PROGRAMMING

Programs with a graphical user interface (GUI) are structured around events. Most of the time, the program just waits for an event to happen.

Events are for instance:
- **key presses**
- **window is minimized, maximized, or closed**
- **mouse is moved**
- **mouse button is pressed**
- **cursor enters window or leaves window**

Event-based programming means that a program doesn't have

a sequential flow of control, but consists of functions that are

called by events.

WAITING FOR USER INTERACTION

The Table.ask(prompt) method must wait for the user to press a key:

```
def  ask(self, prompt):
     self.question.setMessage(prompt)
     while True:
          e = self.canvas.wait()          ←————————  e is an event object
          d = e.getDescription()
          if d == "canvas close":
               sys.exit(1)
          if d == "keyboard":
               key = e.getKey()
               if key == 'y':
                    return True
               if key == 'n':
                    return False
```