Reference

This appendix defines the structure of the Karel programming language on a single page.

Base Karel commnds:

```
move()
turn_left()
put_beeper()
pick_beeper()
```

Karel program structures:

```
# Comments can be included in any part
# of a program. They start with a #
# and include the rest of the line.

def main() :
    code to execute

declarations of other functions
```

Names of the conditions:

```
front_is_clear()      front_is_blocked()
beepers_present()     no_beepers_present()
beepers_in_bag()      no_beepers_in_bag()
left_is_clear()       left_is_blocked()
right_is_clear()      right_is_blocked()
facing_north()        not_facing_north()
facing_south()        not_facing_south()
facing_east()         not_facing_east()
facing_west()         not_facing_west()
```

Conditions:

```
if condition:
    code run if condition passes

if condition:
    code block for "yes"
else:
    code block for "no"
```

Loops:

```
for i in range( count):
    code to repeat

while condition:
    code to repeat
```

Function Declaration:

```
def  name():
    code in the body of the function.
```

Extra Karel Commands:

```
paint_corner(COLOR_NAME)
corner_color_is(COLOR_NAME)
```