**field**

| | |
|---|---|
| + | B: vector <wood> |
| + | G: vector <bump> |
| + | K: vector <stone> |
| + | Pixel: int ([128][128]) |
| - | x: double |
| - | y: double |

| | |
|---|---|
| + | calculate(): void |
| + | field() |
| + | field(double, double) |
| + | generate(int, int, int): void |

**bump**

| | |
|---|---|
| - | dispx: double |
| - | dispxy: double |
| - | dispy: double |
| - | h: double |
| - | x: double |
| - | y: double |

| | |
|---|---|
| + | bump() |
| + | bump(double, double, double, double, double) |
| + | gauss(double, double): double |

**stone**

| | |
|---|---|
| - | R: double |
| - | x: double |
| - | y: double |

| | |
|---|---|
| + | sphere(double, double) |
| + | stone() |
| + | stone(double, double, d |

**rover**

| | |
|---|---|
| - | alpha: double |
| - | beta: double |
| - | clearance: int |
| - | heading: int |
| - | speed: int |
| + | swamp: field |

| | |
|---|---|
| + | angles(int, int, int, int): int |
| + | rover(int, int, double, double, int, field&) |
| + | rover() |
| + | sensor(int, int, int, int): int |

-swamp

-turtle

-turtle

**processor**

| | |
|---|---|
| - | A1: int |
| - | A2: int |
| - | B1: int |
| - | B2: int |
| - | turtle: rover |

| | |
|---|---|
| + | processor(int, int, int, int, rover&) |
| + | processor() |
| + | route(): void |

-brain

| | |
|---|---|
| - | brain: processor* |
| - | date: int |
| - | logc: string |
| - | swamp: field* |
| - | time: int |
| - | turtle: rover* |

| | |
|---|---|
| + | body(double, double, int, int, int, in |
| + | control() |
| + | control(string, int, int) |

-server

**boundary**

| | |
|---|---|
| - | cmd: string |
| - | date: int |
| - | logb: string |
| - | server: control |
| - | time: int |

| | |
|---|---|
| + | body(): void |
| + | boundary(string, string, string, int, int) |

| wood |
| --- |
| - R: double |
| - x1: double |
| - x2: double |
| - y1: double |
| - y2: double |
| + cylinder(double, double): double |
| + wood() |
| + wood(double, double, double, double, double) |

Partial left class (cut off):

```
                  double
            ouble)
```

Partial lower-left class (cut off):

| control |
| --- |
| |
| , int, double, double, int, int, int, int, int): void |