

rover
<ul style="list-style-type: none"> <li>- a: double ([5])</li> <li>- b: double ([7])</li> <li>- c: double ([9])</li> <li>- clearance: double = 1</li> <li>- coverage: double ([9])</li> <li>- critical_angle_alpha: double</li> <li>- length: unsigned int = 3</li> <li>- old_coverage: double ([9])</li> <li>- pixel: vector &lt;Point&gt;</li> <li>- width: unsigned int = 3</li> </ul>
<ul style="list-style-type: none"> <li>+ checkclearance(): int</li> <li>+ clear(): void</li> <li>+ create_rover(double, double, vector &lt;Point&gt;, int): void</li> <li>+ give_last_cords(double*, double*): void</li> <li>+ next_tact(vector &lt;Point&gt;, double, double, int): int</li> <li>+ printcords(): void</li> <li>+ printLastCords(ofstream&amp;): void</li> <li>+ recalculate_angles(double*): int</li> <li>+ rover(double)</li> <li>+ screening(int, double, double, vector &lt;Point&gt;, int): int</li> <li>+ stop(): int</li> <li>+ teleportation(int, vector &lt;Point&gt;, int): int</li> </ul>

Gaussian
<ul style="list-style-type: none"> <li>- angle: double</li> <li>- height: double</li> <li>- sigma_x: double</li> <li>- sigma_y: double</li> <li>- x_0: double</li> <li>- y_0: double</li> <li>- z: double</li> </ul>
<ul style="list-style-type: none"> <li>+ Gaussian(double, double, double, double, double, double)</li> <li>+ z_gauss(double, double): double</li> </ul>

logs
<ul style="list-style-type: none"> <li>- R: double</li> <li>- x1: double</li> <li>- x2: double</li> <li>- y1: double</li> <li>- y2: double</li> </ul>
<ul style="list-style-type: none"> <li>+ logs(double, double, double, double, double)</li> <li>+ z_log(double, double): double</li> </ul>

-rover0

processor
<ul style="list-style-type: none"> <li>- finish_x: double</li> <li>- finish_y: double</li> <li>- rover0: rover</li> <li>- start_x: double</li> <li>- start_y: double</li> </ul>
<ul style="list-style-type: none"> <li>+ building_road(vector &lt;Point&gt;, int): int</li> <li>+ distant(double, double): int</li> <li>+ maindir(double, double): int</li> <li>+ processor(double, double, double, double, double)</li> </ul>

-process

surface
<ul style="list-style-type: none"> <li>- bumps: vector &lt;Gaussian&gt;</li> <li>- hLogs: vector &lt;logs&gt;</li> <li>- hSpheres: vector &lt;stone&gt;</li> <li>- len: int</li> <li>- wid: int</li> </ul>
<ul style="list-style-type: none"> <li>+ fill(unsigned int, unsigned int, unsigned int): void</li> <li>+ print_cord(string, int, int, vector &lt;Gaussian&gt;, vector &lt;stone&gt;, vector &lt;logs&gt;, double**): void</li> <li>+ surface(int, int)</li> </ul>

-terra

control
<ul style="list-style-type: none"> <li>- amountBumps: unsigned int</li> <li>- amountLogs: unsigned int</li> <li>- amountStones: unsigned int</li> <li>- extraBumps: vector &lt;Gaussian&gt;</li> <li>- extraLogs: vector &lt;logs&gt;</li> <li>- extraStones: vector &lt;stone&gt;</li> <li>- length: unsigned int</li> <li>- overwritingPixels: vector &lt;Point&gt;</li> <li>- process: processor</li> <li>- terra: surface</li> <li>- width: unsigned int</li> </ul>
<ul style="list-style-type: none"> <li>+ checkandfillBump(vector &lt;double&gt;, string, ofstream&amp;): void</li> <li>+ checkandfillLog(vector &lt;double&gt;, string, ofstream&amp;): void</li> <li>+ checkandfillStone(vector &lt;double&gt;, string, ofstream&amp;): void</li> <li>+ control(unsigned int, unsigned int, unsigned int, unsigned int, unsigned int)</li> <li>+ createSurface(): void</li> <li>+ fillUserDataofSurface(ofstream&amp;, vector&lt;string&gt;): int</li> <li>+ notation_cords_rover(vector &lt;double&gt;, string, ofstream&amp;): int</li> <li>+ StartRover(vector &lt;string&gt;, string, vector &lt;string&gt;, ofstream&amp;): int</li> </ul>

-controller

stone
<ul style="list-style-type: none"> <li>- R: double</li> <li>- x_0: double</li> <li>- y_0: double</li> <li>- z: double</li> </ul>
<ul style="list-style-type: none"> <li>+ stone(double, double, double)</li> <li>+ z_stone(double, double): double</li> </ul>

Point
<ul style="list-style-type: none"> <li>- x: double</li> <li>- y: double</li> <li>- z: double</li> </ul>
<ul style="list-style-type: none"> <li>+ give_x(): double</li> <li>+ give_y(): double</li> <li>+ give_z(): double</li> <li>+ Point(double, double, double)</li> </ul>

boundary
<ul style="list-style-type: none"> <li>- answers: vector &lt;string&gt;</li> <li>- config: string</li> <li>- controller: control</li> <li>- extraAnswers: vector &lt;string&gt;</li> <li>- patternsAddCommand: vector &lt;string&gt; = { "Add gauss -....</li> <li>- patternsCommand: vector &lt;string&gt; = { "Field genera...</li> <li>- patternsConfig: vector &lt;string&gt; = { "Date recordi...</li> <li>- patternsRoverCommand: vector &lt;string&gt; = { "Start in .*;...</li> <li>- rovercommands: vector &lt;string&gt;</li> </ul>
<ul style="list-style-type: none"> <li>+ boundary(string)</li> <li>+ read_configfile(string): int</li> <li>+ readFirstPartofCommandFile(ifstream&amp;, ofstream&amp;): int</li> <li>+ readRoverCommandFile(ofstream&amp;, ofstream&amp;, ifstream&amp;): void</li> <li>+ readSecondPartofCommandFile(ifstream&amp;, ofstream&amp;, ofstream&amp;): void</li> </ul>