MDP Android App Message Scheme

**Movement**

|  |  |  |  |
| --- | --- | --- | --- |
| Send | MOVE:F | Move Forward | C3 |
| Send | MOVE:TL | Turn Left |
| Send | MOVE:TR | Turn Right |

**Statuses**

|  |  |  |  |
| --- | --- | --- | --- |
| Receive | STATUS:FP | Fastest Path | C4 |
| Receive | STATUS:EX | Exploring |
| Receive | STATUS:F | Moving Forward |
| Receive | STATUS:TL | Turning Left |
| Receive | STATUS:TR | Turning Right |
| Receive | STATUS:DONE | Done <with FP/EX> |
|  |  |  |
|  |  |  |

**Algorithm**

|  |  |  |  |
| --- | --- | --- | --- |
| Send | WP:<row>,<col> | Set Waypoint | C5 |
| Send | START:<row>,<col> | Set Start Point |
| Send | BEGINFP | Begin Fastest Path | Trigger  Algo |
| Send | BEGINEX | Begin Exploration |
| Send | ARENA | Get Current Grid Status | C6, C7 |
| Send | GETPOS | Get Robot Position |

**Display**

|  |  |  |  |
| --- | --- | --- | --- |
| Receive | ROBOTPOSITION:<row>,<col>,<hdg> | Robot Position | C6, C7 |
| Receive | GRID:<map\_descriptor> | Current Grid Status  *Format: all cells, 1=obstacle* |
| Receive | BLOCK:<row>,<col>,<id> | Display Number ID Blocks | C10 |

**String**

|  |  |  |  |
| --- | --- | --- | --- |
| Send | <as is> | Send String Command | C8 |