# THE DRONE

## Documentation

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# Contents

## Overview

The_Drone is a major new technology that is destined to be a disruptive force in the field of transportation. Just as the mobile phone allowed developing countries to leapfrog older technologies for personal communication, the drone has the potential to leapfrog traditional transportation infrastructure. Built with Java Spring Boot The_Drone functions include the delivery of small items that are (urgently) needed in locations with difficult access.

## Technical Requirements

- Java 17
- Maven
- Postman

## Endpoints Details

The following are the url postfix, Method, request and/or response payload of all the endpoints

The base url is *localhost:9099/api/drone*

All media types are **application/json**

### Register Drone

URL:    /register

Method: POST

Request:
```
{
    "model": "String",
    "serialNumber": "String",
    "weightLimit": "Double",
    "batteryCapacity": "Integer",
    "state": "String"
}
```
Response: => 201

```
{
    "id": "Long",
    "model": "String",
    "serialNumber": "String",
    "weightLimit": "Double",
    "batteryCapacity": "Integer",
    "state": "String"
}
```

## Load Drone

URL:    /{droneId}/load

Method: POST

Request:
```
{
    "name": "String",
    "weight": "Double",
    "code": "String",
    "image": "Base64_String"
}
```

Response: => 201
```
{
    "id": "Long",
     "drone": {
        "id": "Long",
        "model": "String",
        "serialNumber": "String",
        "weightLimit": "Double",
        "batteryCapacity": "Integer",
        "state": "String"
    },
    "name": "String",
    "weight": "Double",
    "code": "String",
    "image": "Base64_String"
}
```

## Get loaded medication items for given drone

URL:    /{droneId}/load/{code}

Method: GET

Response: => 200

```json
{
    "id": "Long",
     "drone": {
        "id": "Long",
        "model": "String",
        "serialNumber": "String",
        "weightLimit": "Double",
        "batteryCapacity": "Integer",
        "state": "String"
    },
    "name": "String",
    "weight": "Double",
    "code": "String",
    "image": "Base64_String"
}
```

## Get all loaded medication items for given drone

URL:    /{droneId}/items

Method: GET

Response: => 200
```json
{
    "items": [
      {
        "id": "Long",
        "drone": {
            "id": "Long",
            "model": "String",
            "serialNumber": "String",
            "weightLimit": "Double",
            "batteryCapacity": "Integer",
            "state": "String"
        },
        "name": "String",
        "weight": "Double",
        "code": "String",
        "image": "Base64_String"
      }
    ]
}
```

## Checking available drones for loading

URL:     /available

Method: GET

Response: => 200

```
{
    "total": "Integer",
    "drones": [
        {
            "id": "Long",
            "droneId": "Long",
            "name": "String",
            "weight": "Double",
            "code": "String",
            "image": "Base64_String"
        }
    ]
}
```

## Check drone battery level.

URL:     /{droneId}/battery

Method: GET

Response:

```
{
    "status": "Success",
    "droneId": "Long",
    "batteryLevel": "Integer",
    "state": "String"
}
```

## Dispatch drone

URL:     /{droneId}/dispatch

Method: POST

Response:

```
{
    "status": "Success",
    "dispatchTime": "DateTime",
    "expectedDeliveryTime": "DateTime",
    "trackingId": "String"
}
```