

# Phoenix : IMF Gadget API Development Challenge

## Background:

The Impossible Missions Force (IMF) needs your help! They require a secure API to manage their gadgets. Your mission, should you choose to accept it, is to build this API using Node.js, Express, and PostgreSQL. Choose any ORM you like.

## Mission Objectives:

### 1. Gadget Inventory (`/gadgets`)

- `GET`: Retrieve a list of all gadgets.
  - a. When retrieving the list of gadgets, include a randomly generated "mission success probability" percentage for each gadget (e.g., "The Nightingale - 87% success probability").
- `POST`: Add a new gadget to the inventory.
  - a. Assign it a unique, randomly generated codename (e.g., "The Nightingale", "The Kraken").
- `PATCH`: Update an existing gadget's information.
- `DELETE`: Remove a gadget from the inventory.
  - a. Instead of actually deleting the gadget, mark its status as "Decommissioned" and add a timestamp for when it was decommissioned.

### 2. Self-Destruct Sequence (`/gadgets/{id}/self-destruct`)

- `POST`: Trigger the self-destruct sequence for a specific gadget.
  - a. Requires a randomly generated confirmation code (you can simulate this; no need to actually send it anywhere).

## Data Requirements

### Gadgets:

```
1. id (UUID)
2. name (string)
3. status (string, enum: ["Available", "Deployed",
    "Destroyed", "Decommissioned"])
```

### Bonus Points:

- **Implement robust authentication and authorization (JWT) to protect the API.**
- Deploy the API to a platform like Heroku, Render, or Railway.
- Implement the `GET /gadgets?status={status}` filter to find gadgets with a specific status.

### Submission:

- GitHub repository link with your code.
- Live link to the deployed API.
- Postman or Swagger documentation link.

### Evaluation Criteria:

- **Functionality:** Does the API meet the requirements?
- **Code quality:** Is the code well-organized and easy to understand?
- **Security:** Does the API have robust authentication and authorization?
- **Error handling:** Are errors handled gracefully?
- **Deployment and documentation:** Is the API deployed and documented?

Good luck, agent!

This message will self-destruct in 5 seconds... Just kidding! But seriously, if you're up for the challenge, send your completed assignment and resume to [abhay@upraised.co](mailto:abhay@upraised.co)



**P.S.** We also accept carrier pigeons and messages in a bottle (but email is probably faster)