# **Firestore Security Rules**

## **1.** **General Rules**

* **Version:** The rules are using version 2.
* **Service:** These rules are for Firestore, a database service.
* **Admin Check:** There's a helper function to check if a user is an admin.

## **2.** **Rules for Different Collections**

### **2.1. Users (`/users/{userId}`)**

* Read: You can read your own user data or if you're an admin.
* Create, Update, Delete: Only admins can do this.

### **2.2. Gardens (`/gardens/{gardenId}`)**

* Read: You can read your own garden data or if you're an admin.
* Create: Only admins can create a garden and it must have 'name' and 'archived' fields.
* Update: Only admins can update garden data.

### **2.3. Crops (`/crops/{cropsId}`)**

* Read: Any logged-in user can read crop data.
* Write: Only admins can write crop data.

### **2.4. Tasks (`/tasks/{tasksId}`)**

* Read: Any logged-in user can read task data.
* Write: Only admins can write task data.

### **2.5. Beds (`/beds/{bedsId}`)**

* Create: Admins or the user who owns the bed can create a bed but it must have 'name', 'userId', 'gardenId', and 'archived' fields.
* Delete, Update: Admins or the user who owns the bed can delete or update it.
* Read: You can read your own bed data or if you're an admin.

### **2.6. Plantations (`/plantations/{plantationsId}`)**

* Create: Only admins can create plantation data.
* Update: Admins or the user who owns the plantation can update it.
* Read: You can read your own plantation data or if you're an admin.

### **2.7. Harvests (`/harvests/{harvestsId}`)**

* Read, Write: Only admins can read or write harvest data.

### **2.8. Plagues (`/plagues/{plaguesId}`)**

* Read: Any logged-in user can read plague data.
* Write: Only admins can write plague data.

### **2.9. Reports (`/reports/{reportId}`)**

* Create: Only admins can create reports.
* Update: Admins or the user who owns the report can update it.
* Read: You can read your own report data or if you're an admin.

## **3.** **Summary in Table Format**

| Collection | Read | Create | Update | Delete |
| --- | --- | --- | --- | --- |
| General Rules | - | - | - | - |
| Version | 2 | - | - | - |
| Service | Firestore | - | - | - |
| Admin Check | Helper function to check admin | - | - | - |
| Users | Own data or if admin | Only admins | Only admins | Only admins |
| Gardens | Own data or if admin | Only admins; must have 'name' and 'archived' fields | Only admins | - |
| Crops | Any logged-in user | Only admins | Only admins | - |
| Tasks | Any logged-in user | Only admins | Only admins | - |
| Beds | Own data or if admin | Admins or owner; must have 'name', 'userId', 'gardenId', 'archived' fields | Admins or owner | Admins or owner |
| Plantations | Own data or if admin | Only admins | Admins or owner | - |
| Harvests | Only admins | Only admins | Only admins | Only admins |
| Plagues | Any logged-in user | Only admins | Only admins | - |
| Reports | Own data or if admin | Only admins | Admins or owner | - |
| Everything Else | Not allowed at all | Not allowed at all | Not allowed at all | Not allowed at all |