

## Stardew Valley Farm API

### What purpose does your API serve?

- The purpose of my API is to provide the user the ability to observe, update, delete, and pull key information from the Stardew Valley Farm Database. Some of this information includes:
  - Which players are currently playing the game (farmers)
  - How those farmers are planting and buying crops
  - The ability to add new players(farmers)
  - What crops are currently stored in the game
  - Updating, adding, and deletion of certain crops
  - Determining profitability of crops currently stored in the inventory
  - Listing all cattle on the farm
  - Determining if cattle will produce multiple items for the players are if they produce nothing
  - The adding and deletion of cattle

### Business Logic:

- When adding a farmer into the database, you will not have the ability to delete them. From that point on, when updating the crops that are present in the game, the user will be able to place this new farmer's name as the primary key for being able to purchase the seeds or plant that crop.
- When creating a new farmer, the user will not be allowed to enter a gold attribute value. This is so the newly created farmer will begin their adventure at 0 gold.

## Route Paths

1)

**Path Name:** Show Farmers

**Path:** (GET) `curl -X GET http://localhost:8041/stardewApi/v1/farmer/`

**Description:** Use this command to show all of the farmers currently present in the database

**Image:**

```
● [aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/farmer/
[
  {
    "player_ID": "Andy",
    "address": "Stardew Valley Farm",
    "cabin_number": 1,
    "dob": "1996-07-07T07:00:00.000Z",
    "gender": "M",
    "gold": 0
  },
  {
    "player_ID": "Holland",
    "address": "Stardew Valley Farm",
    "cabin_number": 2,
    "dob": "1986-02-08T08:00:00.000Z",
    "gender": "F",
    "gold": 0
  },
  {
    "player_ID": "Jimbo",
    "address": "Stardew Valley Farm",
    "cabin_number": 3,
    "dob": "1999-03-04T08:00:00.000Z",
    "gender": "M",
    "gold": 20
  }
]
○ [aavola@blue avola_a_P2]$
```

2)

**Path Name:** Not Planted

**Path:** (GET) `curl -X GET http://localhost:8041/stardewApi/v1/farmer/notPlanted`

**Description:** This command prints all data from the crops that are not yet currently planted on the farm.

**Image:**

```
[aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/farmer/notPlanted
[
  {
    "farmer": "Andy",
    "crop_ID": 9,
    "quality": "Normal",
    "type_of_crop": "Potato"
  },
  {
    "farmer": "Andy",
    "crop_ID": 22,
    "quality": "Silver",
    "type_of_crop": "Tomato"
  },
  {
    "farmer": "Holland",
    "crop_ID": 6,
    "quality": "Silver",
    "type_of_crop": "Blueberry"
  },
  {
    "farmer": "Holland",
    "crop_ID": 15,
    "quality": "Gold",
    "type_of_crop": "Artichoke"
  },
  {
    "farmer": "Holland",
    "crop_ID": 26,
    "quality": "Silver",
    "type_of_crop": "Radish"
  },
  {
    "farmer": "Holland",
    "crop_ID": 27,
    "quality": "Gold",
    "type_of_crop": "Radish"
  }
],
```

3)

**Path Name:** Create Farmer

**Path: (POST)** `curl -X POST -H 'Content-type: application/json' -d '{"player_ID": "Jimbob", "address": "Stardew Valley Farm", "cabin_number": "3", "dob": "1999-03-04", "gender": "M"}' http://localhost:8041/stardewApi/v1/farmer/add`

**Description:** Use this path to add another farmer(player) to our game(database)

**Image:**

```
[aavola@blue avola_a_P2]$ curl -X POST -H 'Content-type: application/json' -d '{"player_ID": "Jimbob", "address": "Stardew Valley Farm", "cabin_number": "3", "dob": "1999-03-04", "gender": "M"}' http://localhost:8041/stardewApi/v1/farmer/add
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "",
  "protocol41": true,
  "changedRows": 0
}
[aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/farmer/
[
  {
    "player_ID": "Andy",
    "address": "Stardew Valley Farm",
    "cabin_number": 1,
    "dob": "1996-07-07T07:00:00.000Z",
    "gender": "M",
    "gold": 0
  },
  {
    "player_ID": "Holland",
    "address": "Stardew Valley Farm",
    "cabin_number": 2,
    "dob": "1986-02-08T08:00:00.000Z",
    "gender": "F",
    "gold": 0
  },
  {
    "player_ID": "Jimbob",
    "address": "Stardew Valley Farm",
    "cabin_number": 3,
    "dob": "1999-03-04T08:00:00.000Z",
    "gender": "M",
    "gold": 0
  }
]
[aavola@blue avola_a_P2]$
```

**4)****Path Name:** Update Seed Purchaser**Path: (PUT)** `curl -X PUT -H 'Content-type: application/json' -d '{"farmer": "Andy"}'``http://localhost:8041/stardewApi/v1/farmer/buysSeed/48`**Description:** Use this command to update which farmer is going to be responsible for buying a certain seed type**Image:**

```
[aavola@blue avola_a_P2]$ curl -X PUT -H 'Content-type: application/json' -d '{"farmer": "Andy"}' http://localhost:8041/stardewApi/v1/farmer/buysSeed/48
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "(Rows matched: 1 Changed: 1 Warnings: 0",
  "protocol41": true,
  "changedRows": 1
}
[aavola@blue avola_a_P2]$
```

**5)****Path Name:** Update Seed Planter**Path: (PUT)** `curl -X PUT -H 'Content-type: application/json' -d '{"farmer": "Holland"}'``http://localhost:8041/stardewApi/v1/farmer/plantsSeed/25`**Description:** Use this command to update which farmer is responsible for planting certain seeds in the farm**Image:**

```
[aavola@blue avola_a_P2]$ curl -X PUT -H 'Content-type: application/json' -d '{"farmer": "Holland"}' http://localhost:8041/stardewApi/v1/farmer/plantsSeed/25
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "(Rows matched: 1 Changed: 1 Warnings: 0",
  "protocol41": true,
  "changedRows": 1
}
[aavola@blue avola_a_P2]$
```

6)

**Path Name:** Show Cattle**Path: (GET)** curl -X GET http://localhost:8041/stardewApi/v1/cattle**Description:** Use this command to print all current cattle in the database**Image:**

```
● [aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/cattle
[
  {
    "farm_building_id": "Barn",
    "animal_species": "Cow",
    "time_to_mature_days": 5
  },
  {
    "farm_building_id": "Barn",
    "animal_species": "Goat",
    "time_to_mature_days": 5
  },
  {
    "farm_building_id": "Barn",
    "animal_species": "Pig",
    "time_to_mature_days": 10
  },
  {
    "farm_building_id": "Barn",
    "animal_species": "Sheep",
    "time_to_mature_days": 4
  },
  {
    "farm_building_id": "Coop",
    "animal_species": "Chicken",
    "time_to_mature_days": 6
  },
  {
    "farm_building_id": "Coop",
    "animal_species": "Dinosaur",
    "time_to_mature_days": 11
  },
  {
    "farm_building_id": "Coop",
    "animal_species": "Rabbit",
```

7)

**Path Name:** Produce Three or More Products

**Path: (GET)** `curl -X GET http://localhost:8041/stardewApi/v1/cattle/producesThreeOrMore`

**Description:** Command that will list all cattle in the farm that produce three or more goods for the farmers

**Image:**

```
[aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/cattle/producesThreeOrMore
[
  {
    "Farm Building": "Barn",
    "Produces 3 or more products": "Cow"
  },
  {
    "Farm Building": "Barn",
    "Produces 3 or more products": "Goat"
  },
  {
    "Farm Building": "Coop",
    "Produces 3 or more products": "Chicken"
  }
]
[aavola@blue avola_a_P2]$
```

8)

**Path Name:** Produces Nothing

**Path: (GET)** `curl -X GET http://localhost:8041/stardewApi/v1/cattle/producesNothing`

**Description:** Command that lists all cattle currently on the farm that are not going to produce any products for the farmers

**Image:**

```
[aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/cattle/producesNothing
[
  {
    "animal_species": "Cat"
  },
  {
    "animal_species": "Dog"
  },
  {
    "animal_species": "Horse"
  }
]
[aavola@blue avola_a_P2]$
```

9)

**Path Name:** Add Cattle

**Path: (POST)** curl -X POST -H 'Content-type: application/json' -d '{"farm\_building\_id":"stable", "animal\_species":"Alpaca", "time\_to\_mature\_days": "29"}' http://localhost:8041/stardewApi/v1/cattle/add

**Description:** Use this command to add a new animal to the farm

**Image:**

```
[aavola@blue avola_a_P2]$ curl -X POST -H 'Content-type: application/json' -d '{"farm_building_id":"stable", "animal_species":"Alpaca", "time_to_mature_days": "29"}' http://localhost:8041/stardewApi/v1/cattle/add
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "",
  "protocol41": true,
  "changedRows": 0
}[aavola@blue avola_a_P2]$
```

10)

**Path Name:** Remove Cattle

**Path: (DELETE)** curl -X DELETE http://localhost:8041/stardewApi/v1/cattle/remove/Alpaca

**Description:** Use this command to remove an animal from the farm

**Image:**

```
[aavola@blue avola_a_P2]$ curl -X DELETE http://localhost:8041/stardewApi/v1/cattle/remove/Alpaca
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 34,
  "warningCount": 0,
  "message": "",
  "protocol41": true,
  "changedRows": 0
}[aavola@blue avola_a_P2]$
```



11)

**Path Name:** Show Crops**Path:** (GET) `curl -X GET http://localhost:8041/stardewApi/v1/crop/`**Description:** Use this command to show all current crops that the farmers have**Image:**

```
● [aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/crop/
[
  {
    "crop_ID": 1,
    "quality": "Normal",
    "type_of_crop": "Melon",
    "season": "Summer",
    "growth_time_days": 12,
    "price_each": 250,
    "quantity": 6
  },
  {
    "crop_ID": 2,
    "quality": "Silver",
    "type_of_crop": "Melon",
    "season": "Summer",
    "growth_time_days": 12,
    "price_each": 312,
    "quantity": 3
  },
  {
    "crop_ID": 3,
    "quality": "Gold",
    "type_of_crop": "Melon",
    "season": "Summer",
    "growth_time_days": 12,
    "price_each": 375,
    "quantity": 4
  },
  {
    "crop_ID": 4,
    "quality": "Iridium",
    "type_of_crop": "Melon",
    "season": "Summer",
    "growth_time_days": 12,
    "price_each": 500,
    "quantity": 2
  },
  {
    "crop_ID": 5,
    "quality": "Normal",
    "type_of_crop": "Blueberry",
    "season": "Summer",
    "growth_time_days": 13,
    "price_each": 50,

```

12)

**Path Name:** No Profit Crops

**Path: (GET)** curl -X GET http://localhost:8041/stardewApi/v1/crop/noProfit

**Description:** Use this command to show all crops that will not profit the farmers in gold value

**Image:**

```
● [aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/crop/noProfit
[
  {
    "crop_ID": 3,
    "Quality": "Gold",
    "No Profit Crop": "Melon"
  },
  {
    "crop_ID": 4,
    "Quality": "Iridium",
    "No Profit Crop": "Melon"
  },
  {
    "crop_ID": 6,
    "Quality": "Silver",
    "No Profit Crop": "Blueberry"
  },
  {
    "crop_ID": 7,
    "Quality": "Gold",
    "No Profit Crop": "Blueberry"
  },
  {
    "crop_ID": 9,
    "Quality": "Normal",
    "No Profit Crop": "Potato"
  },
  {
    "crop_ID": 10,
    "Quality": "Silver",
    "No Profit Crop": "Potato"
  },
  {
    "crop_ID": 11,
    "Quality": "Gold",
```

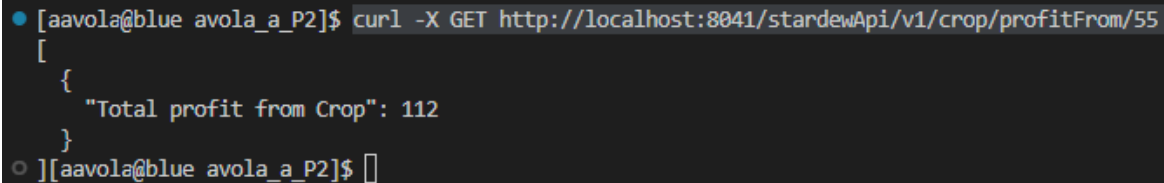
13)

**Path Name:** Profit From Crop

**Path: (GET)** `curl -X GET http://localhost:8041/stardewApi/v1/crop/profitFrom/55`

**Description:** Use this command to call on a function from my database that given a crop ID will return the total amount of profit in gold you will make if all quantities of that crop is sold.

**Image:**



```
• [aavola@blue avola_a_P2]$ curl -X GET http://localhost:8041/stardewApi/v1/crop/profitFrom/55
[
  {
    "Total profit from Crop": 112
  }
]
○ [aavola@blue avola_a_P2]$
```

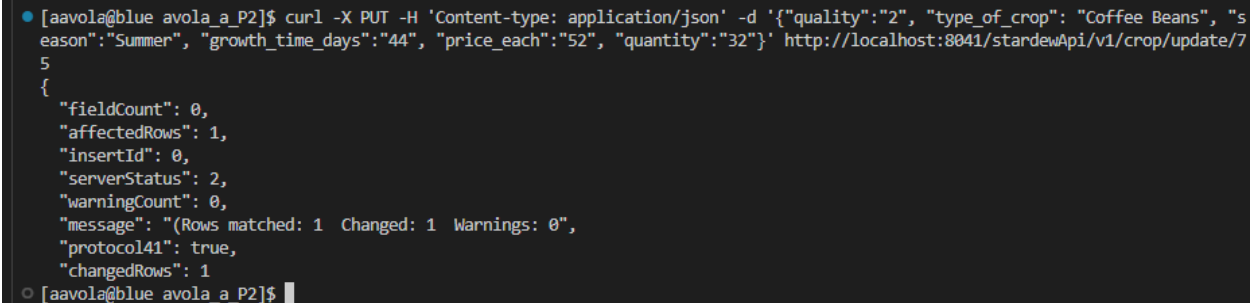
14)

**Path Name:** Update Crop

**Path: (PUT)** `curl -X PUT -H 'Content-type: application/json' -d '{"quality": "2", "type_of_crop": "Coffee Beans", "season": "Summer", "growth_time_days": "44", "price_each": "52", "quantity": "32"}' http://localhost:8041/stardewApi/v1/crop/update/75`

**Description:** Update a crops attributes that is currently present in the farm

**Image:**



```
• [aavola@blue avola_a_P2]$ curl -X PUT -H 'Content-type: application/json' -d '{"quality": "2", "type_of_crop": "Coffee Beans", "season": "Summer", "growth_time_days": "44", "price_each": "52", "quantity": "32"}' http://localhost:8041/stardewApi/v1/crop/update/75
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "(Rows matched: 1 Changed: 1 Warnings: 0",
  "protocol41": true,
  "changedRows": 1
}
○ [aavola@blue avola_a_P2]$
```

15)

**Path Name:** Insert New Crop

**Path: (POST)** curl -X POST -H 'Content-type: application/json' -d '{"crop\_ID":"85", "quality":"0", "type\_of\_crop":"Amaranth", "season":"Fall", "growth\_time\_days":"7", "price\_each":"150", "quantity":"12"}' http://localhost:8041/stardewApi/v1/crop/add

**Description:** Use this command to insert a brand new unique crop into the database

**Image:**

```
• [aavola@blue avola_a_P2]$ curl -X POST -H 'Content-type: application/json' -d '{"crop_ID":"85", "quality":"0", "type_of_crop":"Amaranth", "season":"Fall", "growth_time_days":"7", "price_each":"150", "quantity":"12"}' http://localhost:8041/stardewApi/v1/crop/add
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "",
  "protocol41": true,
  "changedRows": 0
}
○ [aavola@blue avola_a_P2]$
```

16)

**Path Name:** Remove Crop

**Path: (DELETE)** curl -X DELETE http://localhost:8041/stardewApi/v1/crop/remove/85

**Description:** Use this command to remove a crop from the database

**Image:**

```
• [aavola@blue avola_a_P2]$ curl -X DELETE http://localhost:8041/stardewApi/v1/crop/remove/85
{
  "fieldCount": 0,
  "affectedRows": 1,
  "insertId": 0,
  "serverStatus": 2,
  "warningCount": 0,
  "message": "",
  "protocol41": true,
  "changedRows": 0
}
○ [aavola@blue avola_a_P2]$
```