

Project APIs

Create a project

Endpoint: POST /api/projects

Create Floorplans

Endpoint: POST /api/projects/:id/floorplans

Get Project

Endpoint: GET /api/projects/:id

Get All Projects

Endpoint: GET /api/projects

Update Project

Endpoint: PATCH /api/projects/:id

Delete Project

Endpoint: DELETE /api/projects/:id

Delete All Projects

Endpoint: DELETE /api/projects

Floorplan APIs

Get Floorplan

Endpoint: GET /api/floorplans/:id

Get All Floorplans

Endpoint: GET /api/floorplans

Update floorplan

Endpoint: PATCH /api/floorplans/:id

Get floorplan Image

Endpoint: GET /api/floorplans/image/:filename

Delete Floorplan

Endpoint: DELETE /api/floorplans/:id

Delete All Floorplans

Endpoint: DELETE /api/floorplans

Uploads Directory for images

Database Schema

Future Improvements

Project APIs

Create a project

Endpoint: POST /api/projects

This API would be used to create a new project

Body

Name - Name of project

Description - Description of project

Returns

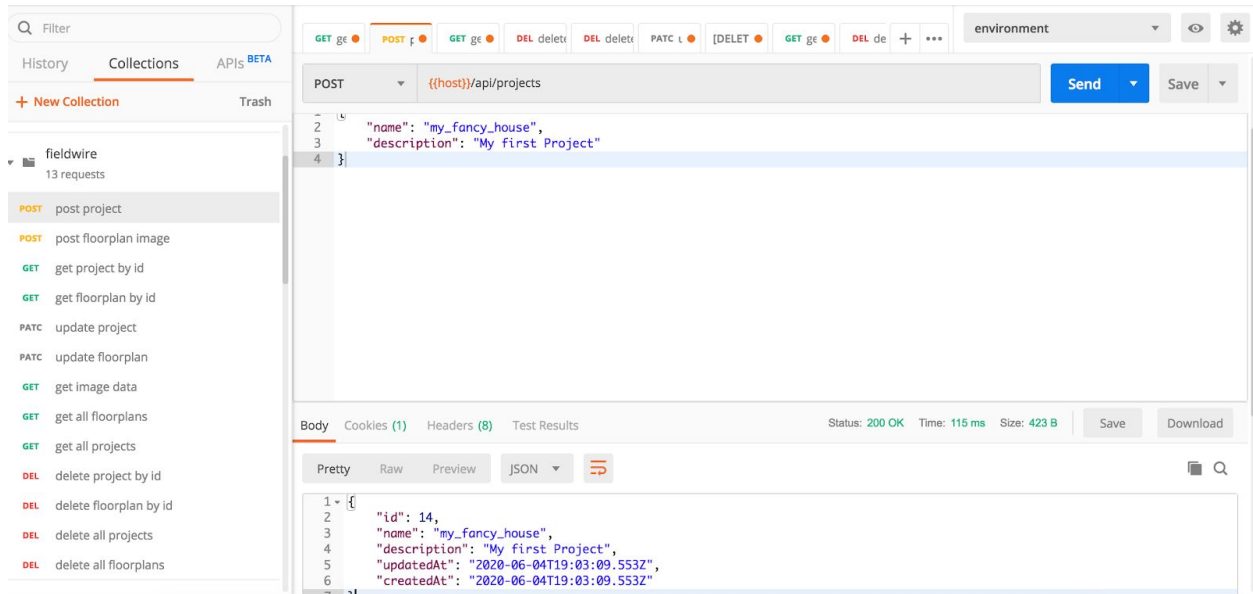
Returns a project object

Sample Request

```
curl -X POST \
  http://localhost:8080/api/projects \
  -d '{
    "name": "my_fancy_house",
    "description": "My first Project"
  }'
```

Sample Response

```
{
  "id": 14,
  "name": "my_fancy_house",
  "description": "My first Project",
  "updatedAt": "2020-06-04T19:03:09.553Z",
  "createdAt": "2020-06-04T19:03:09.553Z"
}
```



Create Floorplans

Endpoint: POST /api/projects/:id/floorplans

This API would be used when the user uploads floorplans for a particular project

Path Parameters

Id - Project id

Body Parameters:

Key - photo

value - image file

Returns

Returns success or failure message

Sample Request

curl -X POST \

http://localhost:8080/api/projects/14/floorplans \

-H 'Content-Type: application/x-www-form-urlencoded' \

-H 'content-length: 1020679' \

-H 'content-type: multipart/form-data;

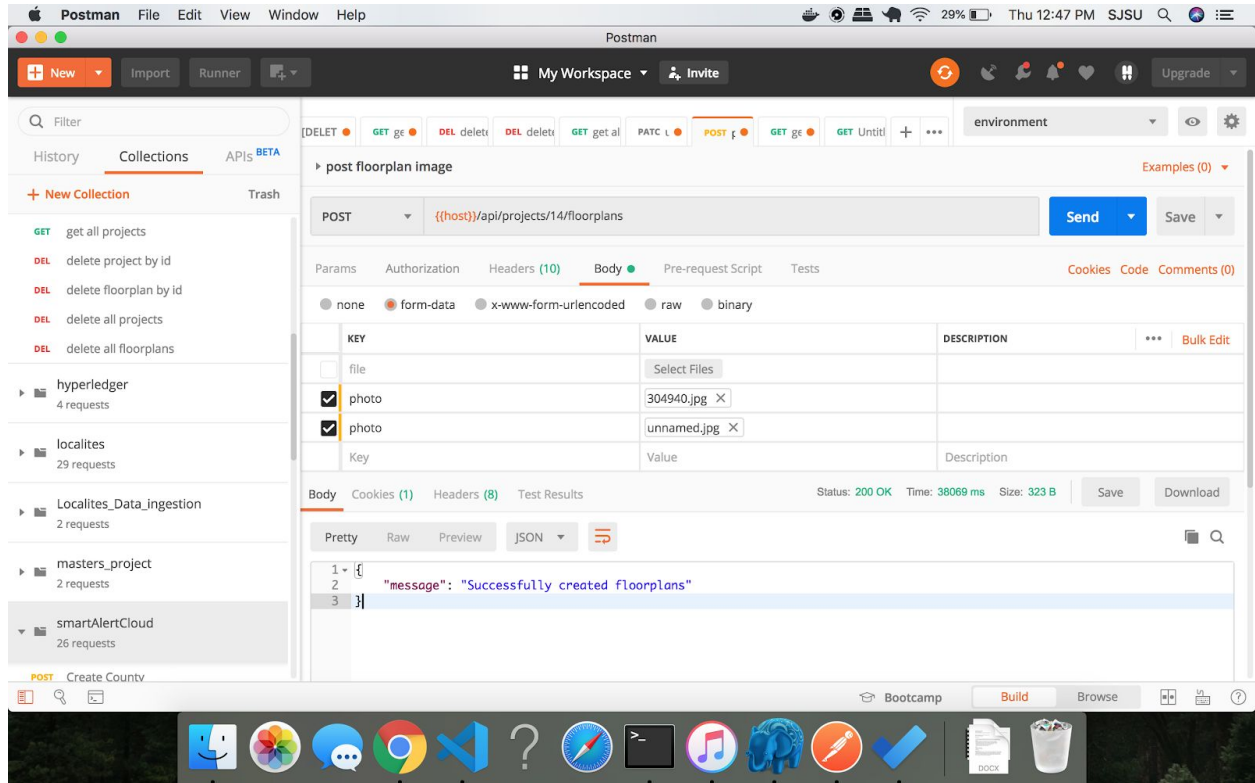
boundary=----WebKitFormBoundary7MA4YWxkTrZu0gW' \

-F photo=@/Users/kruti-sjsu/Downloads/304940.jpg \

-F photo=@/Users/kruti-sjsu/Downloads/unnamed.jpg

Sample Response

```
{  
  "message": "Successfully created floorplans"  
}
```



Get Project

Endpoint: GET /api/projects/:id

This API would be used when the user would like to access a project and its corresponding floorplans

Path Parameters

Id - Project id

Body
None

Returns
Returns Project Object

Sample Request
curl -X GET \
http://localhost:8080/api/projects/14

Sample Response

```
{
  "id": 14,
  "name": "my_fancy_house",
  "description": "My first Project",
  "createdAt": "2020-06-04T19:03:09.553Z",
  "updatedAt": "2020-06-04T19:03:09.553Z",
  "floorplans": [
    {
      "id": 32,
      "name": "unnamed",
      "original": "3ded5c8443cfaa623c13645834b48641",
      "thumb": "3ded5c8443cfaa623c13645834b48641_thumb",
      "large": "3ded5c8443cfaa623c13645834b48641_large",
      "createdAt": "2020-06-04T19:35:16.675Z",
      "updatedAt": "2020-06-04T19:35:16.675Z",
      "fk_projectid": 14
    },
    {
      "id": 33,
      "name": "304940",
      "original": "3c70c3d75d711bc81b3ccf160cd5b55f",
      "thumb": "3c70c3d75d711bc81b3ccf160cd5b55f_thumb",
      "large": "3c70c3d75d711bc81b3ccf160cd5b55f_large",
      "createdAt": "2020-06-04T19:35:16.676Z",
      "updatedAt": "2020-06-04T19:35:16.676Z",
      "fk_projectid": 14
    }
  ]
}
```

Get All Projects

Endpoint: GET /api/projects

This API would be used when the user would like to access all the projects on the platform

Path Parameters

None

Body

None

Returns

Returns Project Objects

Sample Request

```
curl -X GET \
http://localhost:8080/api/projects
```

Sample Response

```
[
  {
    "id": 14,
    "name": "my_fancy_house",
    "description": "My first Project",
    "createdAt": "2020-06-04T19:03:09.553Z",
    "updatedAt": "2020-06-04T19:03:09.553Z",
    "floorplans": [
      {
        "id": 33,
        "name": "304940",
        "original": "3c70c3d75d711bc81b3ccf160cd5b55f",
        "thumb": "3c70c3d75d711bc81b3ccf160cd5b55f_thumb",
        "large": "3c70c3d75d711bc81b3ccf160cd5b55f_large",
        "createdAt": "2020-06-04T19:35:16.676Z",
        "updatedAt": "2020-06-04T19:35:16.676Z",
        "fk_projectid": 14
      },
      {
        "id": 32,
        "name": "unnamed",
```

```

        "original": "3ded5c8443cfaa623c13645834b48641",
        "thumb": "3ded5c8443cfaa623c13645834b48641_thumb",
        "large": "3ded5c8443cfaa623c13645834b48641_large",
        "createdAt": "2020-06-04T19:35:16.675Z",
        "updatedAt": "2020-06-04T19:35:16.675Z",
        "fk_projectid": 14
      }
    ]
  },
  {
    "id": 15,
    "name": "my_fancy_office",
    "description": "My second Project",
    "createdAt": "2020-06-04T19:54:06.196Z",
    "updatedAt": "2020-06-04T19:54:06.196Z",
    "floorplans": []
  }
]

```

Update Project

Endpoint: PATCH `/api/projects/:id`

This API would be used when the user would like to update the project

Path Parameters

Id - project id

Body Parameters:

Name - name of project

Description - description of project

Returns

Returns success or failure message

Sample Request

```

curl -X PATCH \
  http://localhost:8080/api/projects/14 \
  -H 'Content-Type: application/json' \
  -d '{

```

```
    "name" : "my_fancy_house_updated"
  }
}
```

Sample Response

```
{
  "message": "project was updated successfully."
}
```

Delete Project

Endpoint: DELETE /api/projects/:id

This API would be used when the user would like to delete the project

Path Parameters

Id - project id

Body

None

Returns

Returns success or failure message

Sample Request

```
curl -X DELETE \
  http://localhost:8080/api/projects/15
```

Sample Response

```
{
  "message": "project was deleted successfully!"
}
```


Delete All Projects

Endpoint: DELETE /api/projects

This API would be used when the user would like to delete all projects

Path Parameters

None

Body

None

Returns

Returns success or failure message

Sample Request

```
curl -X DELETE \  
http://localhost:8080/api/projects
```

Sample Response

```
{  
  "message": "1 projects were deleted successfully!"  
}
```

Floorplan APIs

Get Floorplan

Endpoint: GET /api/floorplans/:id

This API would be used when the user would like to access a particular floorplan

Path Parameters

Id - Floorplan id

Body

None

Returns

Returns Floorplan Object

Sample Request

```
curl -X GET \  
http://localhost:8080/api/floorplans/32
```

Sample Response

```
{  
  "id": 32,  
  "name": "unnamed",  
  "original": "3ded5c8443cfaa623c13645834b48641",  
  "thumb": "3ded5c8443cfaa623c13645834b48641_thumb",  
  "large": "3ded5c8443cfaa623c13645834b48641_large",  
  "createdAt": "2020-06-04T19:35:16.675Z",  
  "updatedAt": "2020-06-04T19:35:16.675Z",  
  "fk_projectid": 14  
}
```

Get All Floorplans

Endpoint: GET /api/floorplans

This API would be used when the user would like to access all floorplans

Path Parameters

None

Body

None

Returns

Returns Floorplan Objects

Sample Request

```
curl -X GET \  
http://localhost:8080/api/floorplans
```

Sample Response

```
[  
  {
```

```
"id": 32,
"name": "unnamed",
"original": "3ded5c8443cfaa623c13645834b48641",
"thumb": "3ded5c8443cfaa623c13645834b48641_thumb",
"large": "3ded5c8443cfaa623c13645834b48641_large",
"createdAt": "2020-06-04T19:35:16.675Z",
"updatedAt": "2020-06-04T19:35:16.675Z",
"fk_projectid": 14
},
{
  "id": 33,
  "name": "304940",
  "original": "3c70c3d75d711bc81b3ccf160cd5b55f",
  "thumb": "3c70c3d75d711bc81b3ccf160cd5b55f_thumb",
  "large": "3c70c3d75d711bc81b3ccf160cd5b55f_large",
  "createdAt": "2020-06-04T19:35:16.676Z",
  "updatedAt": "2020-06-04T19:35:16.676Z",
  "fk_projectid": 14
}
]
```

Update floorplan

Endpoint: PATCH /api/floorplans/:id

This API would be used when the user would like to update a floorplan

Path Parameters

None

Body

Name(key) - name of floorplan

Photo(key) - floorplan image

Returns

Returns success or failure message

Sample Request

curl -X PATCH \

http://localhost:8080/api/floorplans/31 \

```
-H 'Content-Type: application/json' \  
-H 'content-type: multipart/form-data;  
boundary=----WebKitFormBoundary7MA4YWxkTrZu0gW' \  
-F photo=@/Users/kruti-sjsu/Downloads/IMG_4404.JPG \  
-F name=my_dream_kitchen
```

Sample Failed Response

```
{  
  "message": "Cannot update floorplan with id=31. Maybe floorplan was not found or req.body  
is empty!"  
}
```

Sample Request 2

```
curl -X PATCH \  
http://localhost:8080/api/floorplans/32 \  
-H 'Content-Type: application/json' \  
-H 'content-type: multipart/form-data;  
boundary=----WebKitFormBoundary7MA4YWxkTrZu0gW' \  
-F photo=@/Users/kruti-sjsu/Downloads/IMG_4404.JPG \  
-F name=my_dream_kitchen
```

Sample Success Response

```
{  
  "message": "floorplan was updated successfully."  
}
```

Get floorplan Image

Endpoint: GET `/api/floorplans/image/:filename`

This API would be used to retrieve the floorplan image

Path Parameters

Filename - Image to be retrieved

Body

None

Returns

Returns Image content or failure message

Sample Request

```
curl -X GET \
```

```
http://localhost:8080/api/floorplans/image/3ded5c8443cfaa623c13645834b4861_thumb
```

Sample Failed Response

```
{
  "message": "No such image"
}
```

Sample Request2

```
curl -X GET \
```

```
http://localhost:8080/api/floorplans/image/3ded5c8443cfaa623c13645834b48641_thumb
```

Sample Success Response

The screenshot displays a REST client interface with a sidebar on the left containing a list of collections and a main panel on the right showing the details of a selected request. The sidebar lists various API endpoints, including 'post project', 'post floorplan image', 'get project by id', 'get floorplan by id', 'update project', 'update floorplan', 'get image data', 'get all floorplans', 'get all projects', 'delete project by id', 'delete floorplan by id', 'delete all projects', and 'delete all floorplans'. The main panel shows a GET request to the endpoint 'http://localhost:8080/api/floorplans/image/3ded5c8443cfaa623c13645834b48641_thumb'. The request is successful, with a status of 200 OK, a time of 20 ms, and a size of 20.65 KB. The response body is a PNG image, which is displayed as a base64-encoded string. The interface also includes tabs for Params, Authorization, Headers, Body, Pre-request Script, and Tests, as well as buttons for Send, Save, and Download.

Delete Floorplan

Endpoint: DELETE /api/floorplans/:id

This API would be used when the user would like to delete a particular floorplan

Path Parameters

Id - Floorplan id

Body

None

Returns

Returns success or failure message

Sample Request

```
curl -X DELETE \  
http://localhost:8080/api/floorplans/9
```

Sample Failed Response

```
{  
  "message": "Cannot delete floorplan with id=9. Maybe floorplan was not found!"  
}
```

Sample Request 2

```
curl -X DELETE \  
http://localhost:8080/api/floorplans/33
```

Sample Success Response

```
{  
  "message": "floorplan was deleted successfully!"  
}
```

Delete All Floorplans

Endpoint: DELETE /api/floorplans

This API would be used when the user would like to delete all floorplans

Path Parameters

None

Body

None

Returns

Returns success or failure message

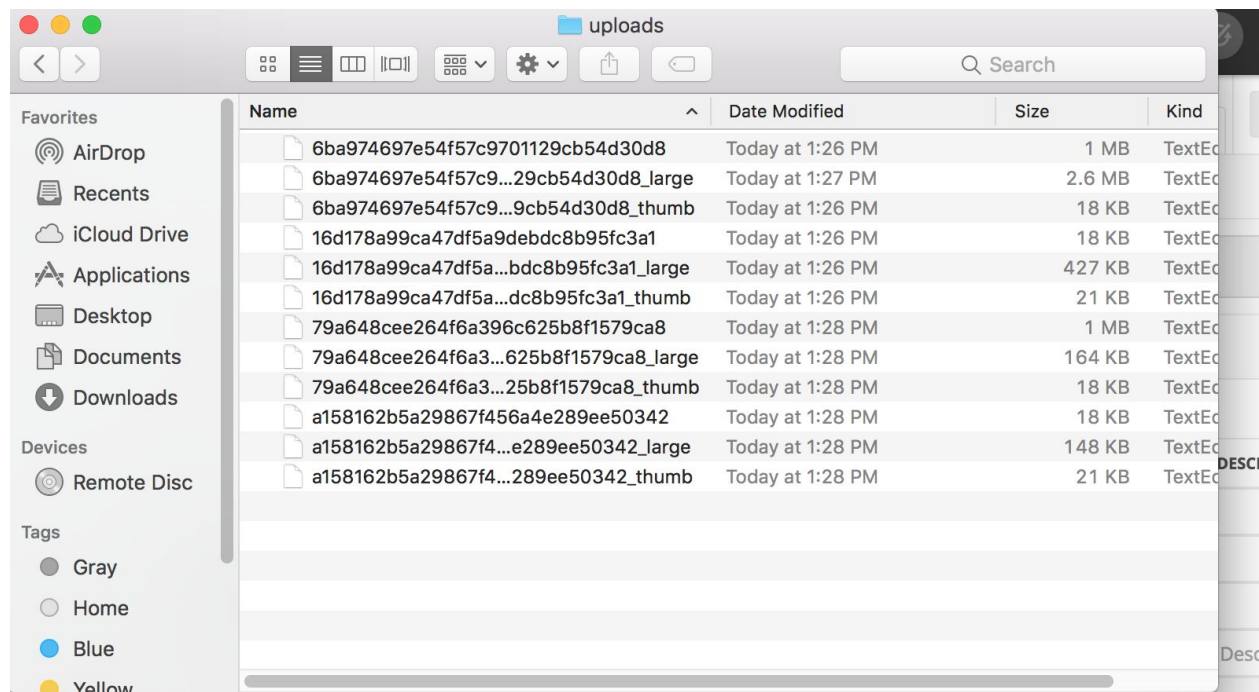
Sample Request

```
curl -X DELETE \
  http://localhost:8080/api/floorplans
```

Sample Success Response

```
{
  "message": "1 floorplans were deleted successfully!"
}
```

Uploads Directory for images



Database Schema

```
|fieldwire=# \d floorplans
```

Table "public.floorplans"				
Column	Type	Collation	Nullable	Default
id	integer		not null	nextval('floorplans_id_seq'::regclass)
name	character varying(255)			
original	character varying(255)			
thumb	character varying(255)			
large	character varying(255)			
createdAt	timestamp with time zone		not null	
updatedAt	timestamp with time zone		not null	
fk_projectid	integer			

Indexes:

"floorplans_pkey" PRIMARY KEY, btree (id)

Foreign-key constraints:

"floorplans_fk_projectid_fkey" FOREIGN KEY (fk_projectid) REFERENCES projects(id) ON UPDATE CASCADE ON DELETE SET NULL

```
|fieldwire=# \d projects
```

Table "public.projects"				
Column	Type	Collation	Nullable	Default
id	integer		not null	nextval('projects_id_seq'::regclass)
name	character varying(255)			
description	character varying(255)			
createdAt	timestamp with time zone		not null	
updatedAt	timestamp with time zone		not null	

Indexes:

"projects_pkey" PRIMARY KEY, btree (id)

Referenced by:

TABLE "floorplans" CONSTRAINT "floorplans_fk_projectid_fkey" FOREIGN KEY (fk_projectid) REFERENCES projects(id) ON UPDATE CASCADE ON DELETE SET NULL

```
|fieldwire=# select * from floorplans;
```

id	name	updatedAt	original	fk_projectid	thumb	large	createdAt
34	unnamed	0207d0da0630d733adb0b129a137b5b7-07	0207d0da0630d733adb0b129a137b5b7_16		0207d0da0630d733adb0b129a137b5b7_thumb	0207d0da0630d733adb0b129a137b5b7_large	2020-06-04 13:38:32.885-07
35	304940	b70afc8cd849b318828e3d2d4ec1c8a8-07	b70afc8cd849b318828e3d2d4ec1c8a8_16		b70afc8cd849b318828e3d2d4ec1c8a8_thumb	b70afc8cd849b318828e3d2d4ec1c8a8_large	2020-06-04 13:38:32.886-07

(2 rows)

```
|fieldwire=# select * from projects;
```

id	name	description	createdAt	updatedAt
16	my_fancy_office	My second Project	2020-06-04 13:24:31.605-07	2020-06-04 13:24:31.605-07
17	my_fancy_apartment	My third Project	2020-06-04 13:39:15.85-07	2020-06-04 13:39:15.85-07

(2 rows)

```
|fieldwire=# █
```

Future Improvements

1. Usage of query parameters instead of path parameters
2. Consistent API response
3. Standard error response
4. Update API responses to hide fields not used by the client
5. Images can be uploaded to S3 store
6. Code Refactoring

