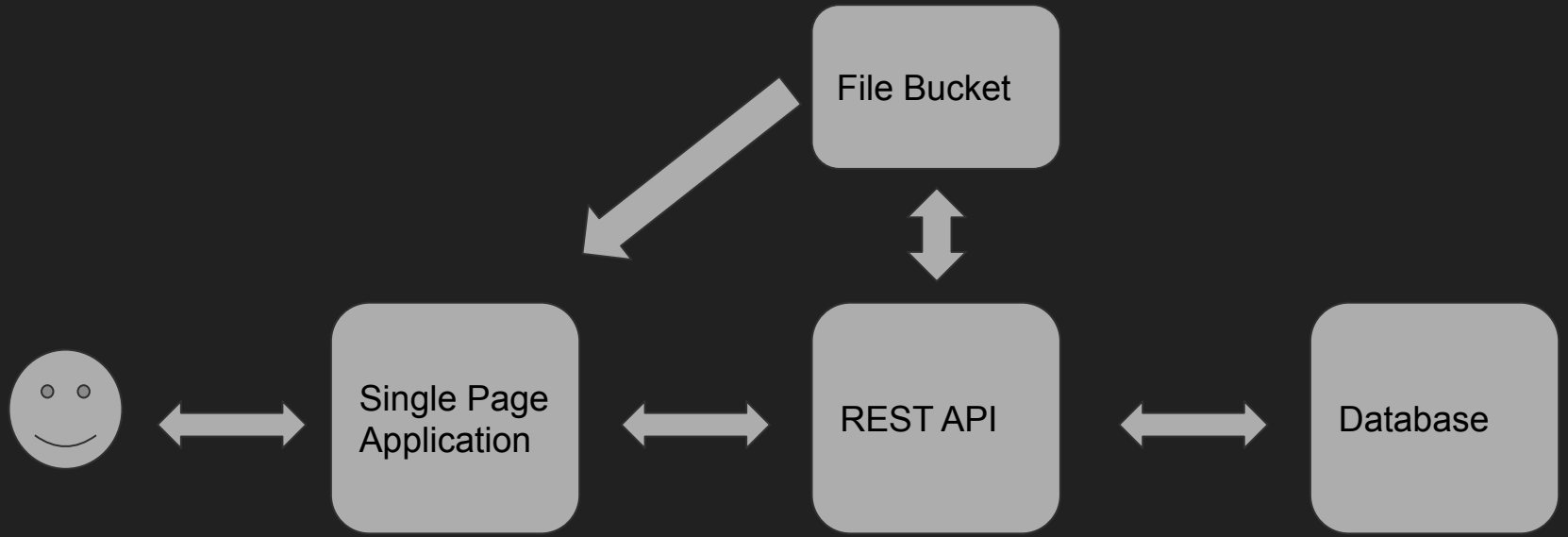
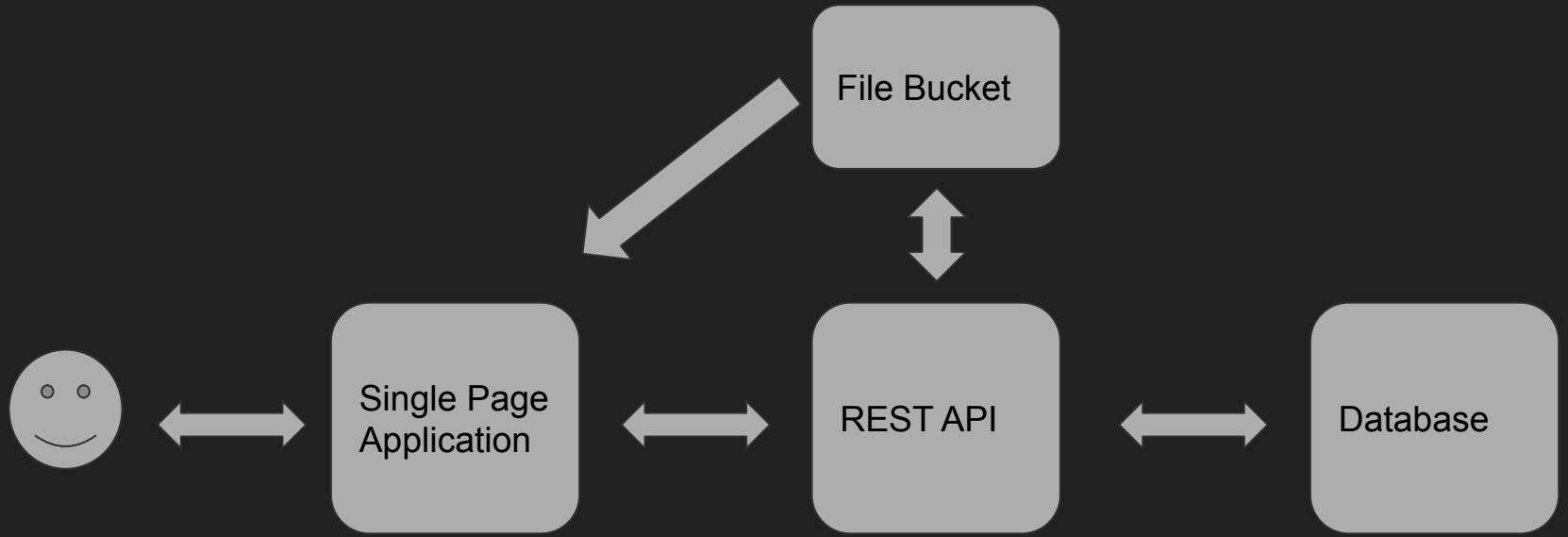
CSFlow

Architecture



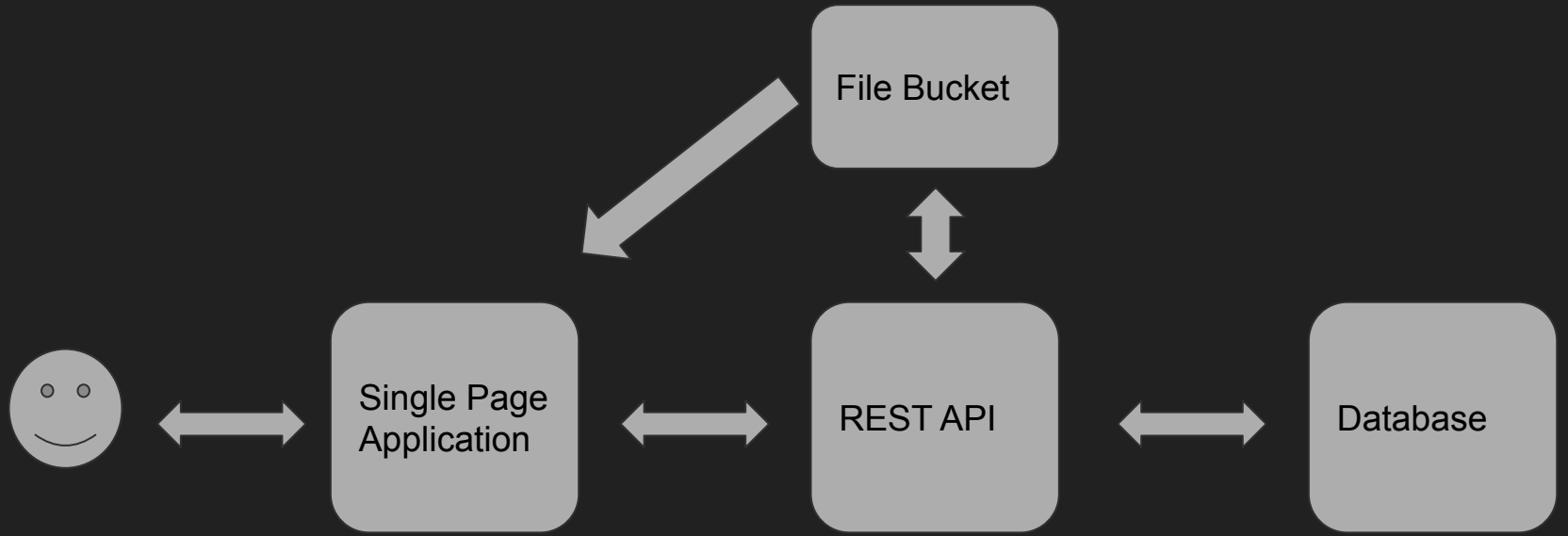
The Whole Architecture of CSFlow



Browser

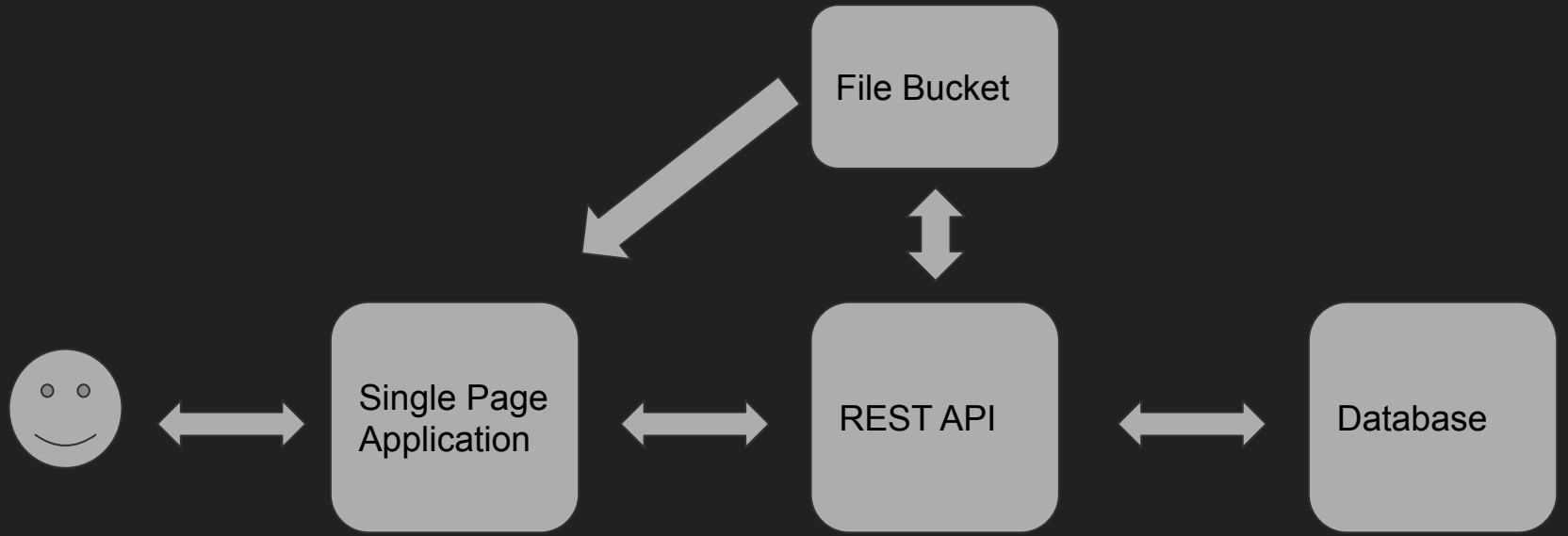
- Hosting: Firebase
- Language: Javascript
- Framework: Vue.js

- A single page application that communicates with the backend without refreshing the page.



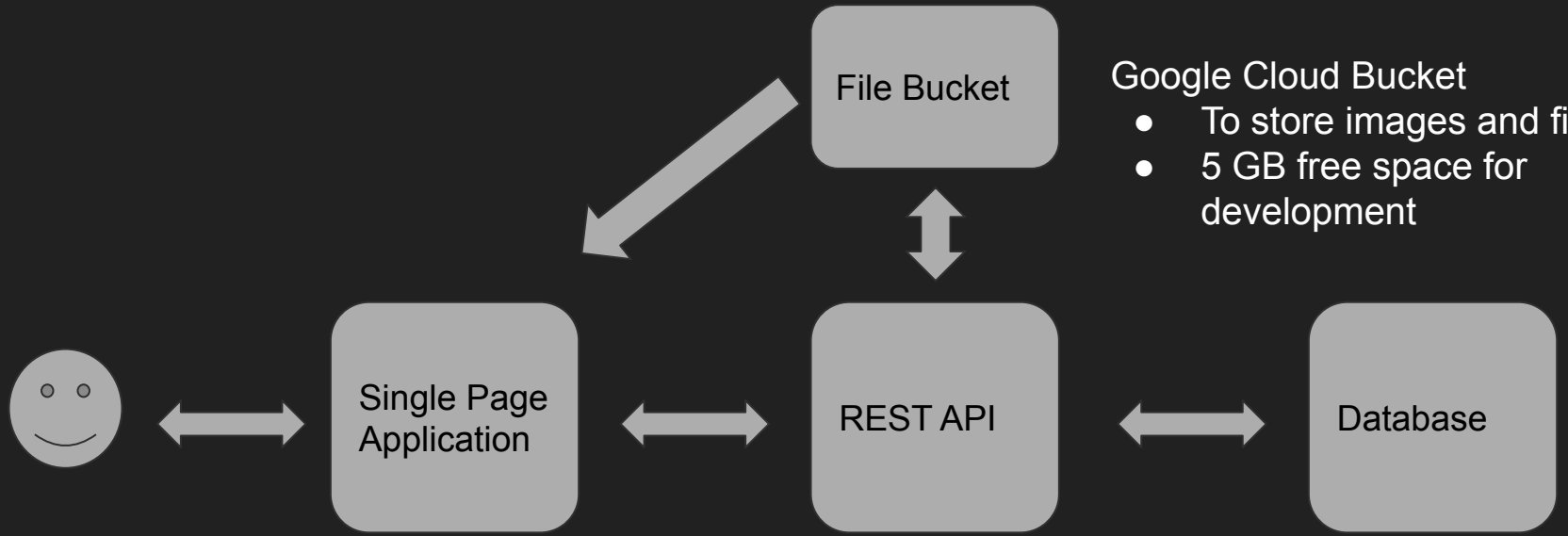
Hosting: Heroku
Language: Javascript
Framework: Express.js

Dockerized Dyno with 512 MB RAM with no persistent disk



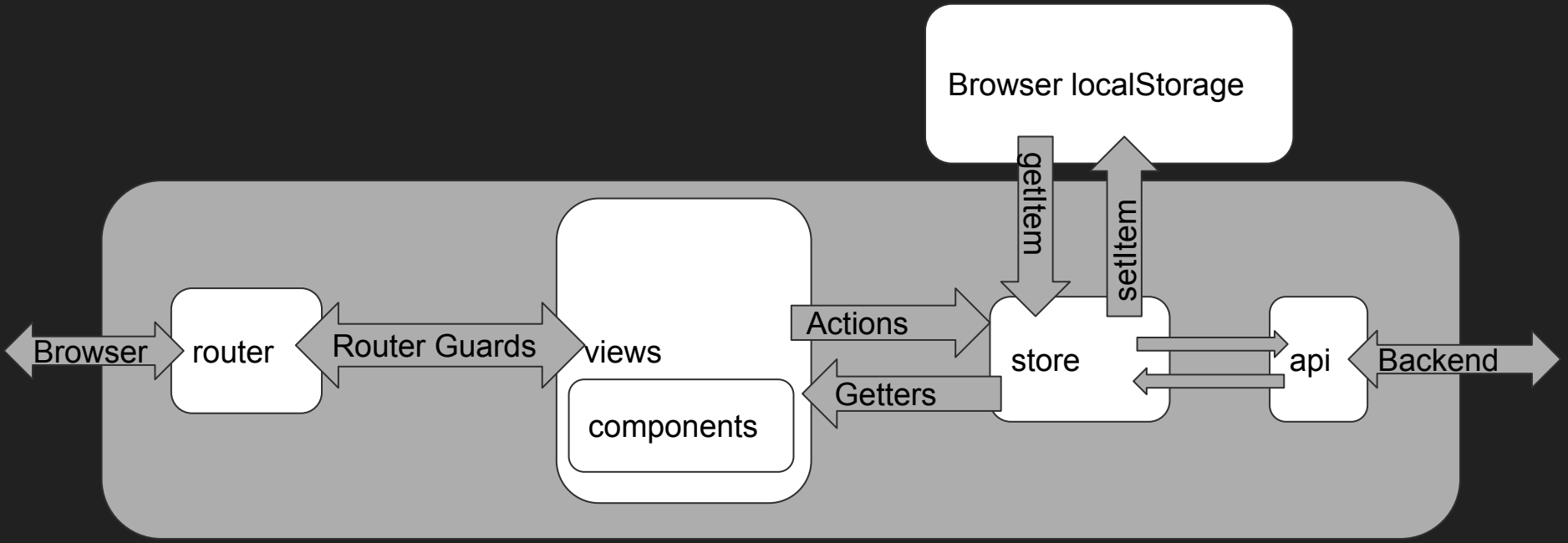
- Hosting: ClearDB
- Language: SQL
- Database: MySQL

- 500 MB of free space for development purpose

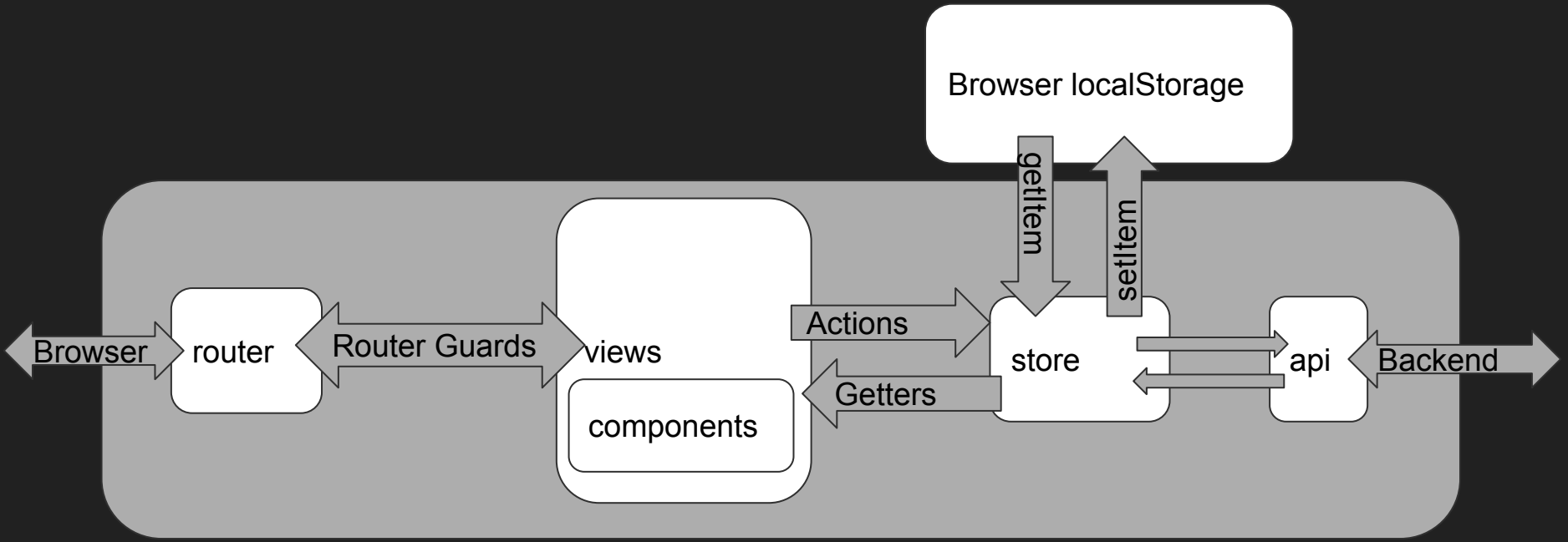


Google Cloud Bucket

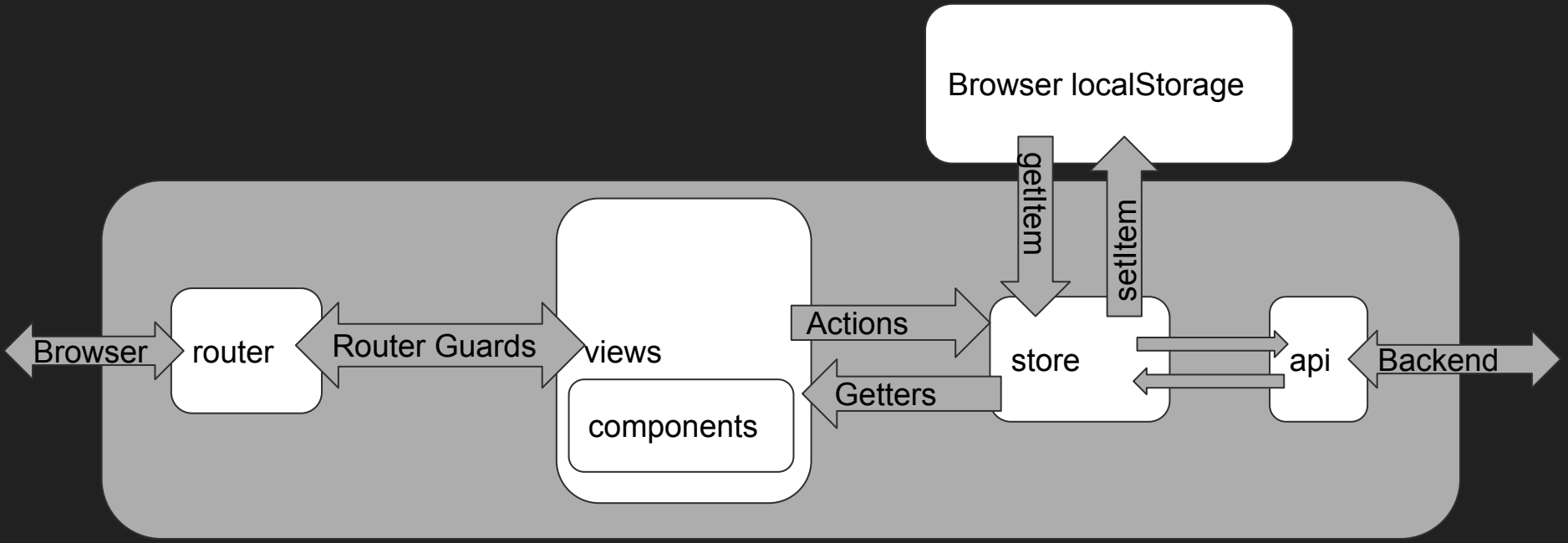
- To store images and files
- 5 GB free space for development



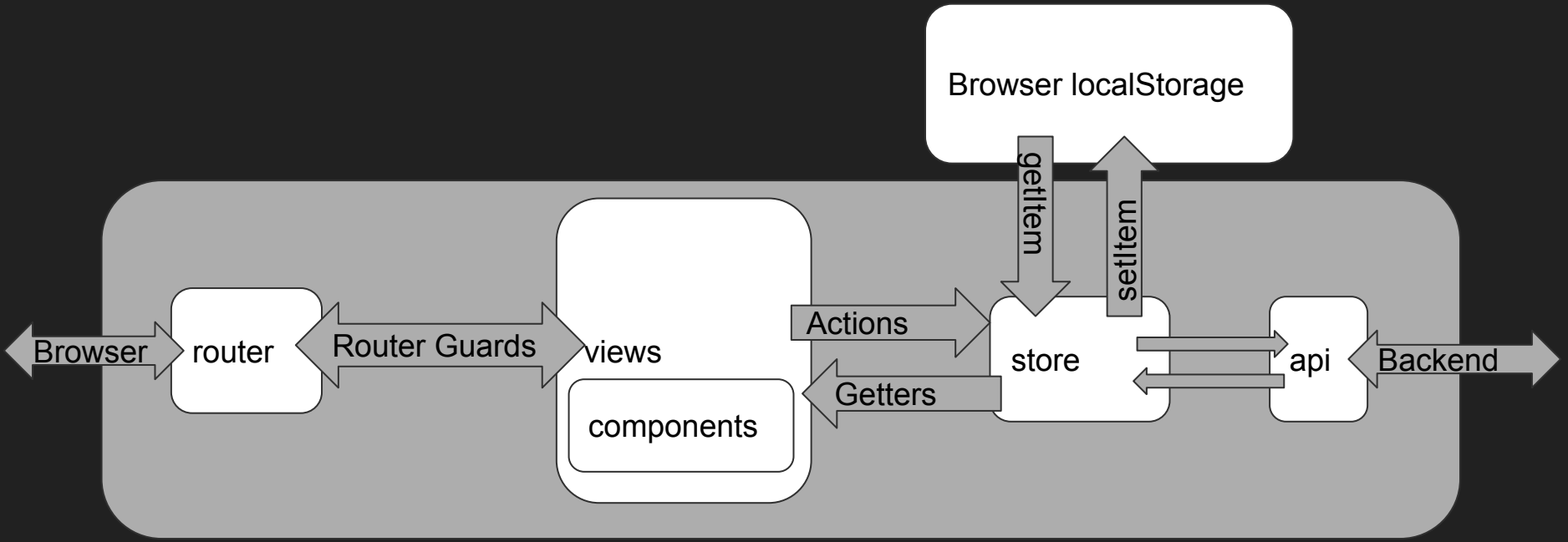
Structure of Vue.js code



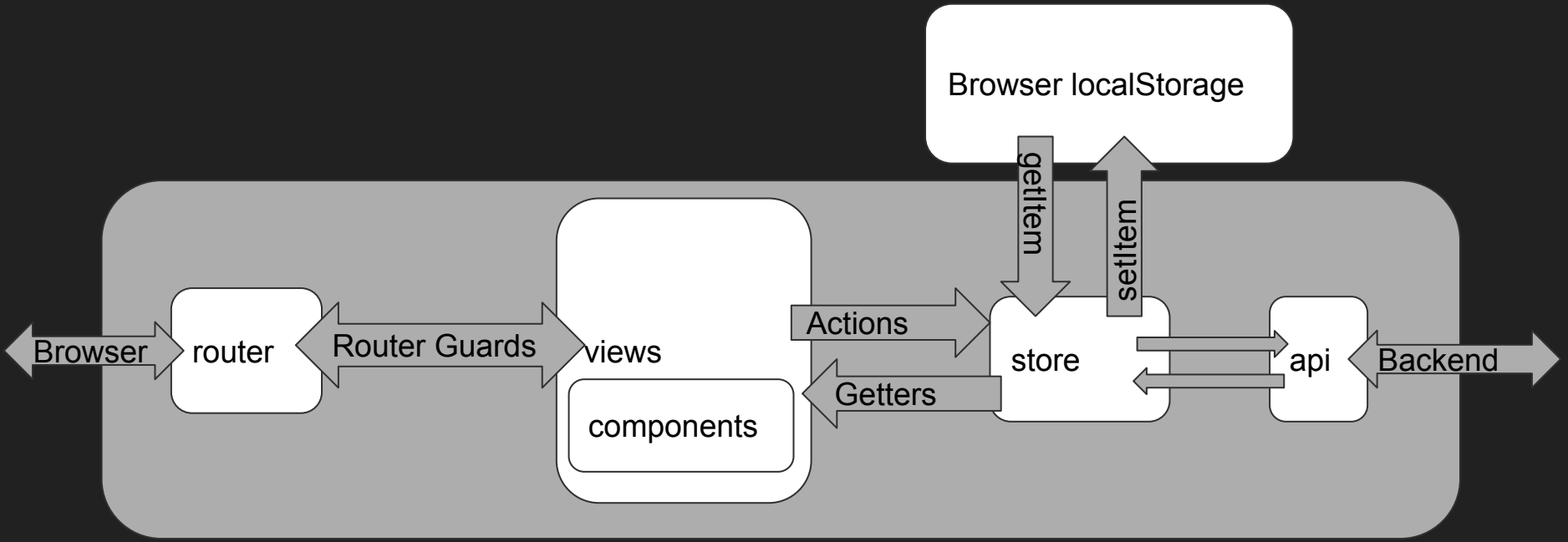
The user will request URLs to be served. And the router will serve up views



The views are consisted of reusable custom UI components

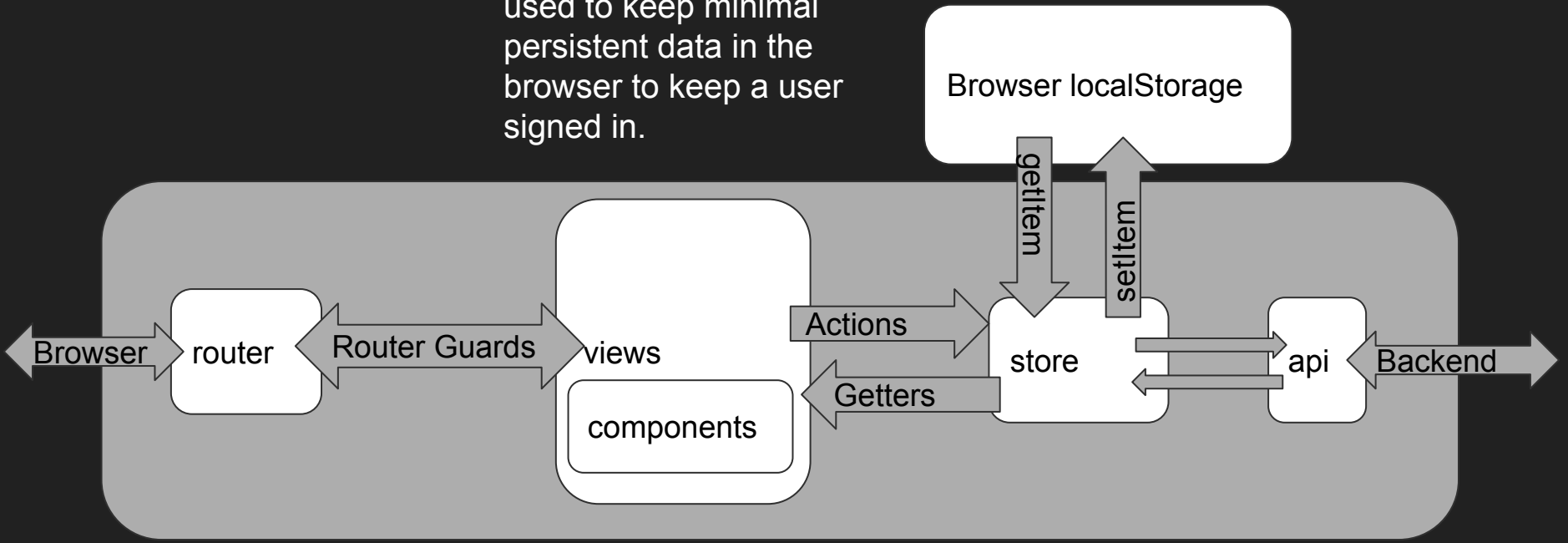


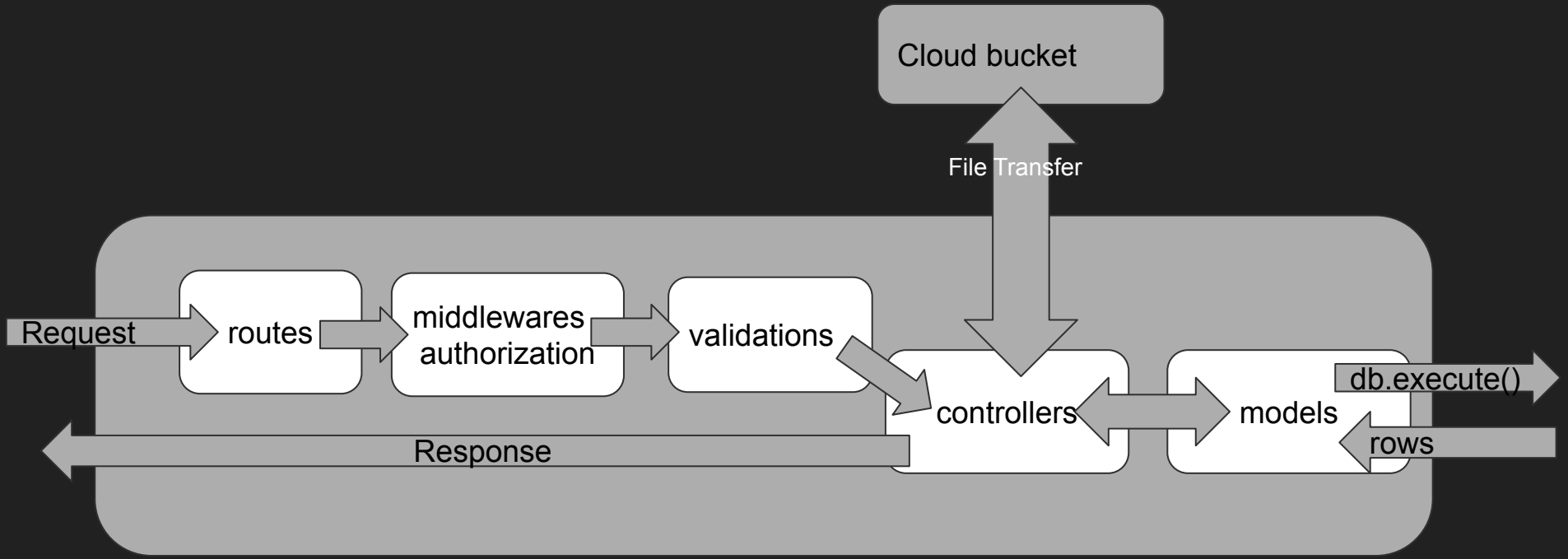
The store is used to store all session data that will be wiped out after a user's session has ended but is stored for performance



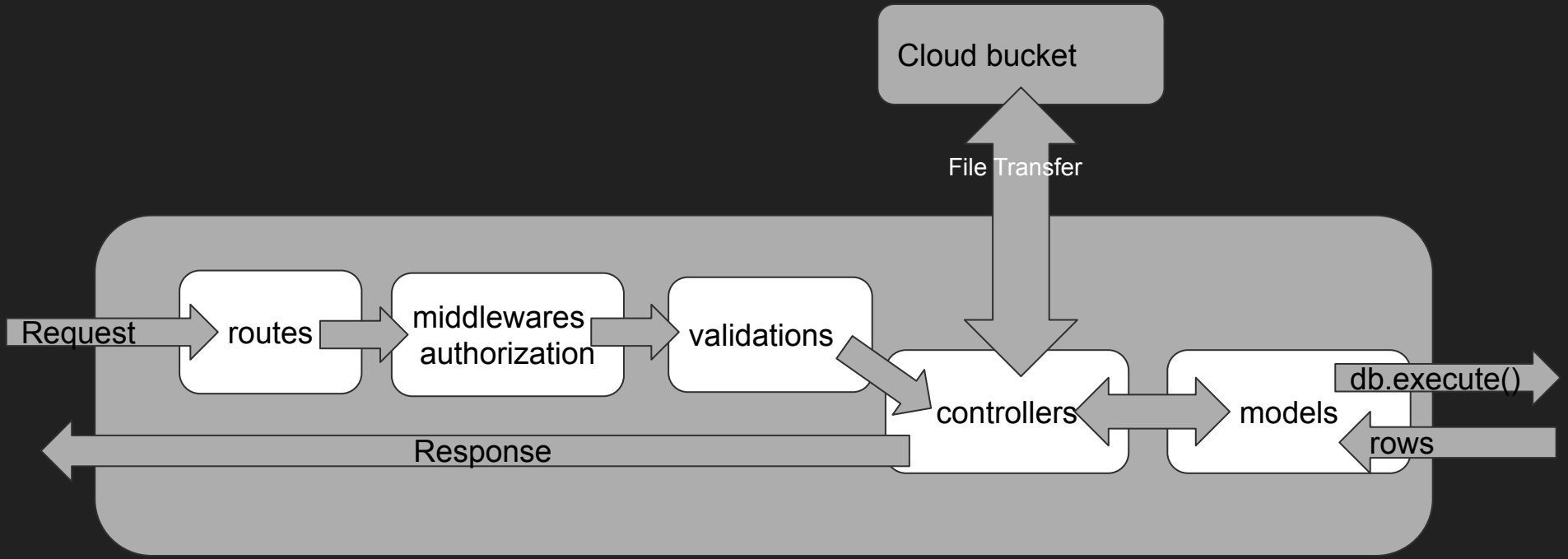
The frontend connects to the backend with tokens. The frontend sends and receives JSON objects.

The localStorage is used to keep minimal persistent data in the browser to keep a user signed in.

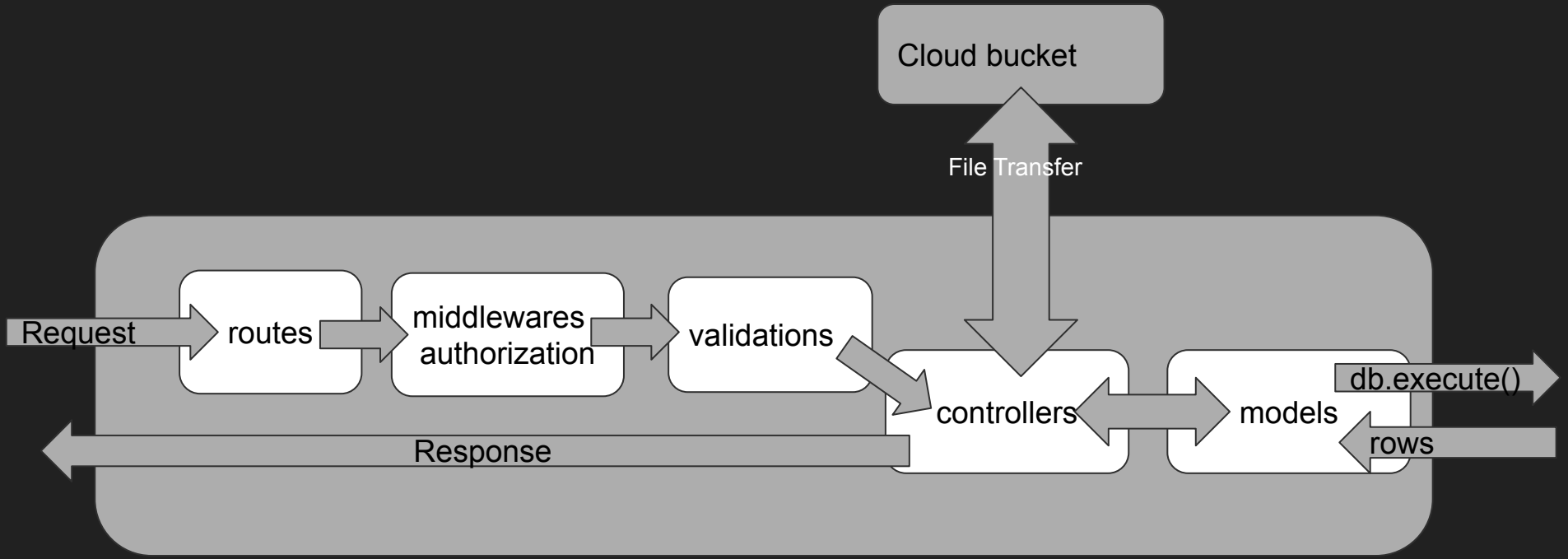




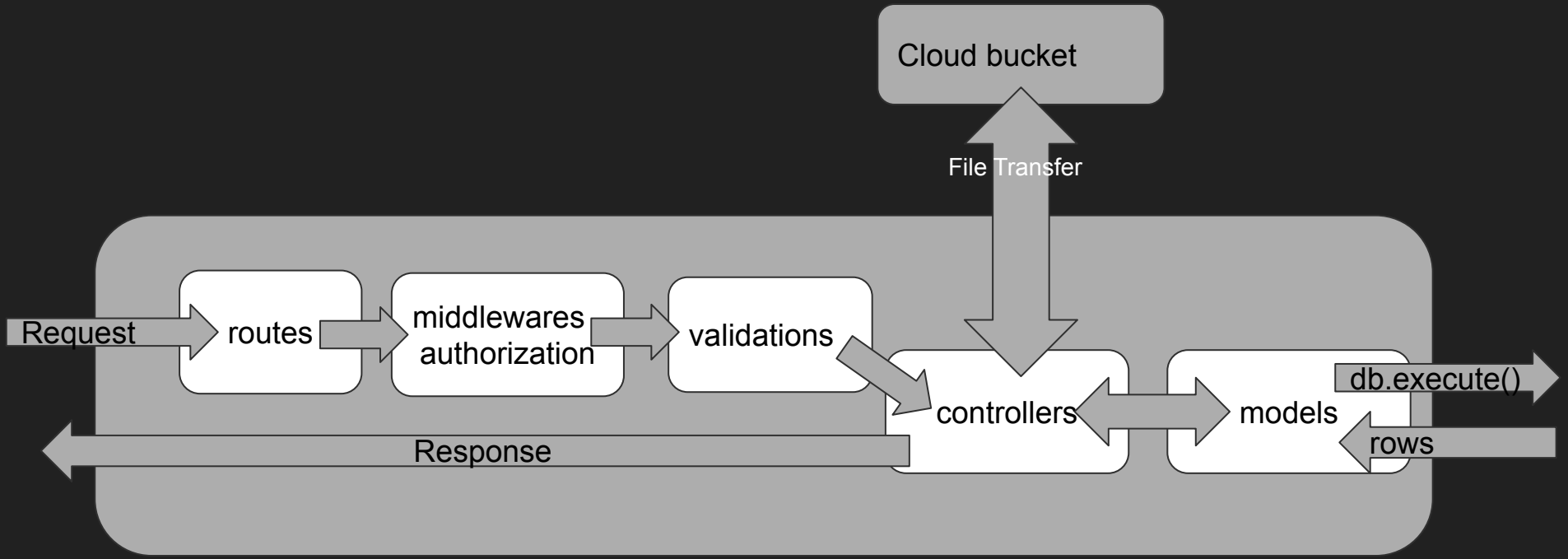
Structure of Node.js code



The frontend requests to the routes of the backend that serve different functionality.

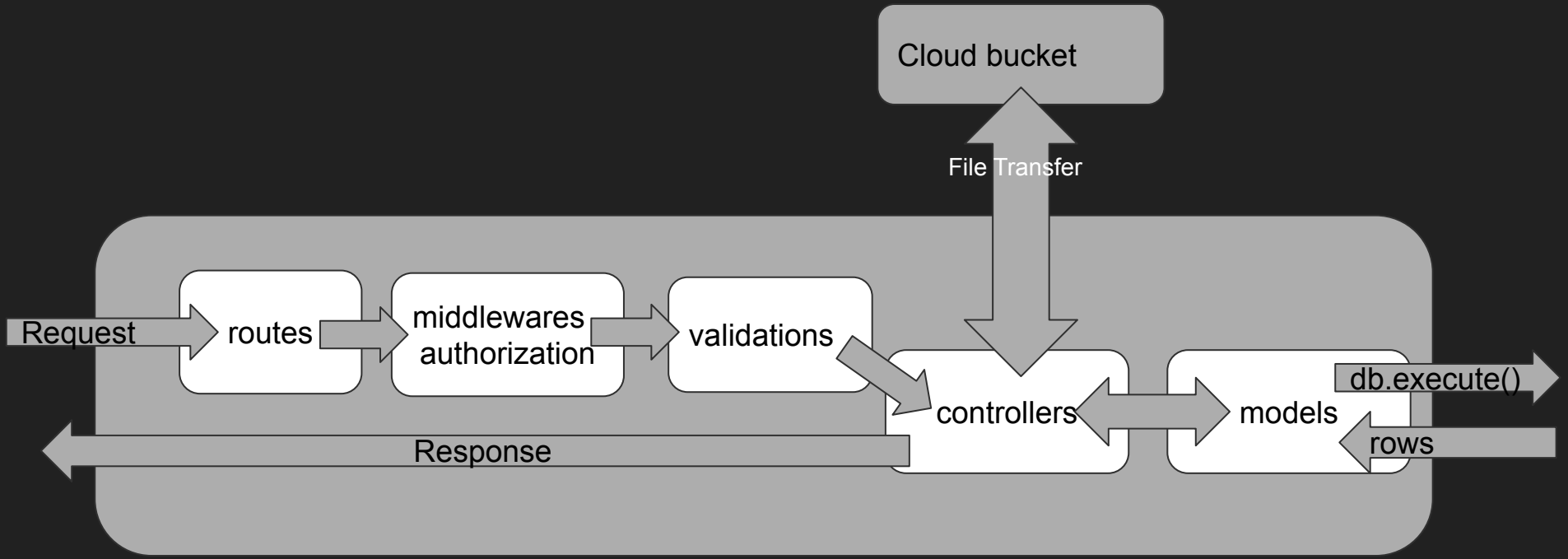


- Authorization middlewares protect the routes from unauthorized access
- Enables access control to users of different hierarchies.



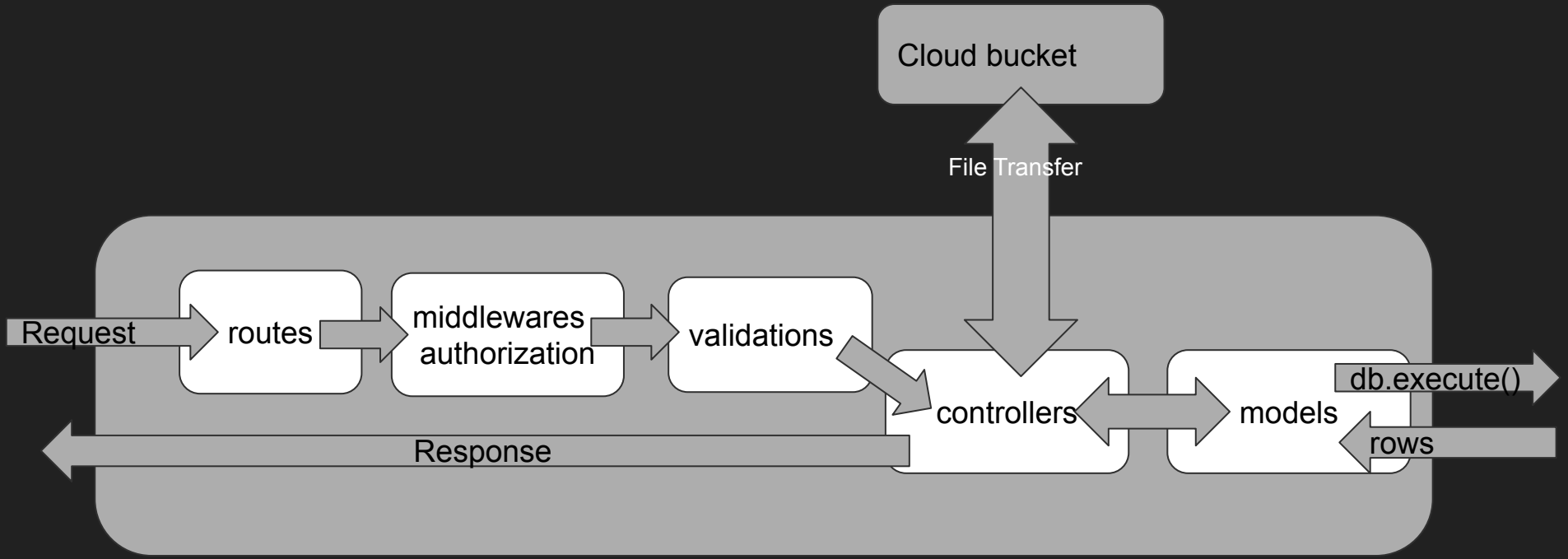
Validations:

- Make sure that the user doesn't crash the API with abnormal requests



Controllers:

- Consist of all the business logic of our platform.

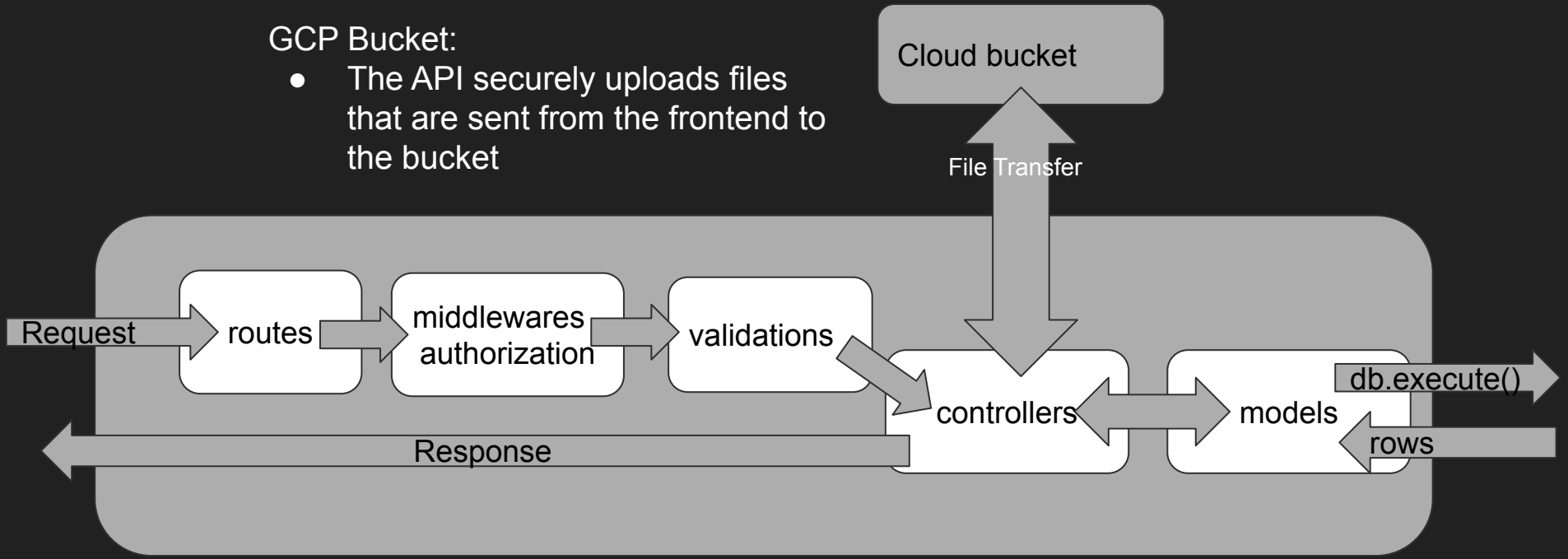


Models:

- Abstracts the SQL statements into javascript functions.

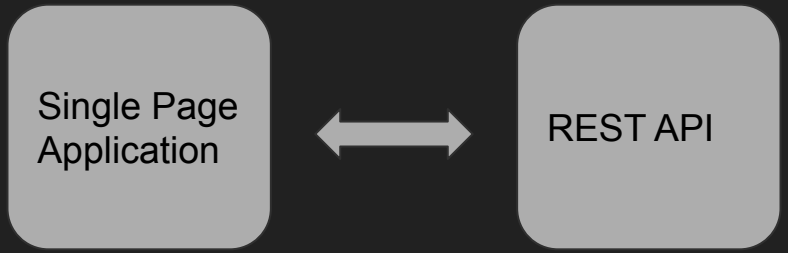
GCP Bucket:

- The API securely uploads files that are sent from the frontend to the bucket



The docs

We made a doc to keep track of all connections of backend and frontend



The documentation of CSFlow

The docs

We made a doc to keep track of all connections of backend and frontend

Single Page Application

4.1 Short List of Routes

4.1.1 Part 1: Question-Answer Sharing

No	Route
1.	/
2.	/auth/signIn
3.	/auth/signUp
4.	/auth/signUp/complete
5.	/auth/password/forgot
6.	/auth/password/recover?token=dlskjgdj4drjts43yw
7.	/user/123456
8.	/user/me
9.	/user/me/edit

The docs

REST API

Sample of the list of endpoints

5.1.2 Part 2: Resource Sharing and Administration

[note: routes for reporting or deleting comments under project or thesis have not been desig
yet]

No	Method	Route	Link to details	progress
1.	GET	/archive/batch	jump	complete
2.	GET	/archive/resource	jump	complete
3.	GET	/archive/thesis/batch/:batchNumber	jump	complete
4.	GET	/archive/thesis/:id	jump	complete
5.	POST	/archive/thesis	jump	complete
6.	PATCH	/archive/thesis/:id	jump	complete
7.	DELETE	/archive/thesis/:id	jump	complete
8.	GET	/archive/thesis/topics	jump	complete

Sample of a description of endpoint

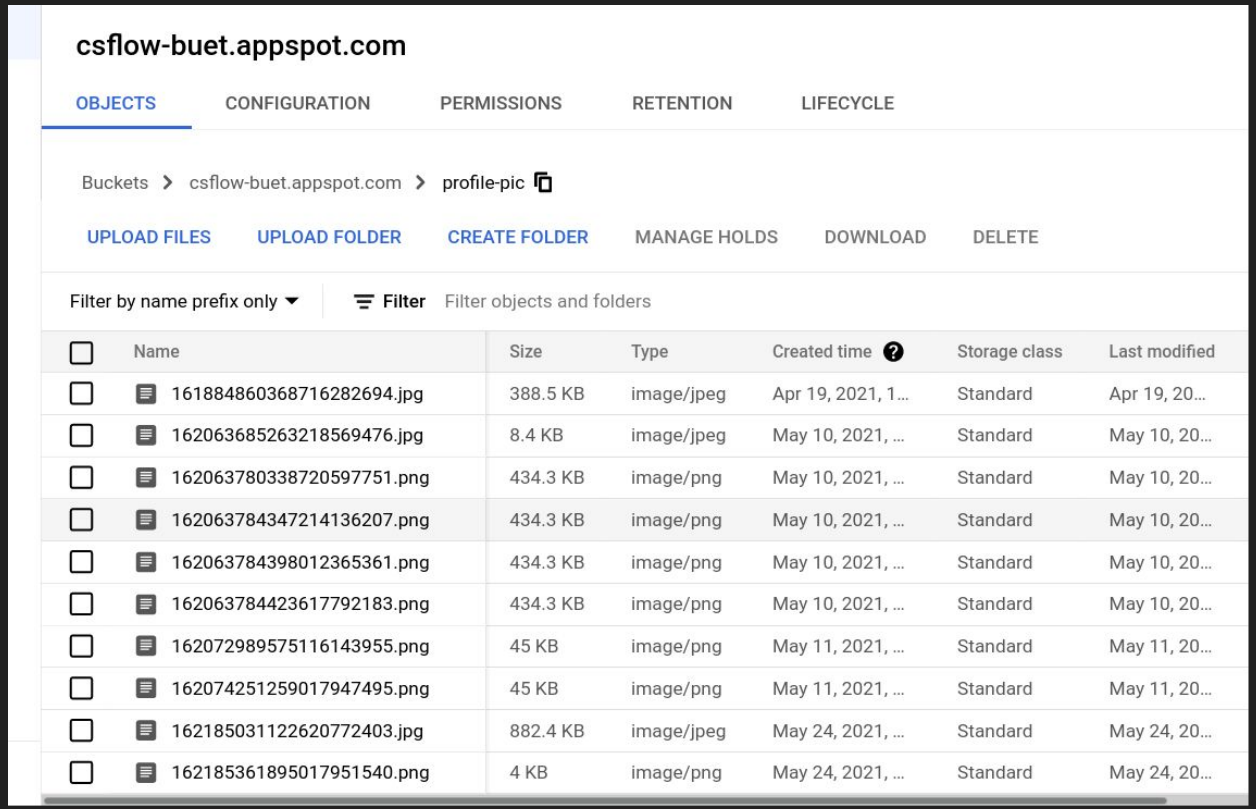
Route	POST /auth/signIn
Description	Handles user sign ins using email and password. You will receive a token upon successful sign in.
Bearer token required	No

Request body	{
	"email":"maha@gmail.com",
	"password":"test1234"
	}

Response body	{
	"statusCode": 201,
	"message": "Successfully signed in",
	"status": "OK",
	"payload":
	"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6MTYwNTAxMSwiaWF0IjoxNjE2MjI5MzM4fQ.wKAojfApBNspq639lSyFCj1wES2gRkaypx1naRiQ3oA"
	}

List of Errors and corresponding message	{
	"statusCode": 401,
	"status": "ERROR",
	"message": "Incorrect email / password"
	}

Storage


csflow-buet.appspot.com
OBJECTS
CONFIGURATION
PERMISSIONS
RETENTION
LIFECYCLE
Buckets
csflow-buet.appspot.com
profile-pic
UPLOAD FILES
UPLOAD FOLDER
CREATE FOLDER
MANAGE HOLDS
DOWNLOAD
DELETE
Filter by name prefix only
Filter
Filter objects and folders
Name
Size
Type
Created time
Storage class
Last modified
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Thank You