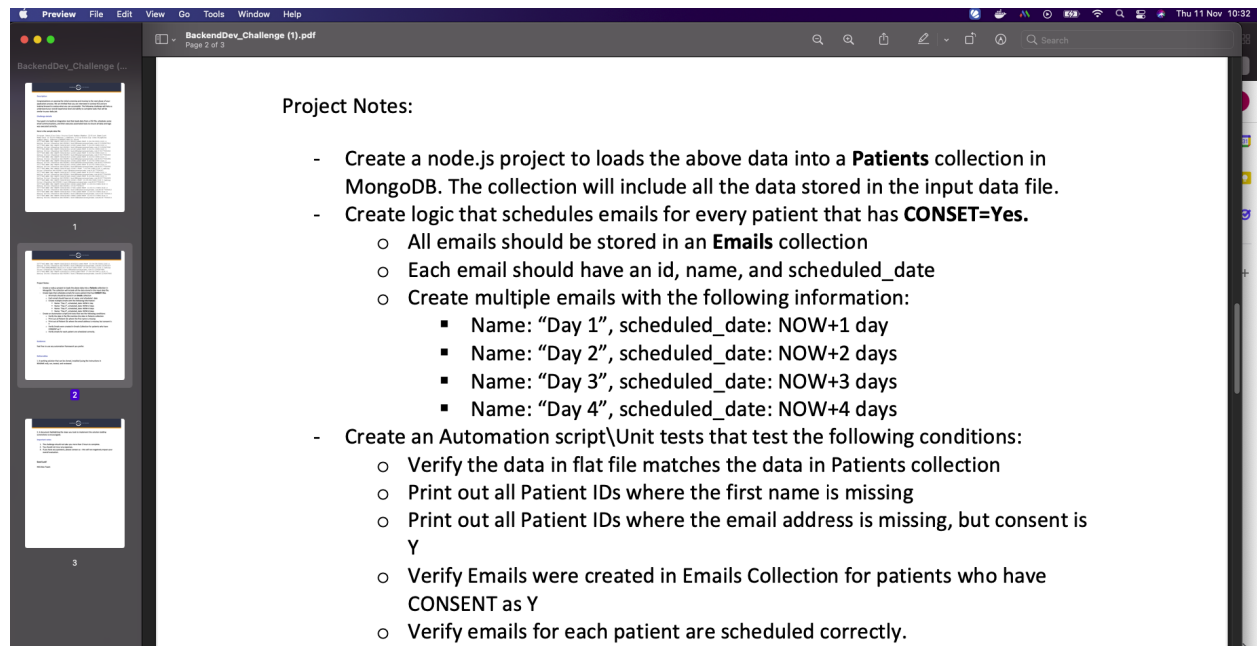


# Steps

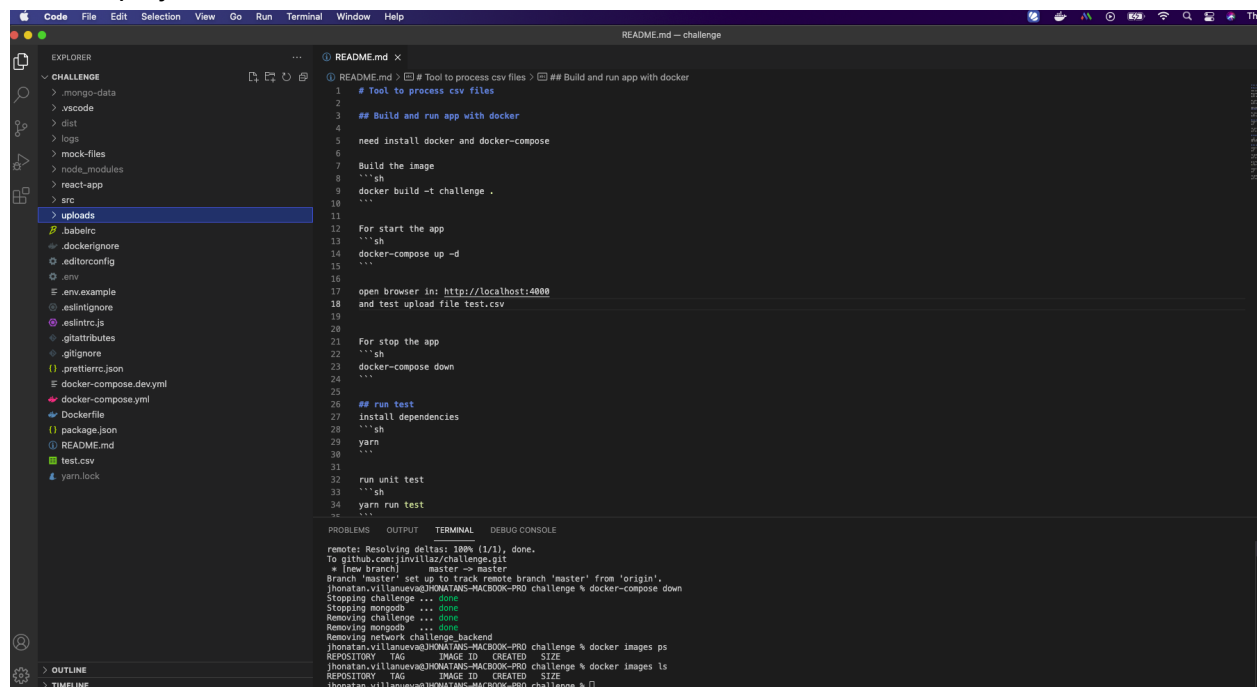
## 1.- Analysis



Project Notes:

- Create a node.js project to loads the above data into a **Patients** collection in MongoDB. The collection will include all the data stored in the input data file.
- Create logic that schedules emails for every patient that has **CONSET=Yes**.
  - o All emails should be stored in an **Emails** collection
  - o Each email should have an id, name, and scheduled\_date
  - o Create multiple emails with the following information:
    - Name: "Day 1", scheduled\_date: NOW+1 day
    - Name: "Day 2", scheduled\_date: NOW+2 days
    - Name: "Day 3", scheduled\_date: NOW+3 days
    - Name: "Day 4", scheduled\_date: NOW+4 days
- Create an Automation script\Unit tests that test the following conditions:
  - o Verify the data in flat file matches the data in Patients collection
  - o Print out all Patient IDs where the first name is missing
  - o Print out all Patient IDs where the email address is missing, but consent is Y
  - o Verify Emails were created in Emails Collection for patients who have CONSENT as Y
  - o Verify emails for each patient are scheduled correctly.

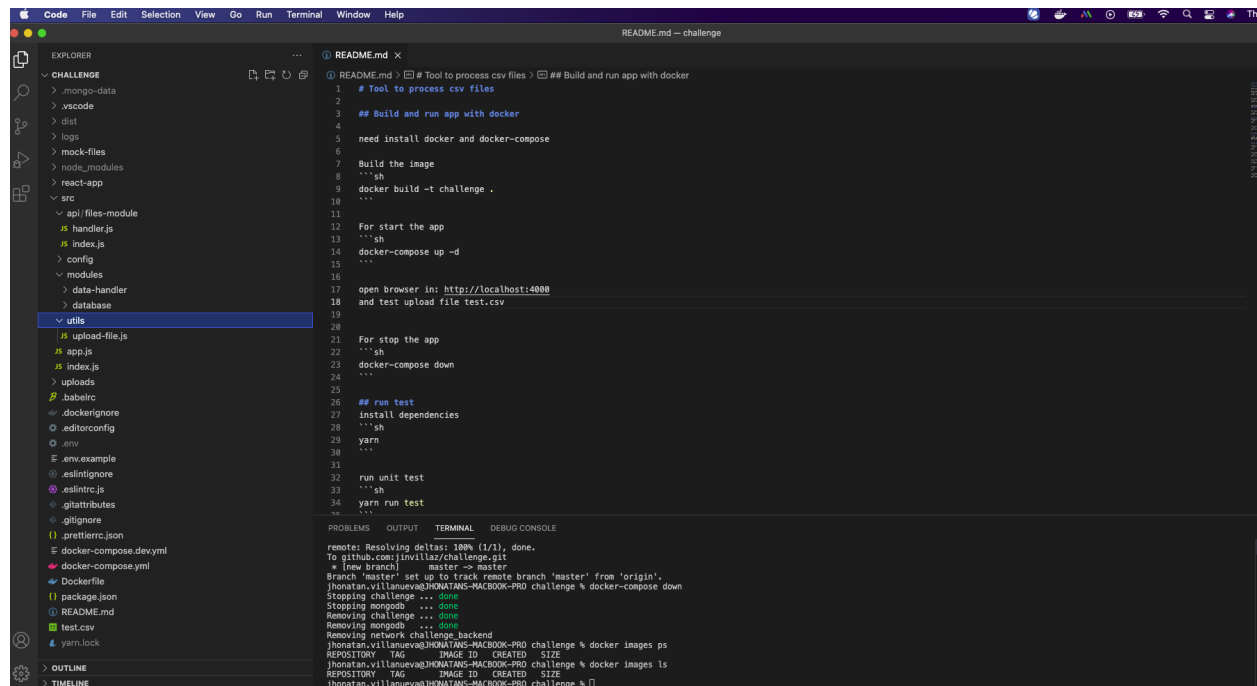
## 2.- Start project, create environment for dev mode.



```
1 # Tool to process csv files > ## Build and run app with docker
2
3 ## Build and run app with docker
4
5 need install docker and docker-compose
6
7 Build the image
8 ```sh
9 docker build -t challenge .
10
11
12 For start the app
13 ```sh
14 docker-compose up -d
15
16
17 open browser in: http://localhost:4000
18 and test upload file test.csv
19
20
21 For stop the app
22 ```sh
23 docker-compose down
24
25
26 ## run test
27 install dependencies
28 ```sh
29 yarn
30
31
32 run unit test
33 ```sh
34 yarn run test
35
```

remote: Resolving deltas: 100% (1/1), done.  
To github.com:jivillaz/challenge.git  
\* [new branch] master -> master  
Branch 'master' set up to track remote branch 'master' from 'origin'.  
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker-compose down  
Stopping challenge ... done  
Removing challenge ... done  
Removing mongod ... done  
Removing network challenge\_backend  
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker images ps  
REPOSITORY TAG IMAGE ID CREATED SIZE  
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker images ls  
REPOSITORY TAG IMAGE ID CREATED SIZE  
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge %

### 3.- Build the basic backend to upload file



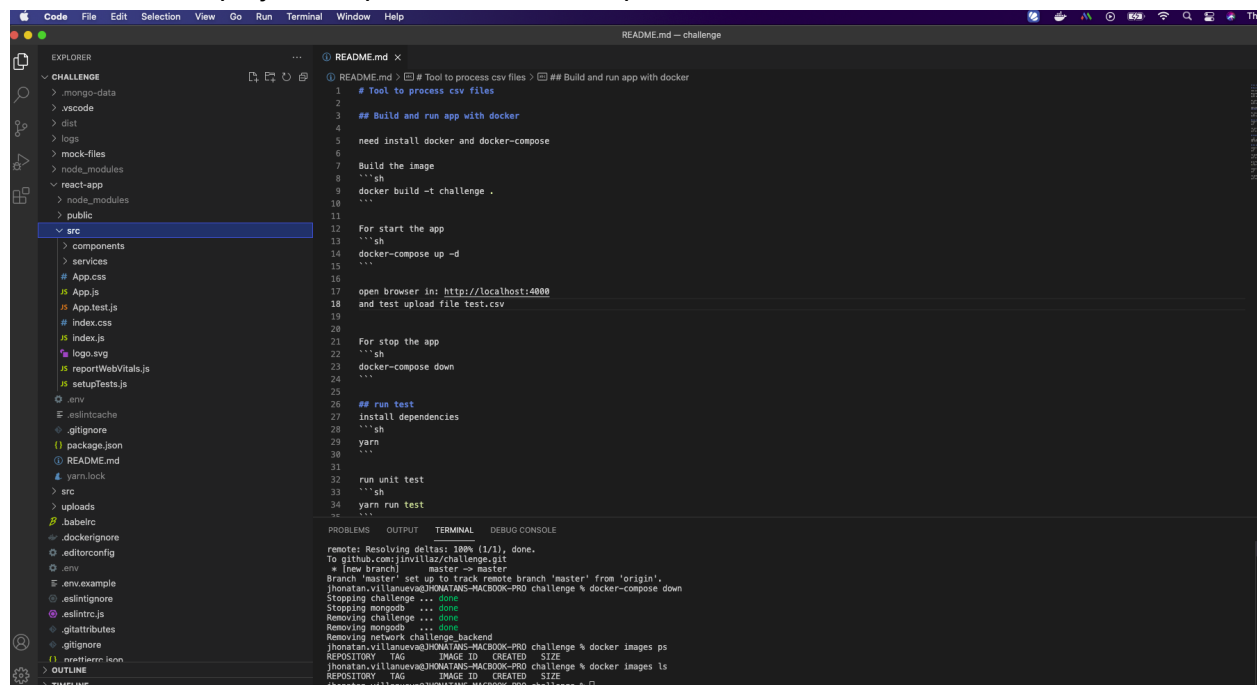
The screenshot shows a VS Code editor window titled "README.md - challenge". The Explorer sidebar on the left shows a project structure with folders like "CHALLENGE", "mongo-data", ".vscode", "dist", "logs", "mock-files", "node\_modules", "react-app", "src", "api/files-module", "utils", "uploads", and "test.csv". The "utils" folder is selected, showing files like "upload-file.js", "app.js", "index.js", and "uploads". The main editor displays the content of "README.md", which includes instructions for building and running the application with Docker. The terminal at the bottom shows the execution of the commands.

```
1 # Tool to process csv files
2
3 ## Build and run app with docker
4
5 need install docker and docker-compose
6
7 Build the image
8 ```sh
9 docker build -t challenge .
10 ...
11
12 For start the app
13 ```sh
14 docker-compose up -d
15 ...
16
17 open browser in: http://localhost:4000
18 and test upload file test.csv
19
20 ...
21
22 For stop the app
23 ```sh
24 docker-compose down
25 ...
26
27 ## run test
28 install dependencies
29 ```sh
30 yarn
31 ...
32
33 run unit test
34 ```sh
35 yarn run test
36 ...
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
remote: Resolving deltas: 100% (1/1), done.
To github.com:jinvillaz/challenge.git
 * [new branch] master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker-compose down
Stopping challenge ... done
Stopping mongodb ... done
Removing challenge ... done
Removing mongodb ... done
Removing network challenge_backend
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker images ps
REPOSITORY TAG IMAGE ID CREATED SIZE
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker images ls
REPOSITORY TAG IMAGE ID CREATED SIZE
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge %
```

### 4.- Build a react project to upload a csv file and process it.

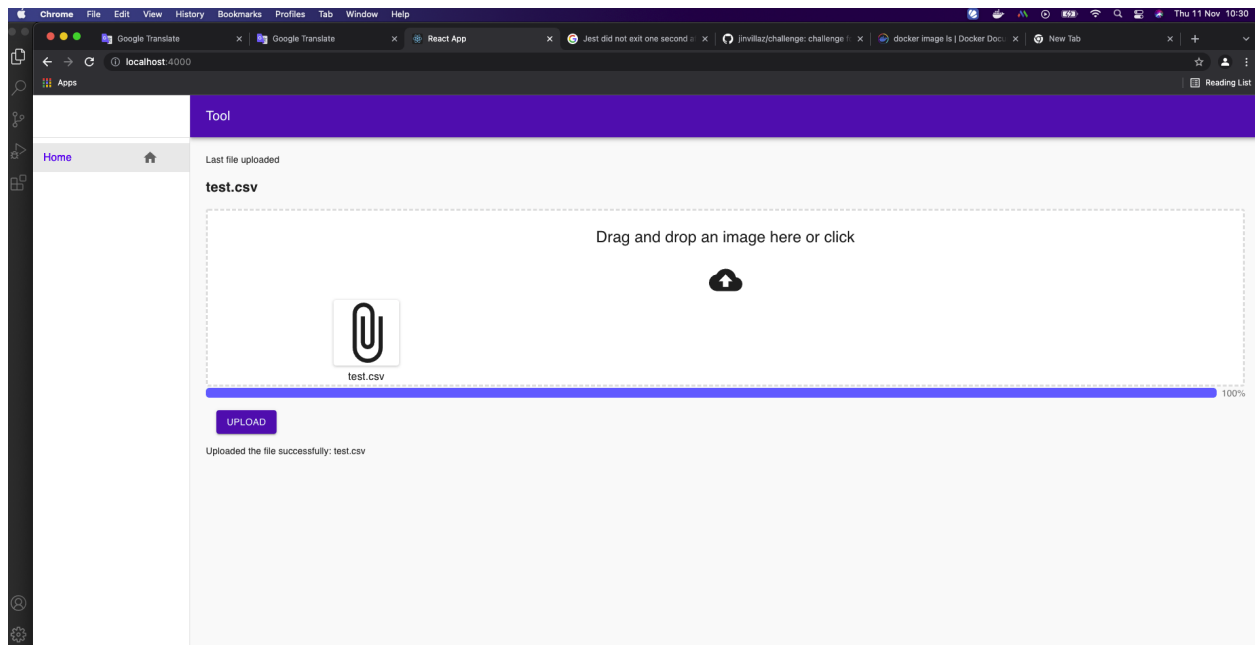


The screenshot shows a VS Code editor window titled "README.md - challenge". The Explorer sidebar on the left shows a project structure with folders like "CHALLENGE", "mongo-data", ".vscode", "dist", "logs", "mock-files", "node\_modules", "react-app", "src", "api/files-module", "utils", "uploads", and "test.csv". The "src" folder is selected, showing files like "components", "services", "App.css", "App.js", "App.test.js", "index.css", "index.js", "logo.svg", "reportWebVitals.js", "setupTests.js", ".env", ".eslintrc", ".gitignore", "package.json", "README.md", "yarn.lock", "src", "uploads", and ".babelrc". The main editor displays the content of "README.md", which includes instructions for building and running the application with Docker. The terminal at the bottom shows the execution of the commands.

```
1 # Tool to process csv files
2
3 ## Build and run app with docker
4
5 need install docker and docker-compose
6
7 Build the image
8 ```sh
9 docker build -t challenge .
10 ...
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12 For start the app
13 ```sh
14 docker-compose up -d
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17 open browser in: http://localhost:4000
18 and test upload file test.csv
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20 ...
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22 For stop the app
23 ```sh
24 docker-compose down
25 ...
26
27 ## run test
28 install dependencies
29 ```sh
30 yarn
31 ...
32
33 run unit test
34 ```sh
35 yarn run test
36 ...
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

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remote: Resolving deltas: 100% (1/1), done.
To github.com:jinvillaz/challenge.git
 * [new branch] master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker-compose down
Stopping challenge ... done
Stopping mongodb ... done
Removing challenge ... done
Removing mongodb ... done
Removing network challenge_backend
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker images ps
REPOSITORY TAG IMAGE ID CREATED SIZE
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge % docker images ls
REPOSITORY TAG IMAGE ID CREATED SIZE
jhonatan.villanueva@JHONATANs-MACBOOK-PRO challenge %
```



5.- Create logic to validate csv file, parsing data, insert in database, and create logic to schedule emails, create docker container.

```

Window  Help
docker-compose.yml — challenge

README.md  docker-compose.yml x
1  version: '3.8'
2  services:
3    challenge:
4      image: challenge
5      container_name: challenge
6      restart: always
7      ports:
8        - "4000:4000"
9      environment:
10       - MONGO_URL=mongodb://mongodb:27017/test
11      depends_on:
12        - mongodb
13      networks:
14        - backend
15    mongodb:
16      container_name: mongodb
17      volumes:
18        - /etc/localtime:/etc/localtime:ro
19        - ../mongo-data:/data/db
20      restart: 'always'
21      ports:
22        - '27017:27017'
23      image: dannyben/alpine-mongo
24      tty: true
25      networks:
26        - backend
27  networks:
28    backend:
29      driver: bridge
30

```