

## Ex. No 4

## PaaS Implementation

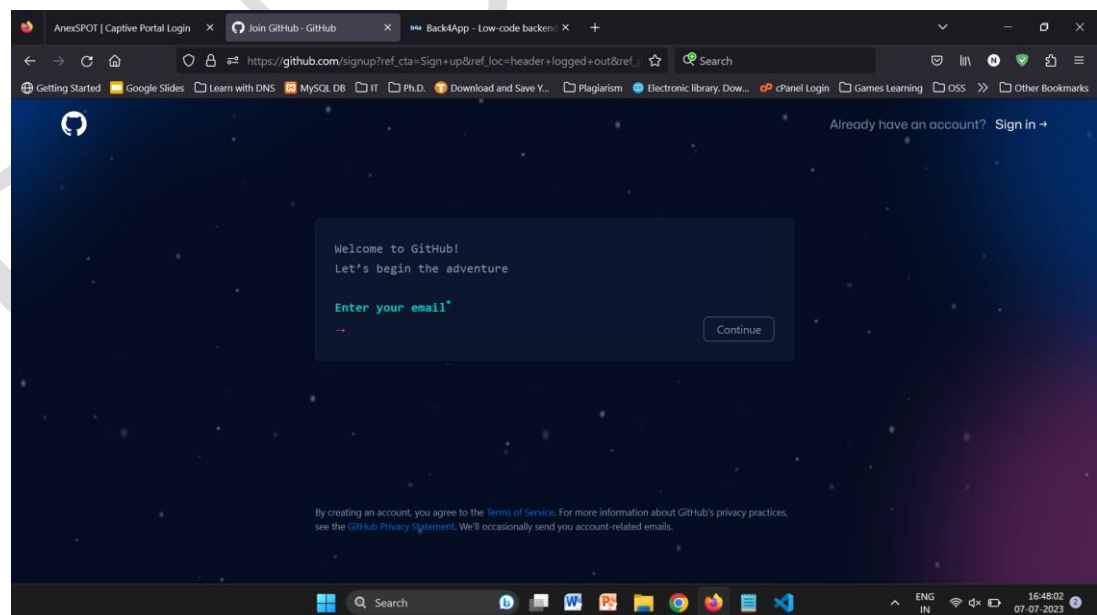
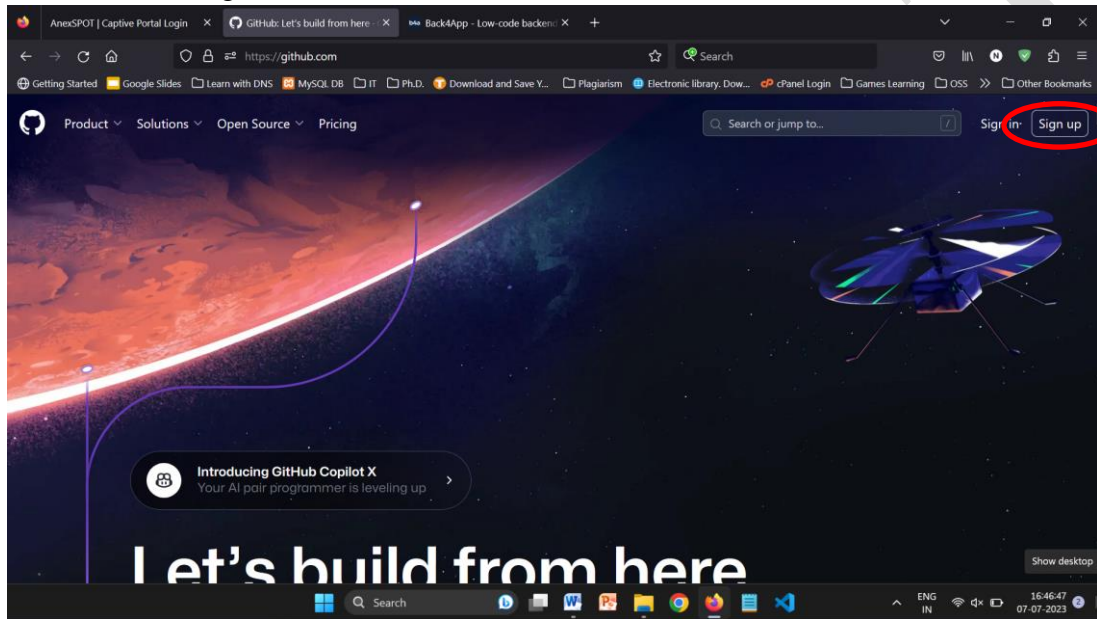
**Aim:** To implement PaaS by creating a PHP program to validate user, create a database login(username, password) in mysql and deploy to cloud.

### Required Logins

- Github login (<https://github.com/>)
- Back4App (<https://www.back4app.com/>)

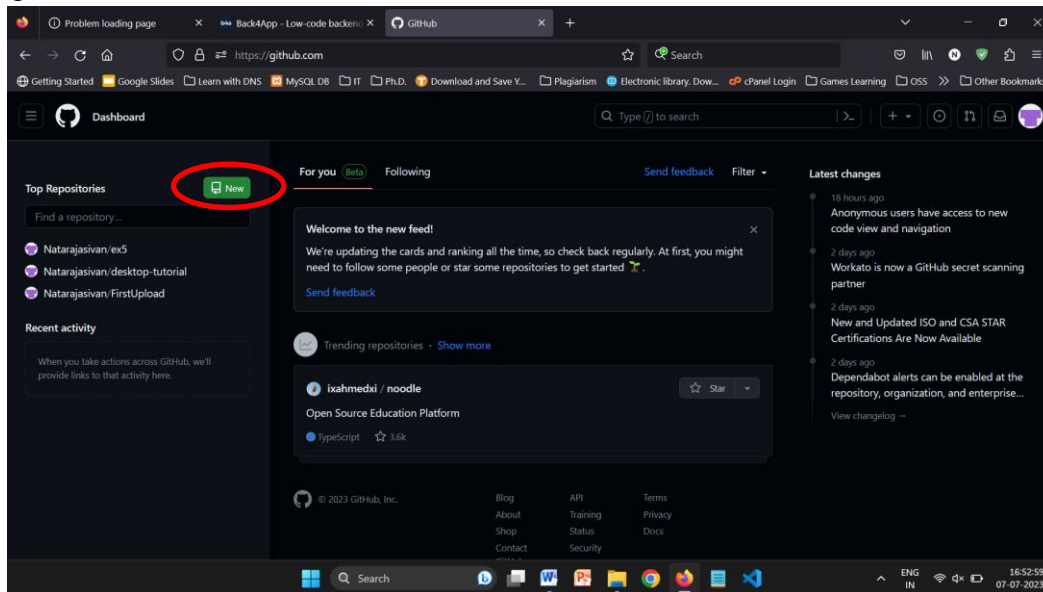
### Procedure:

#### 1. Create Github Login.

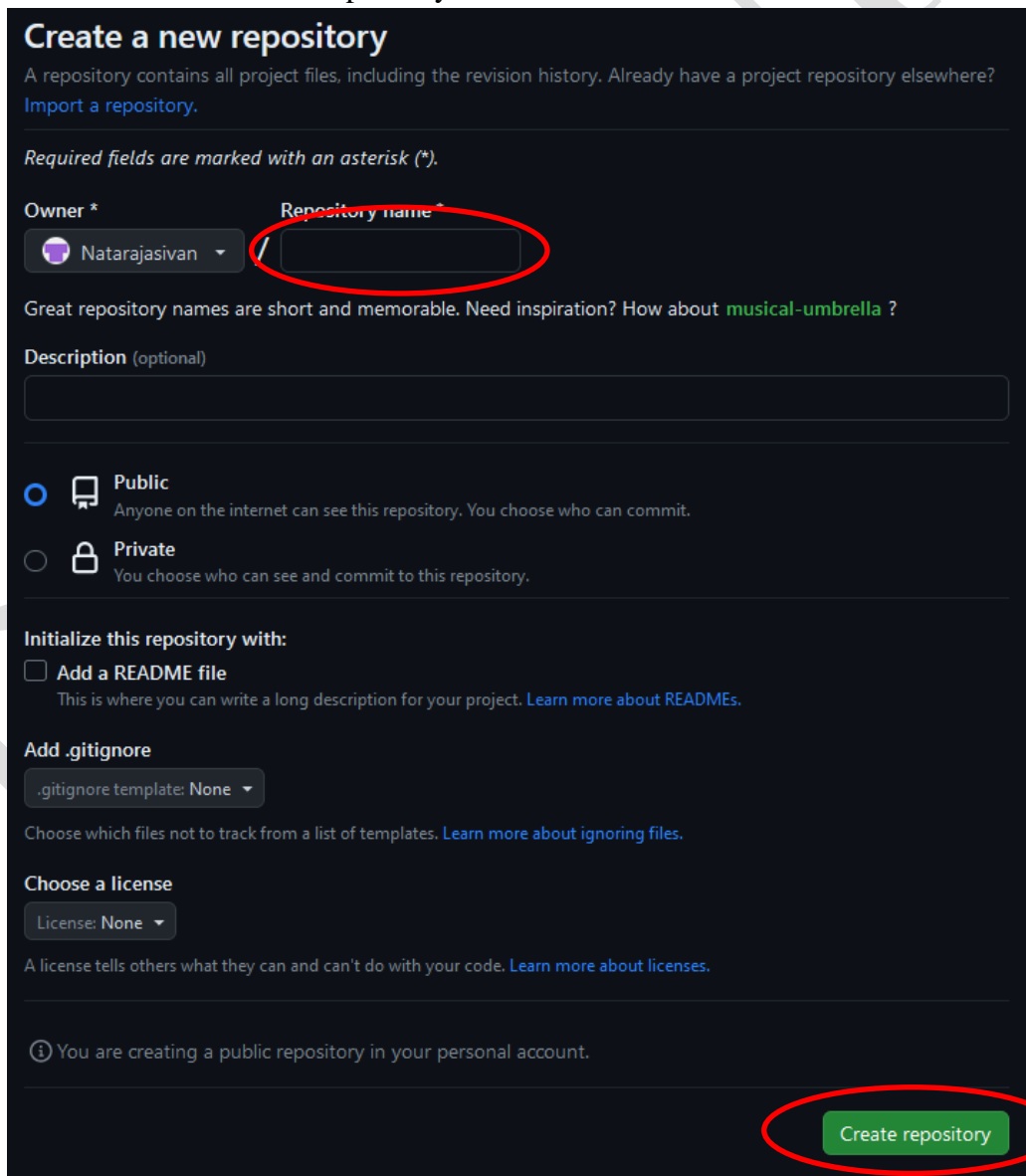


#### 2. Enter email and password to create a Login in Github.

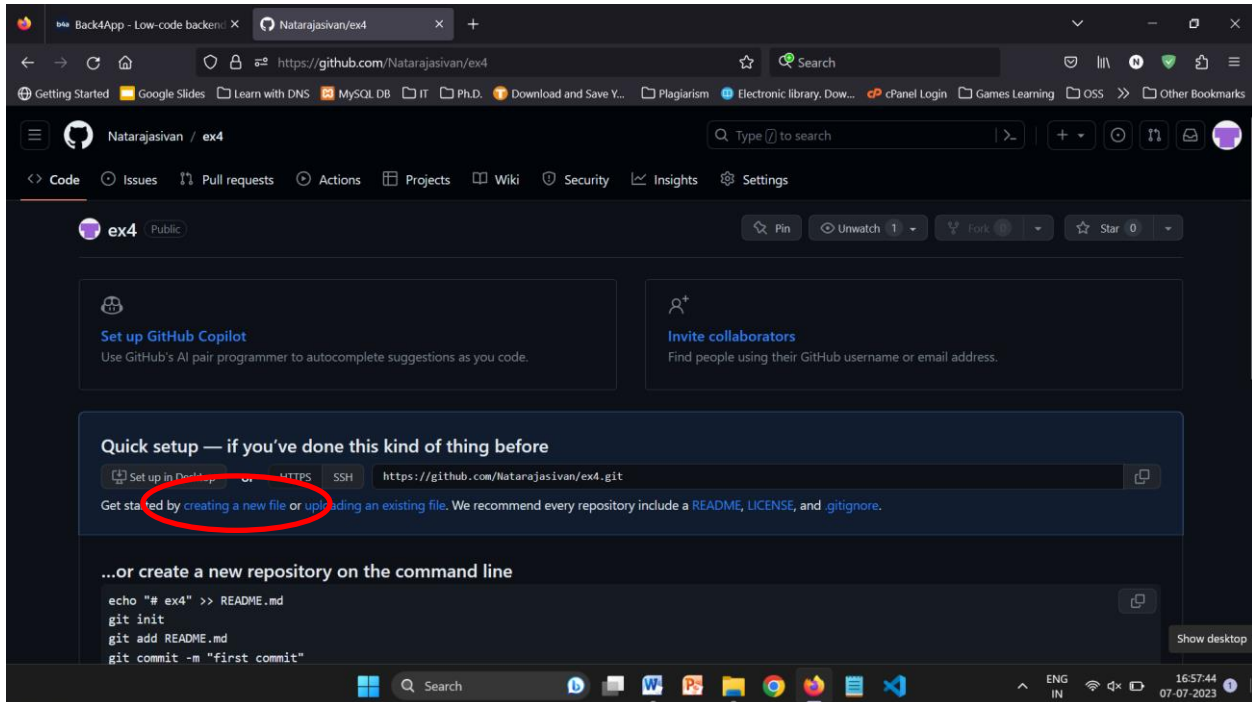
### 3. Login to GitHub website.



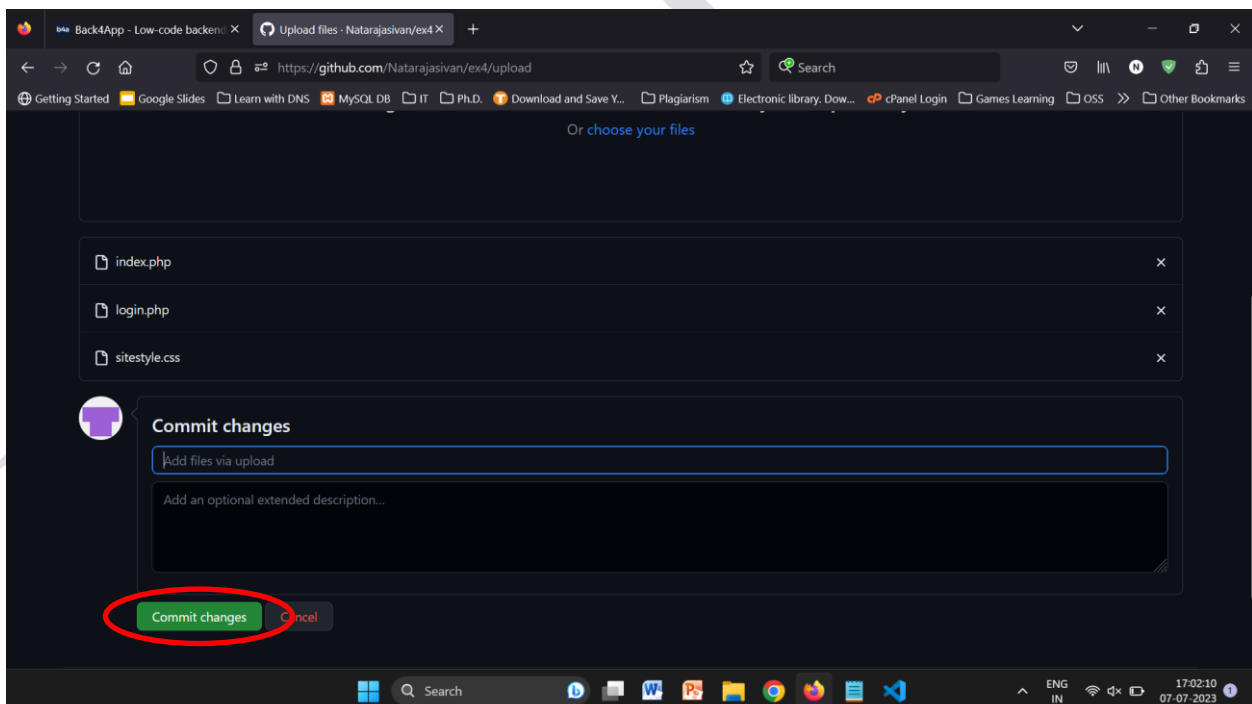
### 4. Select New to create a new repository.

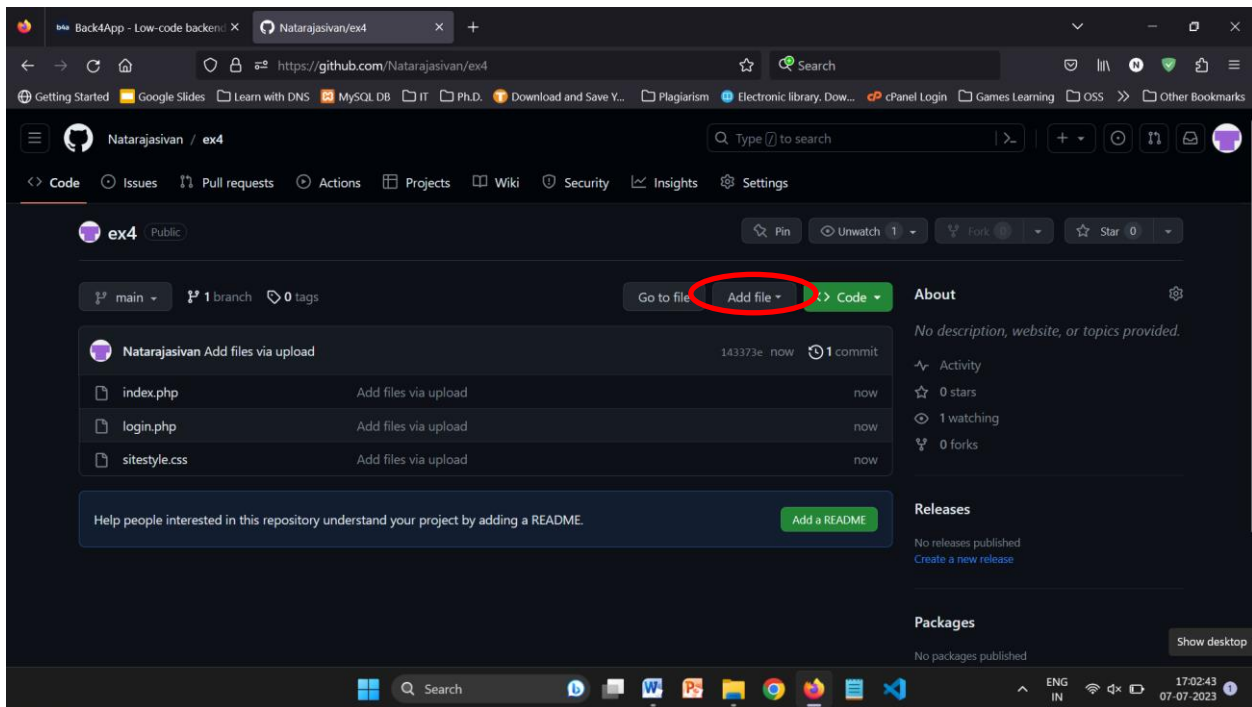


## 5. Enter Repository Name to create new repository

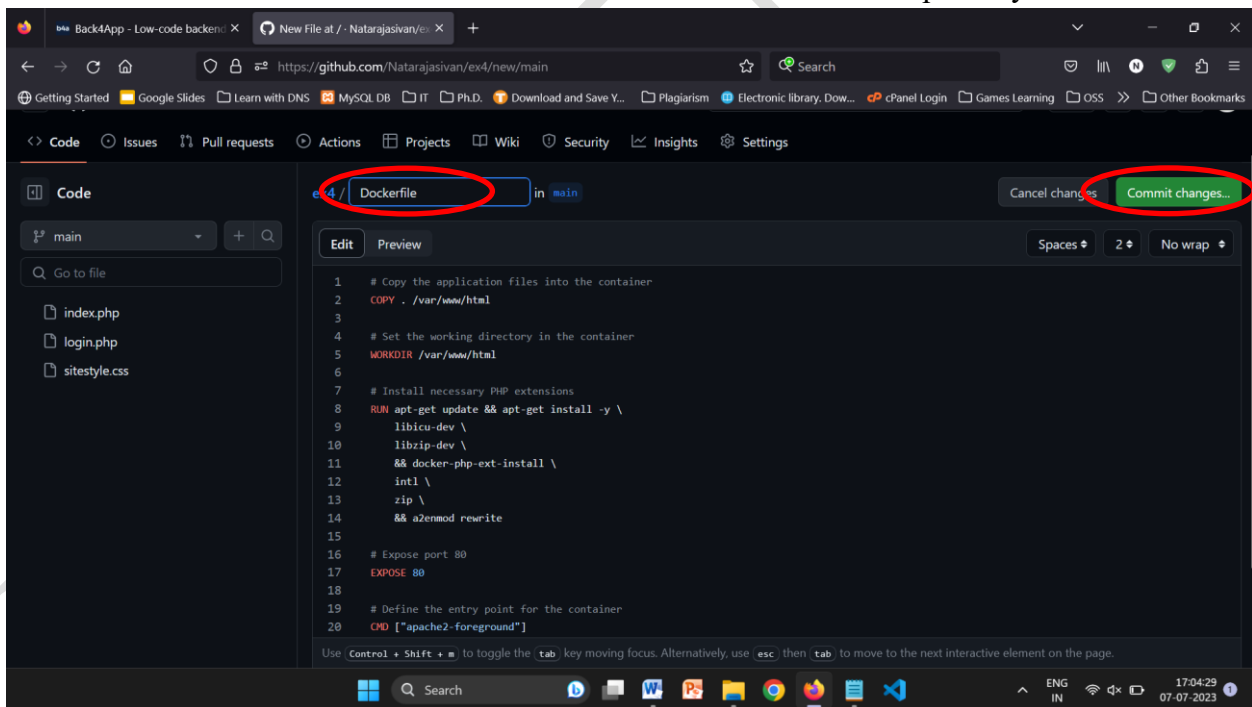


6. Click "Creating a new file or Uploading an existing file" to create or upload an existing file.
7. Upload the files "index.php", "login.php" and "sitestyle.css" file to the repository and commit.



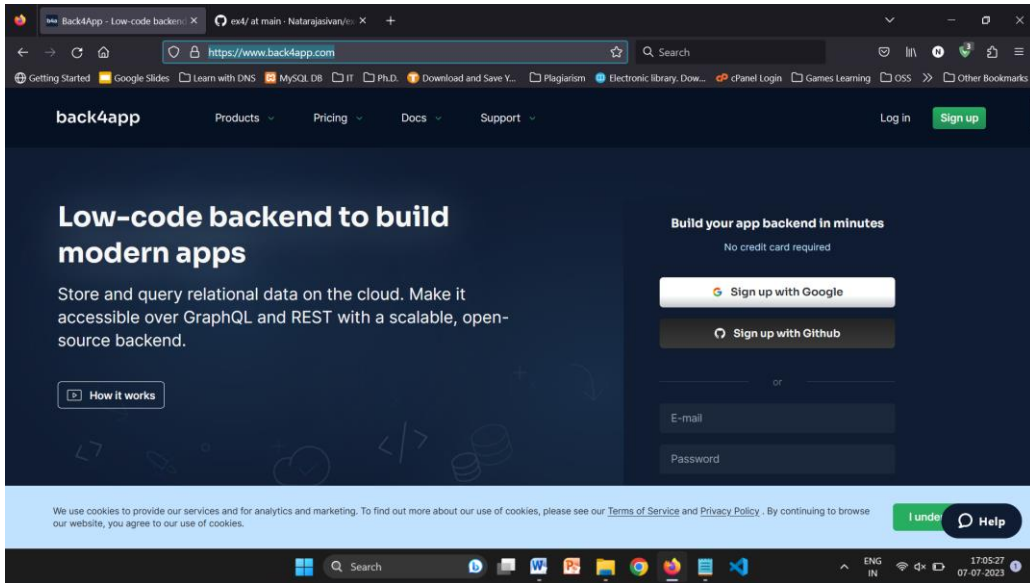


8. Select Add File->Create New File to Create “Dockerfile” in the repository.

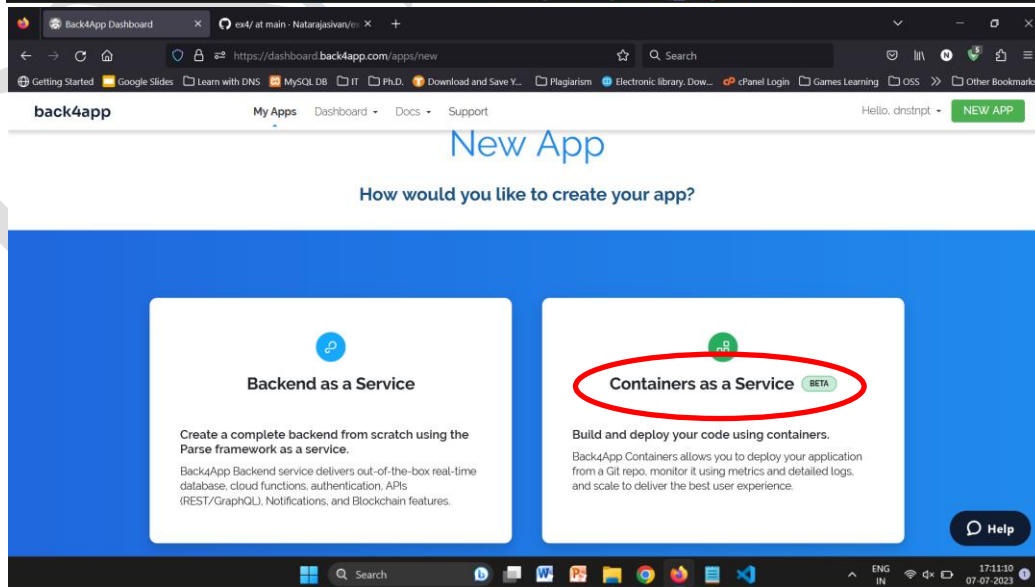
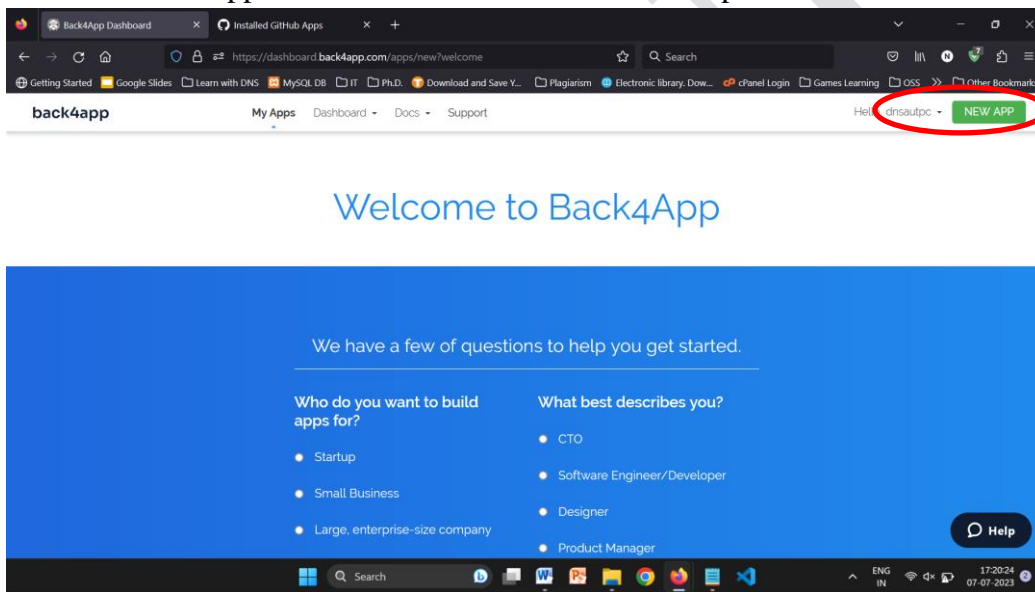


9. Commit Changes.

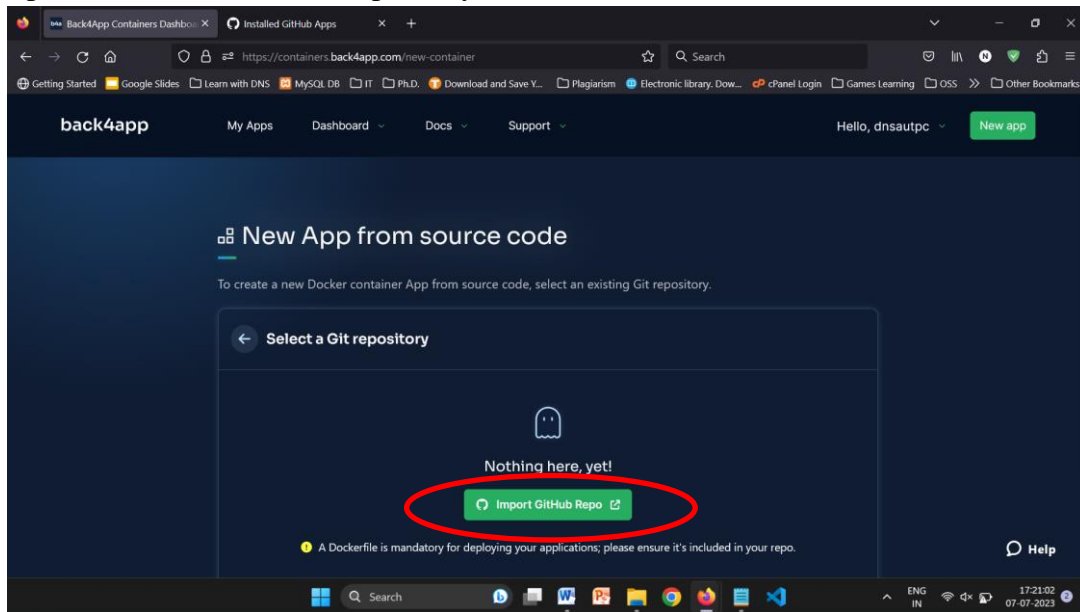
10. Create Login in Back4App using Google account or GitHub account.



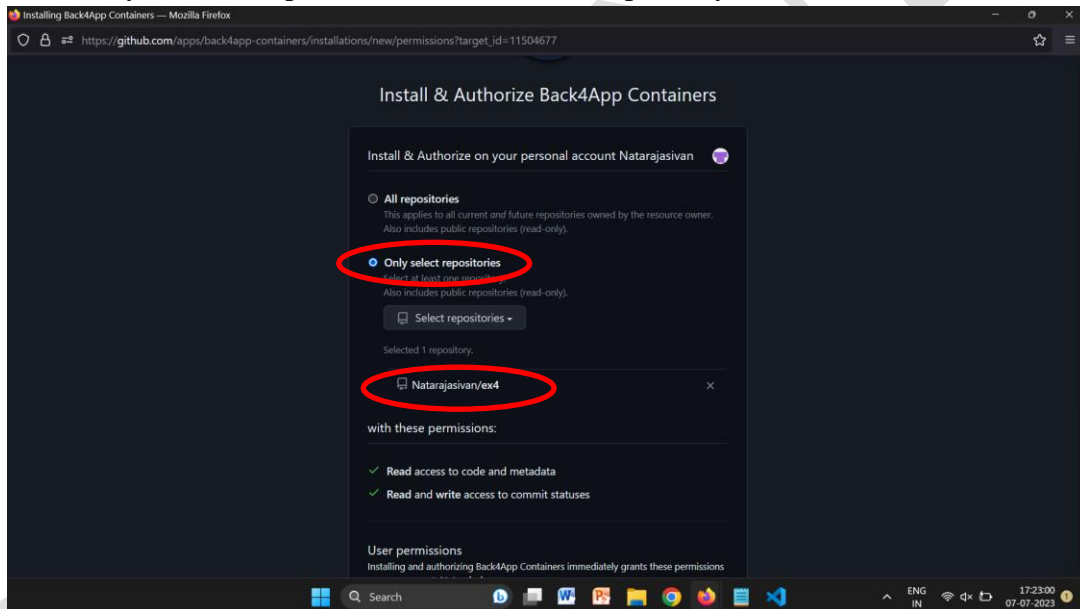
11. Select Build New App and Choose Container as Service Option.



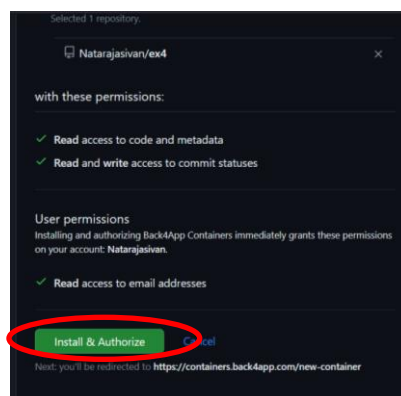
## 12. Import Code from GitHub Repository.



## 13. Select Only selected repositories and select the repository

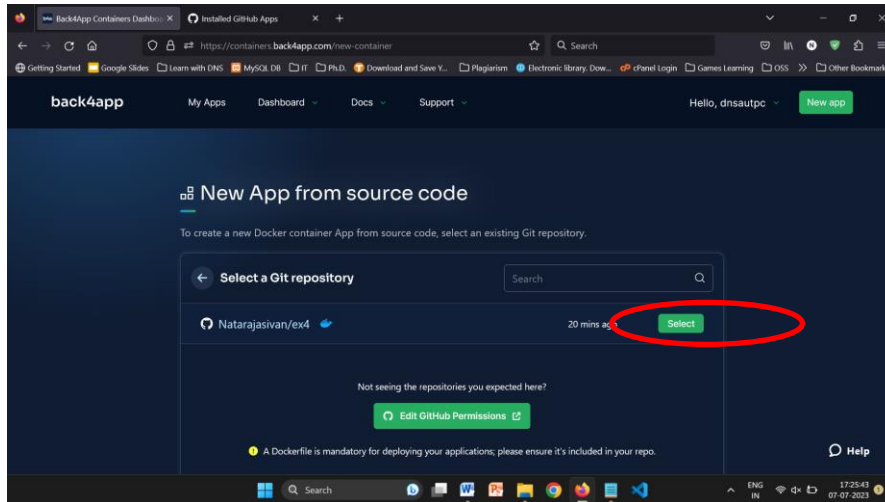


## 14. Select Install and Authorize.

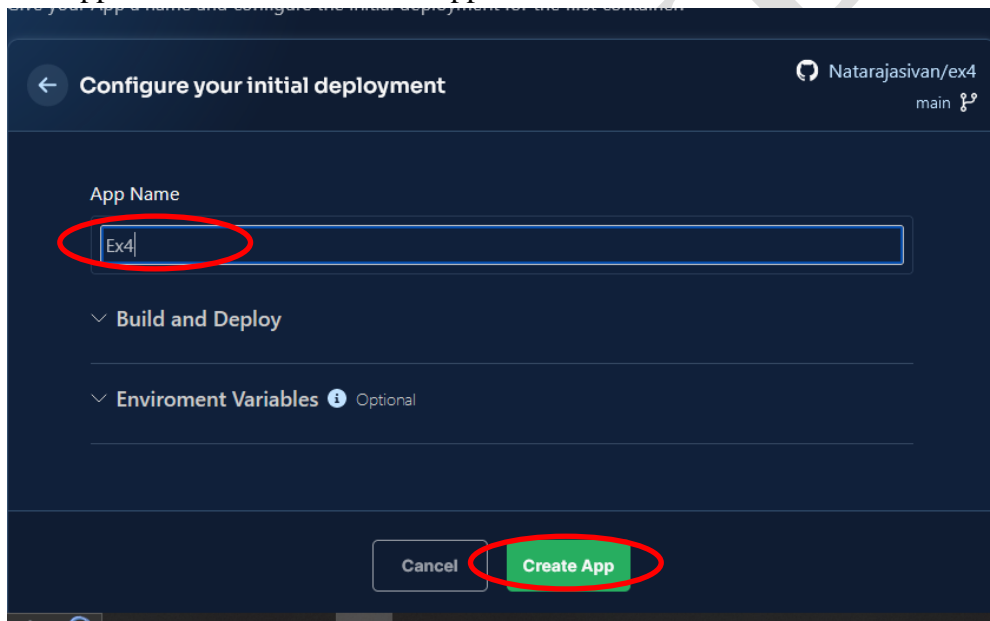




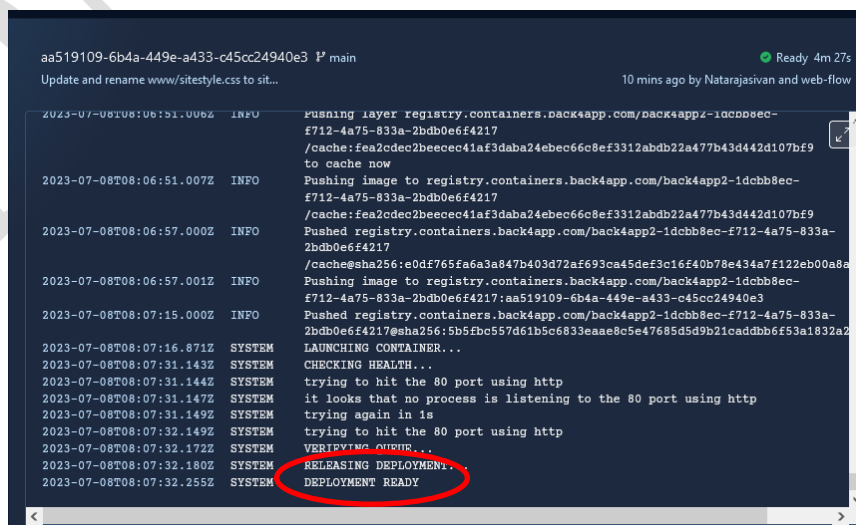
15. After Importing the Repository, select the repository in Back4App.



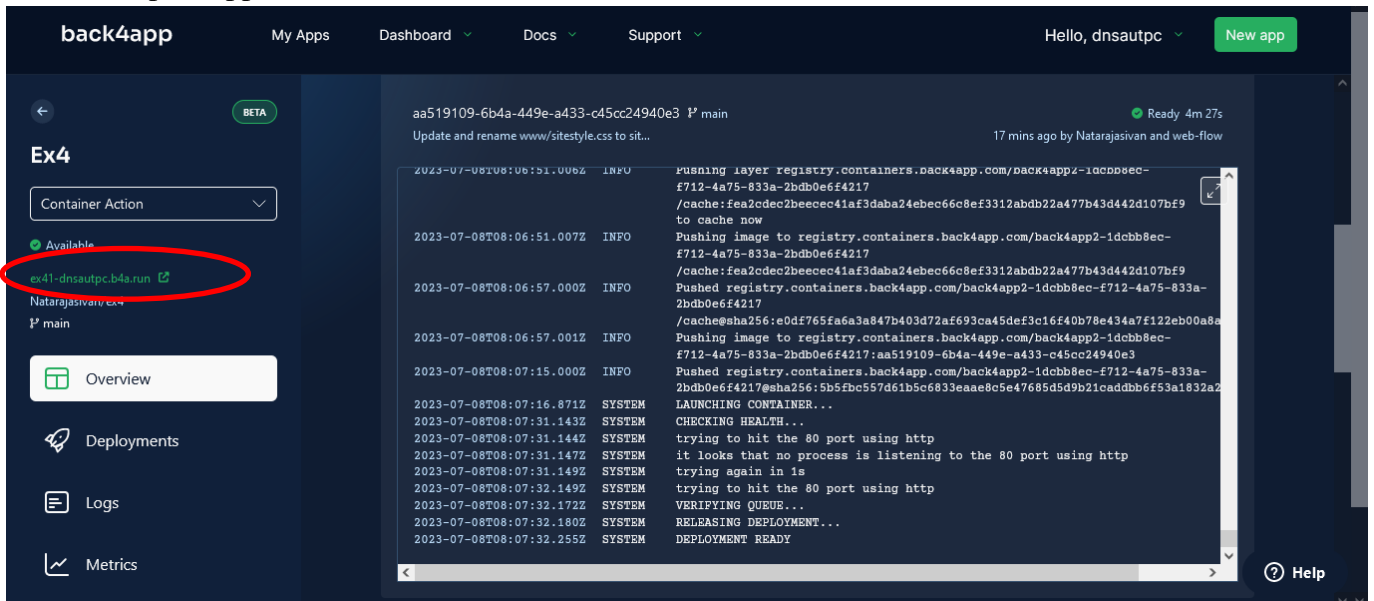
16. Provide App Name and Click Create App.



17. The Application will be deployed in the cloud, wait for installation to complete.



## 18. Open Application from the link



The screenshot shows the back4app dashboard. On the left, under the 'Ex4' section, the container 'ex41-dnsautpc.b4a.run' is listed with a status of 'Available' and is circled in red. The main area displays the container's logs, which include messages about pushing images to a registry and the container successfully launching and becoming ready.

### index.php

```
<!DOCTYPE html>
<html>
  <head>
    <title>Login Page</title>
    <link rel="stylesheet" href="sitestyle.css">
  </head>
  <body>
    <header>
      <h1>Cloud Login Demo</h1>
    </header>
    <hr>
    <article>
      <section>
        <h2>Login Details</h2>
        <form action="login.php" method="POST">
          <label>User Name</label>
          <input type="text" name="usr"><br><br>
          <label>Password</label>
          <input type="password" name="pwd"><br>
          <input type="submit" value="Login">
        </form>
      </section>
    </article>
    <footer>
      Developed by K Anbarasan
    </footer>
  </body>
```



```
</html>
```

### **login.php**

```
<?php
    $usr = $_POST["usr"];
    $pwd = $_POST["pwd"];
    if($usr == "sajid" && $pwd == "sajid123")
    {
        $loginName = "Welcome Admin";
    }
    else
    {
        $loginName = "Login Failed";
    }

?>
<!DOCTYPE html>
<html>
    <head>
        <title>Login Page</title>
        <link rel="stylesheet" href="sitestyle.css">
    </head>
    <body>
        <header>
            <h1>Cloud Login Result</h1>
        </header>
        <hr>
        <article>
            <section>
                <h2> <?php echo $loginName ?></h1>
            </section>
        </article>
        <footer>
            Developed by K Anbarasan
        </footer>
    </body>
</html>
```

### **sitestyle.css**

```
header {
    text-align:center;
    height: 100px;
    background-color: #ffe697;
```

```
padding: 10px;
border-radius: 10px 10px 0px 0px;
}
footer {
text-align:center;
font-size: 12px;
height: 50px;
line-height: 50px;
background-color: #ffe697;
padding: 10px;
border-radius: 10px;
}
img{
width: 100px;
height: 100px;
}
article{
width: auto;
border: 2px solid gray;
padding: 10px;
border-radius: 10px;
margin:5px;
}
```

### **Dockerfile**

```
# Use the official PHP image as the base image
FROM php:7.4-apache
```

```
# Copy the application files into the container
COPY ./var/www/html
```

```
# Set the working directory in the container
WORKDIR /var/www/html
```

```
# Install necessary PHP extensions
RUN apt-get update && apt-get install -y \
libicu-dev \
libzip-dev \
&& docker-php-ext-install \
intl \
zip \
&& a2enmod rewrite
```

```
# Expose port 80
```

EXPOSE 80

# Define the entry point for the container

CMD ["apache2-foreground"]

## Output

The image displays three sequential screenshots of a web application interface, all featuring a yellow header and footer with the text "Developed by K Anbarasan".

- First Screenshot:** Titled "Cloud Login Demo". It shows a "Login Details" section with two input fields: "User Name" and "Password". A "Login" button is located below the "Password" field.
- Second Screenshot:** Also titled "Cloud Login Demo". The "User Name" field now contains the text "admin". The "Password" field is filled with ten dots. The "Login" button is circled in red, indicating it is the focus of the action.
- Third Screenshot:** Titled "Cloud Login Result". It displays a message "Welcome Admin" in the main content area, indicating a successful login.

## Result:

Thus implementation of PaaS by creating a PHP and MySQL application for user validation is completed and verified.