Asynchronous JavaScript and XML

AIM :

To submit a form using Asynchronous JavaScript and XML with nodeJS as backend service

PROGRAM CODE :

App.js

```
const express = require("express");

const morgan = require("morgan");

const bp = require("body-parser");

const app = express();


app.set("view engine", "ejs");

app.use(express.static("public"));

app.use(bp.urlencoded({ extended: true }));

app.use(morgan("dev"));


app.get("/", function (req, res) {

  res.render("register");

});


app.post("/", function (req, res) {

  console.log(req.body);

  res.render("register");

});


app.listen(5000, function () {

  console.log("The server is listening at port 5000...");

});
```

Home.html

```html
<!DOCTYPE html>
<html lang="en" dir="ltr">


<head>
  <meta charset="utf-8">
  <title>Secrets</title>
  <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.6.3/css/all.css" integrity="sha384-UHRtZLI+pbxtHCWp1t77Bi1L4ZtiqrqD80Kn4Z8NTSRyMA2Fd33n5dQ8lWUE00s/" crossorigin="anonymous">
  <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC" crossorigin="anonymous">
  <link rel="stylesheet" href="css/styles.css">
</head>


<body>
<div class="container mt-5">
  <h1>Register</h1>

  <div class="row">
    <div class="col-sm-8">
      <div class="card">
        <div class="card-body">


          <!-- Makes POST request to /register route -->
          <form action="/" method="POST">
            <div class="form-group">
              <label for="email">Email</label>
              <input type="email" class="form-control email" name="username">
            </div>
            <div class="form-group">
              <label for="text">Name</label>
```

```html
        <input type="text" class="form-control text" name="name">
      </div>
      <div class="form-group">
        <label for="password">Password</label>
        <input type="password" class="form-control password" name="password">
      </div>
      <div class="form-group">
        <label for="password">Confirm Password</label>
        <input type="password" class="form-control cpassword" name="confirm password">
      </div>
      <br>
      <button type="submit" class="btn btn-dark">Register</button>
    </form>


    </div>
   </div>
  </div>
 </div>
</div>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
<script src="js/Register.js"></script>
</body>
</html>
```
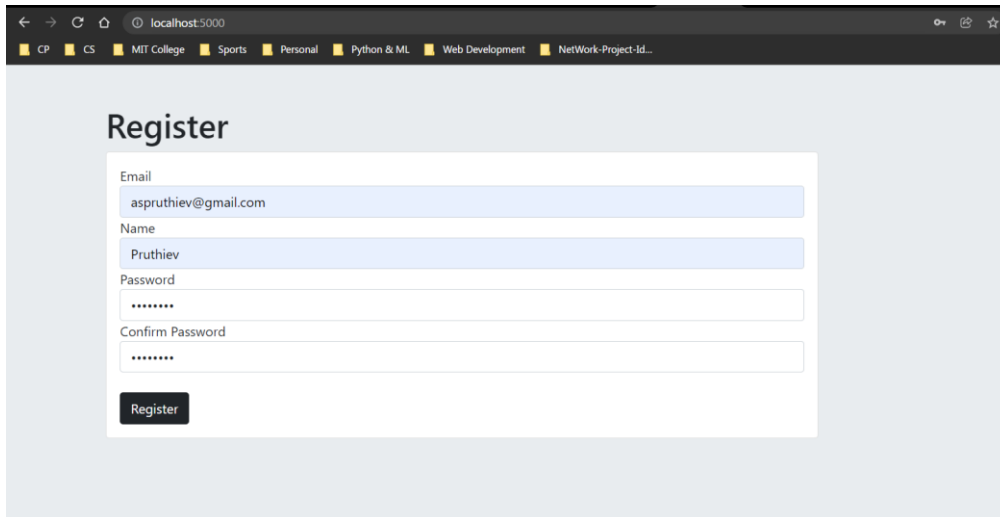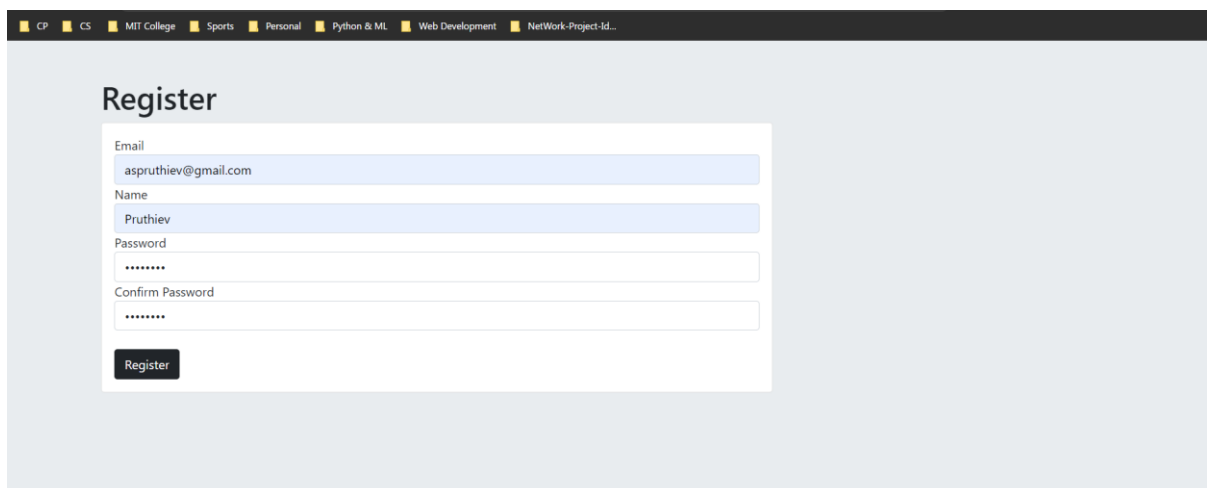
Home.js :

```javascript
$(document).ready(function () {
  console.log("Linked ....");
  $("form").submit((e) => {
    var formData = {
      username: $(".email").val(),
      name: $(".text").val(),
      password: $(".password").val(),
    };
    console.log(formData);
    $.ajax({
      type: "POST",
      url: "/",
      data: formData,
      dataType: "json",
      encode: true,
    }).done(function (data) {
      console.log(data);
    });

    event.preventDefault();
  });
});
```

OUTPUT:

Before Submitting the form :

The form fields are collected in the backend :

After submitting the page isn't reloaded as usual :

RESULT :

Thus the ajax is executed successfully.