



UNIVERSITI MALAYSIA TERENGGANU

Faculty of Computer Sciences and Mathematics

Front-End Programming

CSM3103

Lab Report 6

Prepared for:

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Prepared by:

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Bachelor of Computer Science (Mobile Computing) with Honors

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Task 2

a. Codes:

task2.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Lab 6 : Firebase</title>
</head>
<body>

  <h2>Simple Input</h2>

  <div class="row">
    <h4>Enter ID</h4>
    <input type="text" id="inputID">
    <h4>Enter Name</h4>
    <input type="text" id="inputName">
    <h4>Enter Age</h4>
    <input type="number" id="inputAge">
    <br>
    <br>
    <button id="btnInsert">Insert Data</button>
  </div>

  <script type="module">
    // Import the functions you need from the SDKs you need
    import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";
    // TODO: Add SDKs for Firebase products that you want to use
    // https://firebase.google.com/docs/web/setup#available-
libraries

    // Your web app's Firebase configuration
    const firebaseConfig = {
      apiKey: "AIzaSyAg9iqUE0H0YA8WZFXhWVwDVRa6qw_kURw",
      authDomain: "csm3103-lab6-399fb.firebaseio.com",
      databaseURL: "https://csm3103-lab6-399fb-default-
rtadb.asia-southeast1.firebaseio.com",
      projectId: "csm3103-lab6-399fb",
      storageBucket: "csm3103-lab6-399fb.appspot.com",
      messagingSenderId: "19925079351",
      appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
    };

    // Initialize Firebase
    const app = initializeApp(firebaseConfig);

    // Import the selected method from google related to Firebase-
Database
    import {getDatabase, set, get, remove, update, ref, child}
```

```

        from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

        // Create the holder for the database using the imported
method FirebaseDatabase()
        const db = FirebaseDatabase();

        // Retrieve the object from html into the JavaScript
var inputID = document.getElementById('inputID');
var inputName = document.getElementById('inputName');
var inputAge = document.getElementById('inputAge');

var btnInsert = document.getElementById('btnInsert');

// Add a listener for a click event on btnInsert
btnInsert.addEventListener("click", funInsertData);

// Add the function funInsertData
function funInsertData() {
    set(ref(db, "People/" + inputID.value), {
        ID: inputID.value,
        name: inputName.value,
        age: inputAge.value
    })
    .then(()=>{
        alert("Data added successfully!");
    })
    .catch((error)=>{
        alert(error);
    });
}
</script>
</body>
</html>

```

task2 form.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Lab 6 : Firebase</title>
</head>
<body>

    <h2>Simple Input</h2>

    <form id="myForm">
        <table>
            <tr>
                <td><label for="inputID">ID</label></td>
                <td><input type="text" id="inputID"></td>
            </tr>
        </table>
    </form>

```

```

        <td><label for="inputName">Name</label></td>
        <td><input type="text" id="inputName"></td>
    </tr>
    <tr>
        <td><label for="inputAge">Age</label></td>
        <td><input type="number" id="inputAge"></td>
    </tr>
    <tr>
        <td>
            <br>
            <button type="button" id="btnInsert">Insert
Data</button>
        </td>
    </tr>
</table>
</form>

<script type="module">
    // Import the functions you need from the SDKs you need
    import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";
    // TODO: Add SDKs for Firebase products that you want to use
    // https://firebase.google.com/docs/web/setup#available-
libraries

    // Your web app's Firebase configuration
    const firebaseConfig = {
        apiKey: "AIzaSyAg9iqUE0H0YA8WZFXhVwDVRa6qw_kURw",
        authDomain: "csm3103-lab6-399fb.firebaseio.com",
        databaseURL: "https://csm3103-lab6-399fb-default-
rtdb.asia-southeast1.firebaseio.com",
        projectId: "csm3103-lab6-399fb",
        storageBucket: "csm3103-lab6-399fb.appspot.com",
        messagingSenderId: "19925079351",
        appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
    };

    // Initialize Firebase
    const app = initializeApp(firebaseConfig);

    // Import the selected method from google related to Firebase-
Database
    import {getDatabase, set, get, remove, update, ref, child}
    from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

    // Create the holder for the database using the imported
method getDatabase()
    const db = getDatabase();

    // Retrieve the object from html into the JavaScript
    var form = document.getElementById('myForm');

    var inputID = document.getElementById('inputID');
    var inputName = document.getElementById('inputName');
    var inputAge = document.getElementById('inputAge');

    var btnInsert = document.getElementById('btnInsert');

```

```

        btnInsert.addEventListener("click", funInsertData);

        function funInsertData() {
            set(ref(db, "People/" + inputID.value), {
                ID: inputID.value,
                name: inputName.value,
                age: inputAge.value
            })
            .then(()=>{
                alert("Data added successfully!")
            })
            .catch((error)=>{
                alert(error)
            });
        }
    }
</script>

</body>
</html>

```

task2 delete.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Lab 6 : Firebase</title>
</head>
<body>

    <h2>Simple Input</h2>

    <form id="myForm">
        <table>
            <tr>
                <td><label for="inputID">ID</label></td>
                <td><input type="text" id="inputID"></td>
            </tr>
            <tr>
                <td><label for="inputName">Name</label></td>
                <td><input type="text" id="inputName"></td>
            </tr>
            <tr>
                <td><label for="inputAge">Age</label></td>
                <td><input type="number" id="inputAge"></td>
            </tr>
        </table>
        <br>
        <button type="button" id="btnInsert">Insert Data</button>
        <button type="button" id="btnDelete">Delete Data</button>
    </form>

    <script type="module">
        // Import the functions you need from the SDKs you need

```

```

import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";
// TODO: Add SDKs for Firebase products that you want to use
// https://firebase.google.com/docs/web/setup#available-
libraries

// Your web app's Firebase configuration
const firebaseConfig = {
  apiKey: "AIzaSyAg9iqUE0H0YA8WZFXhVwDVRa6qw_kURw",
  authDomain: "csm3103-lab6-399fb.firebaseio.com",
  databaseURL: "https://csm3103-lab6-399fb-default-
rttdb.asia-southeast1.firebaseio.com",
  projectId: "csm3103-lab6-399fb",
  storageBucket: "csm3103-lab6-399fb.appspot.com",
  messagingSenderId: "19925079351",
  appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);

// Import the selected method from google related to Firebase-
Database
import {getDatabase, set, get, remove, update, ref, child}
from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

// Create the holder for the database using the imported
method getDatabase()
const db = getDatabase();

// Retrieve the object from html into the JavaScript
var form = document.getElementById('myForm');

var inputID = document.getElementById('inputID');
var inputName = document.getElementById('inputName');
var inputAge = document.getElementById('inputAge');

var btnInsert = document.getElementById('btnInsert');
var btnDelete = document.getElementById('btnDelete');

btnInsert.addEventListener('click', insertData);
btnDelete.addEventListener('click', deleteData);

function insertData() {
  set(ref(db, "People/" + inputID.value), {
    ID: inputID.value,
    name: inputName.value,
    age: inputAge.value
  })
  .then(()=>{
    alert("Data added successfully!")
  })
  .catch((error)=>{
    alert(error)
  });
}

function deleteData() {

```

```
        remove(ref(db, "People/" + inputID.value))
        .then(()=>{
            alert("Data removed successfully!")
        })
        .catch((error)=>{
            alert(error)
        });
    }
</script>

</body>
</html>
```

b. Outputs:

Simple Input

Enter ID

Enter Name

Enter Age

file:///D:/UMT/Sarjana%20Muda/SEM%204/Pengaturcaraan%20Front-End/Lab/Lab%206/Task%202/task2.html

Study Entertainment

Simple Input

Enter ID

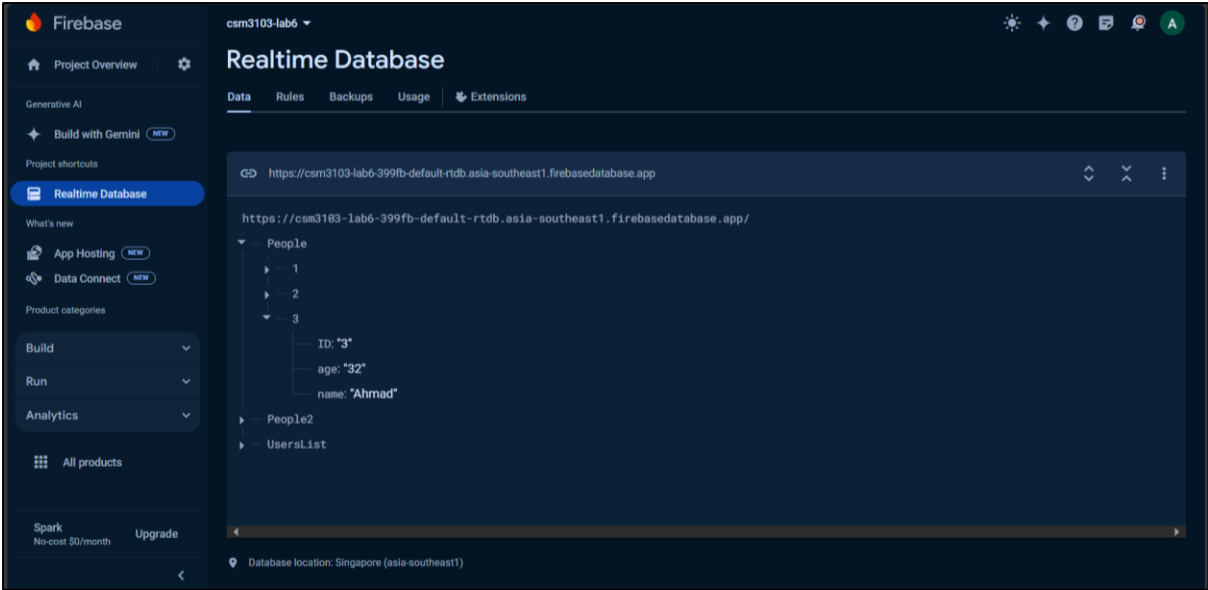
Enter Name

Enter Age

This page says

Data added successfully!

OK



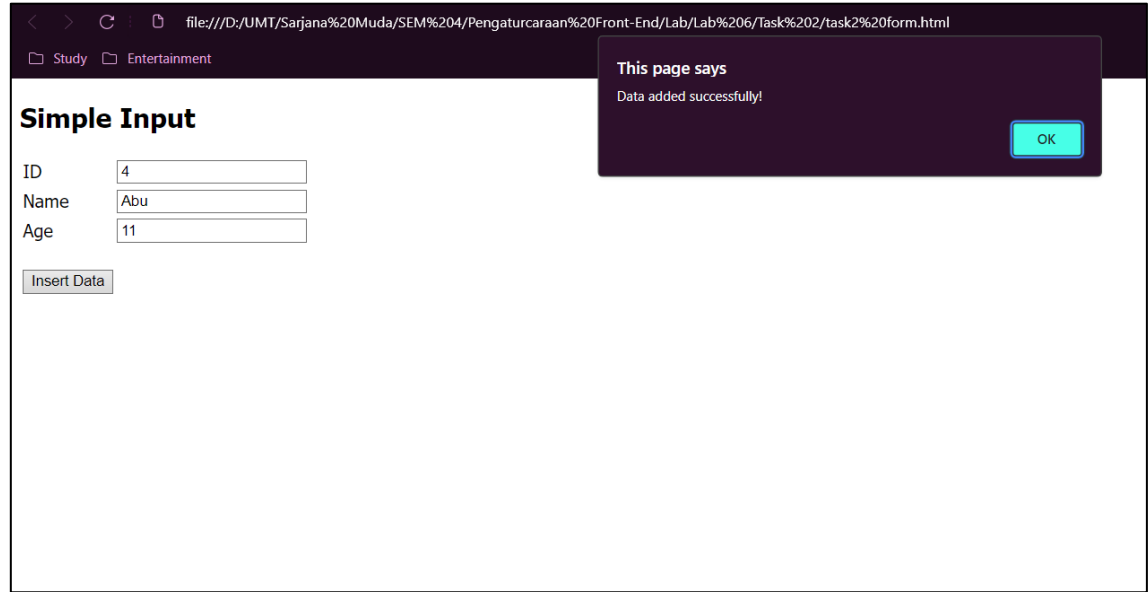
Simple Input

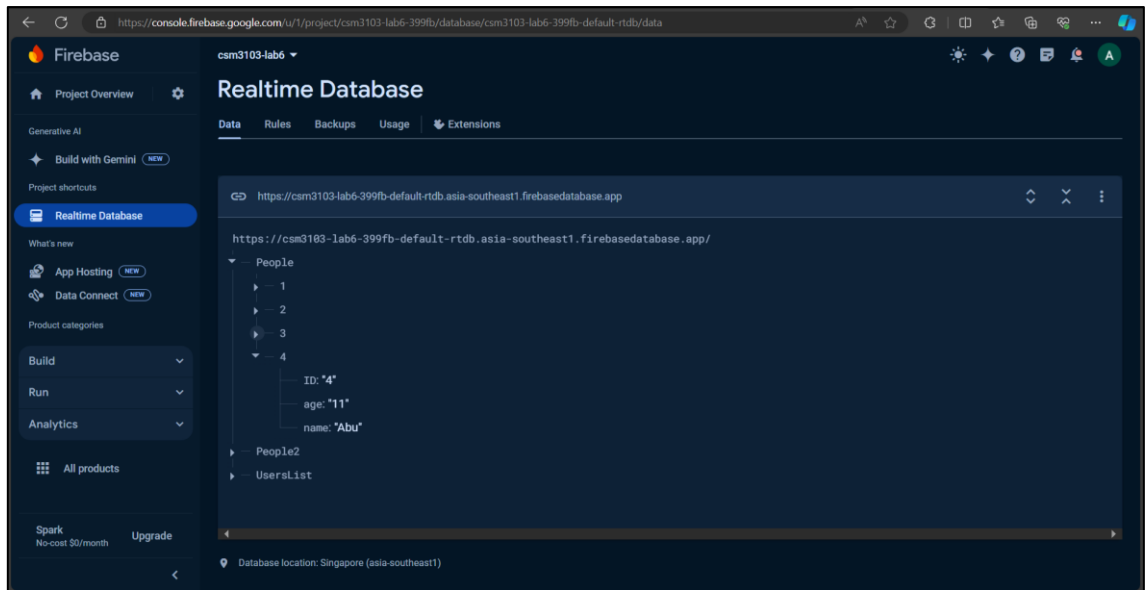
ID

Name

Age

Insert Data



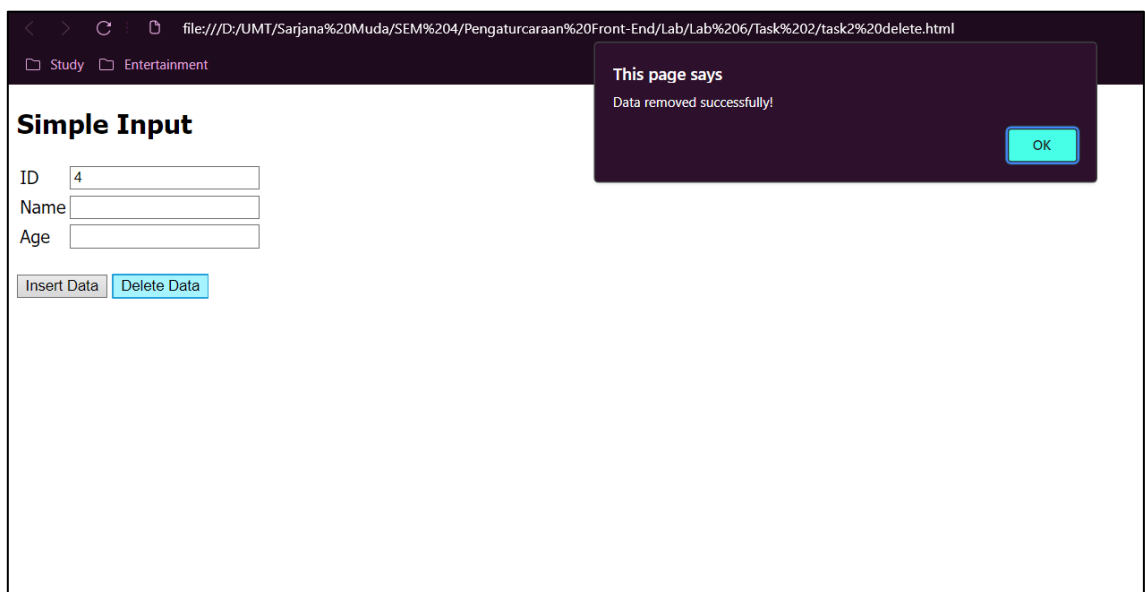


Simple Input

ID

Name

Age



←

↻

🔒

https://console.firebase.google.com/u/1/project/csm3103-lab6-399fb/database/csm3103-lab6-399fb-default-rtdb/data

⌵

🔍


🔖

🔗

🔧

🔔

👤

 **Firebase**

🏠 Project Overview

⚙️

Generative AI

🔧 Build with Gemini NEW

Project shortcuts

📄 Realtime Database

What's new

📄 App Hosting NEW

🔗 Data Connect NEW

Product categories

Build ▾

Run ▾

Analytics ▾

All products

Spark
No-cost \$0/month

Upgrade

⏪

csm3103-lab6 ▾

Realtime Database

Data

Rules

Backups

Usage

🔗 Extensions

🔗 <https://csm3103-lab6-399fb-default-rtdb.asia-southeast1.firebaseio.com>

↕

⌵

⋮

<https://csm3103-lab6-399fb-default-rtdb.asia-southeast1.firebaseio.com/>

▾ People

- 1
- 2
- 3

▸ People2

▸ UsersList

⏪

⏩

📍 Database location: Singapore (asia-southeast1)

Task 3

a. Codes:

register.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Sign Up</title>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/crypto-
js/4.2.0/crypto-js.min.js" integrity="sha512-
a+SUDuwNzXDvz4XrIcXHuCf089/iJAoN4lmrXJg18XnduKK6YlDHNra1v4yd1N400KI80t
FidF+rqTFKGpWFQ==" referrerpolicy="no-referrer"></script>
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.
min.css" integrity="sha384-
Vkoo8x4CGs03+Hhxxv8T/Q5PaXtkKtu6ug5T0eNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">
  <style>
    body {
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
      width: 100vw;
      margin: 0;
    }
  </style>
</head>
<body>

  <div class="mb-5">
    <h3 class="mb-3">Sign Up</h3>
    <input type="text" placeholder="Fullname" id="inputFullname"
class="form-control mb-3">
    <input type="text" placeholder="Email" id="inputEmail"
class="form-control mb-3">
    <input type="text" placeholder="Username" id="inputUsername"
class="form-control mb-3">
    <input type="password" placeholder="Password"
id="inputPassword" class="form-control mb-3">
    <button type="button" id="btnSignUp" class="btn btn-outline-
primary mb-3 w-100">Sign Up</button>
    <a href="login.html" class="badge badge-secondary py-1 w-
100">Already have an account?</a>
  </div>

  <script type="module">
    // Import the functions you need from the SDKs you need
    import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";
```

```

// Your web app's Firebase configuration
const firebaseConfig = {
  apiKey: "AIzaSyAg9iqUE0H0YA8WZFXhWVwDVRa6qw_kURw",
  authDomain: "csm3103-lab6-399fb.firebaseio.com",
  databaseURL: "https://csm3103-lab6-399fb-default-
rttdb.asia-southeast1.firebaseio.com",
  projectId: "csm3103-lab6-399fb",
  storageBucket: "csm3103-lab6-399fb.appspot.com",
  messagingSenderId: "19925079351",
  appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);

// Import the selected method from google related to Firebase-
Database
import { getDatabase, set, get, remove, update, ref, child }
from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

// Create the holder for the database using the imported
method getDatabase()
const db = getDatabase();

// References
var inputFullname = document.getElementById('inputFullname');
var inputEmail = document.getElementById('inputEmail');
var inputUsername = document.getElementById('inputUsername');
var inputPassword = document.getElementById('inputPassword');
var btnSignUp = document.getElementById('btnSignUp');

// Validation
function validateInput() {
  let fullnameRegex = /^[a-zA-Z\s]+$/;
  let emailRegex = /^[a-zA-Z0-
9]+@(gmail|yahoo|outlook)\.com$/;
  let usernameRegex = /^[a-zA-Z0-9]{5,}$/;

  if (isEmptyorSpaces(inputFullname.value) ||
isEmptyorSpaces(inputEmail.value)
|| isEmptyorSpaces(inputUsername.value) ||
isEmptyorSpaces(inputPassword.value)) {
    alert("You cannot left any field empty.");
    return false;
  }

  if (!fullnameRegex.test(inputFullname.value)) {
    alert("The name should only contain alphabets!");
    return false;
  }

  if (!emailRegex.test(inputEmail.value)) {
    alert("Invalid email!");
    return false;
  }

  if (!usernameRegex.test(inputUsername.value)) {

```

```

        alert("Username can only be alphanumeric\nUsername
must be at least 5 characters\nUsername cannot contain space");
        return false;
    }

    return true;
}

function isEmptyorSpaces(str) {
    return str === null || str.match(/^ */) !== null;
}

// Password encryption
function encryptPassword() {
    var encryptedPassword =
CryptoJS.AES.encrypt(inputPassword.value, inputPassword.value);
    return encryptedPassword.toString();
}

// Register user to firebase
function registerUser() {
    if (!validateInput()) {
        return;
    }

    get(child(ref(db), "UsersList/" + inputUsername.value))
    .then((snapshot)=>{
        if (snapshot.exists()) {
            alert("Account already exist!");
        }
        else {
            set(ref(db, "UsersList/" + inputUsername.value), {
                fullname: inputFullname.value,
                email: inputEmail.value,
                username: inputUsername.value.toLowerCase(),
                password: encryptPassword()
            })
            .then(() => {
                alert("Account created successfully!");
                window.location = "login.html";
            })
            .catch((error) => {
                alert(error);
            })
        }
    })
    .catch((error) => {
        console.error(error);
    });
}

// Assign the events
btnSignUp.addEventListener('click', registerUser);
</script>
</body>
</html>

```

login.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Log In</title>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/crypto-
js/4.2.0/crypto-js.min.js" integrity="sha512-
a+SUDuwNzXDvz4XrIcXHuCF089/iJAoN41mrXJg18XnduKK6Y1DHNra1v4yd1N400KI80t
FidF+rqTFKGPoWfQ==" crossorigin="anonymous" referrerpolicy="no-
referrer"></script>
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.
min.css" integrity="sha384-
Vkoo8x4CGs03+Hhxxv8T/Q5PaXtkKtu6ug5T0eNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">
  <style>
    body {
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
      width: 100vw;
      margin: 0;
    }
  </style>
</head>
<body>

  <div class="mb-5">
    <h3 class="mb-3">Log In</h3>
    <input type="text" placeholder="Username" id="inputUsername"
class="form-control mb-3">
    <input type="password" placeholder="Password"
id="inputPassword" class="form-control mb-3">
    <div class="custom-control custom-switch mb-3">
      <input type="checkbox" class="custom-control-input"
id="switchKeepLoggedIn">
      <label class="custom-control-label"
for="switchKeepLoggedIn">Keep me logged in</label>
    </div>
    <button type="button" id="btnLogIn" class="btn btn-outline-
primary mb-3 w-100">Log In</button>
    <a href="register.html" class="badge badge-secondary py-1 w-
100">Create a new account</a>
  </div>

  <script type="module">
    // Import the functions you need from the SDKs you need
    import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";

    // Your web app's Firebase configuration
    const firebaseConfig = {
      apiKey: "AIzaSyAg9iqUE0H0YA8WZFXhWVwDVRa6qw_kURw",
```

```

        authDomain: "csm3103-lab6-399fb.firebaseio.com",
        databaseURL: "https://csm3103-lab6-399fb-default-
rtddb.asia-southeast1.firebaseio.com",
        projectId: "csm3103-lab6-399fb",
        storageBucket: "csm3103-lab6-399fb.appspot.com",
        messagingSenderId: "19925079351",
        appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
    };

    // Initialize Firebase
    const app = initializeApp(firebaseConfig);

    // Import the selected method from google related to Firebase-
Database
    import { getDatabase, set, get, remove, update, ref, child }
    from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

    // Create the holder for the database using the imported
method getDatabase()
    const db = getDatabase();

    // References
    var inputUsername = document.getElementById('inputUsername');
    var inputPassword = document.getElementById('inputPassword');
    var btnLogIn = document.getElementById('btnLogIn');

    // Authentication process
    function authenticateUser() {
        get(child(ref(db), "UsersList/" + inputUsername.value))
        .then((snapshot)=>{
            if (snapshot.exists()) {
                let dbPassword =
decryptPassword(snapshot.val().password);
                if (inputPassword.value.toLowerCase() ==
dbPassword) {
                    login(snapshot.val());
                }
                else {
                    alert("User does not exist!");
                }
            }
            else {
                alert("Invalid username or password!");
            }
        })
        .catch((error) => {
            console.error(error);
        });
    }

    // Password decryption
    function decryptPassword(dbPassword) {
        var decryptedPassword = CryptoJS.AES.decrypt(dbPassword,
inputPassword.value);
        return decryptedPassword.toString(CryptoJS.enc.Utf8);
    }

    // Login

```

```

        function login(user) {
            let keepLoggedIn =
document.getElementById('switchKeepLoggedIn').checked;

            if (!keepLoggedIn) {
                sessionStorage.setItem('user', JSON.stringify(user));
                window.location = "home.html";
            }
            else {
                localStorage.setItem('keepLoggedIn', 'Yes');
                localStorage.setItem('user', JSON.stringify(user));
                window.location = "home.html";
            }
        }

        // Assign the events
        btnLogIn.addEventListener('click', authenticateUser);
    </script>
</body>
</html>

```

home.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Home</title>
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.
min.css" integrity="sha384-
Vkoo8x4CGs03+Hhvx8T/Q5PaXtkKtu6ug5T0eNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">
    <script src="https://kit.fontawesome.com/aa5de83a5b.js"
crossorigin="anonymous"></script>
</head>
<body>

    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
        <a class="navbar-brand" href="#">CSM3103</a>
        <button class="navbar-toggler" type="button" data-
toggle="collapse" data-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent" aria-expanded="false" aria-
label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>

        <div class="collapse navbar-collapse"
id="navbarSupportedContent">
            <ul class="navbar-nav mr-auto">
                <li class="nav-item active">
                    <a class="nav-link" href="home.html">Home<span
class="sr-only">(current)</span></a>
                </li>
                <li class="nav-item">

```



```

        <a id="navTable" class="nav-link"
href="table.html">Table</a>
    </li>
</ul>
<form class="form-inline my-2 my-lg-0">
    <ul class="navbar-nav mr-auto">
        <li class="nav-item mx-1">
            <a class="nav-link" href="#"
id="linkUsername">Username</a>
        </li>
        <li class="nav-item mx-1">
            <a class="nav-link" href="#"
id="linkSignOut">Sign Out</a>
        </li>
    </ul>
</form>
</div>
</nav>

<div class="mx-auto mt-5 text-center">
    <h1 id="header"></h1>
</div>

<script>
    // References
    var linkUsername = document.getElementById('linkUsername');
    var linkSignOut = document.getElementById('linkSignOut');
    var header = document.getElementById('header');
    var navTable = document.getElementById('navTable');
    var currentUser = null;

    // Functions
    function getUsername() {
        let keepLoggedIn = localStorage.getItem("keepLoggedIn");

        if (keepLoggedIn == "Yes") {
            currentUser =
JSON.parse(localStorage.getItem('user'));
        }
        else {
            currentUser =
JSON.parse(sessionStorage.getItem('user'));
        }
    }

    function signOut() {
        sessionStorage.removeItem('user');
        localStorage.removeItem('user');
        localStorage.removeItem('keepLoggedIn');
        window.location = "home.html";
    }

    // Windows load
    window.onload = function() {
        getUsername();

        if (currentUser == null) {
            linkUsername.innerText = "Create New Account";
            linkUsername.classList.replace("nav-link", "btn");
        }
    }

```

```

        linkUsername.classList.add("btn-light");
        linkUsername.href = "register.html";

        linkSignOut.innerText = "Log In";
        linkSignOut.classList.replace("nav-link", "btn");
        linkSignOut.classList.add("btn-secondary");
        linkSignOut.href = "login.html";

        navTable.classList.add("disabled");
    }
    else {
        linkUsername.innerText = currentUser.username;
        linkUsername.classList.replace("btn", "nav-link");
        linkUsername.classList.remove("btn-light");
        linkUsername.href = "#";

        linkSignOut.innerText = "Sign Out";
        linkSignOut.classList.replace("btn", "nav-link");
        linkSignOut.classList.remove("btn-secondary");
        linkSignOut.href = "javascript:signOut()";

        navTable.classList.remove("disabled");

        header.innerText = "Welcome " + currentUser.fullname;
    }
}
</script>
</body>
</html>

```

table.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Table</title>
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.
min.css" integrity="sha384-
Vkoo8x4CGs03+Hhvx8T/Q5PaXtkKtu6ug5T0eNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">
    <script src="https://kit.fontawesome.com/aa5de83a5b.js"
crossorigin="anonymous"></script>
    <style>
        #rowAdd {
            cursor: pointer;
        }
    </style>
</head>
<body>

    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
        <a class="navbar-brand" href="#">CSM3103</a>

```

```

        <button class="navbar-toggler" type="button" data-
toggle="collapse" data-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent" aria-expanded="false" aria-
label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
    </button>

    <div class="collapse navbar-collapse"
id="navbarSupportedContent">
        <ul class="navbar-nav mr-auto">
            <li class="nav-item">
                <a class="nav-link" href="home.html">Home</a>
            </li>
            <li class="nav-item active">
                <a class="nav-link" href="table.html">Table<span
class="sr-only">(current)</span></a>
            </li>
        </ul>
        <form class="form-inline my-2 my-lg-0">
            <ul class="navbar-nav mr-auto">
                <li class="nav-item mx-1">
                    <a class="nav-link" href="#"
id="linkUsername">Username</a>
                </li>
                <li class="nav-item mx-1">
                    <a class="nav-link" href="#"
id="linkSignOut">Sign Out</a>
                </li>
            </ul>
        </form>
    </div>
</nav>

<div class="container mt-3">
    <div class="table-responsive-lg">
        <table class="table">
            <thead class="thead-dark">
                <th scope="col">No.</th>
                <th scope="col">Name</th>
                <th scope="col">Address</th>
                <th scope="col">Phone No.</th>
            </thead>
            <tbody id="tbody">
                <tr class="text-center" id="rowAdd">
                    <td class="table-secondary" colspan="4"><i
class="fa-solid fa-plus"></i></td>
                </tr>
            </tbody>
        </table>
    </div>
</div>

<script>
    // References
    var linkUsername = document.getElementById('linkUsername');
    var linkSignOut = document.getElementById('linkSignOut');
    var header = document.getElementById('header');
    var rowAdd = document.getElementById('rowAdd');
    var currentUser = null;

```

```

// Functions
function getUsername() {
    let keepLoggedIn = localStorage.getItem("keepLoggedIn");

    if (keepLoggedIn == "Yes") {
        currentUser =
JSON.parse(localStorage.getItem('user'));
    }
    else {
        currentUser =
JSON.parse(sessionStorage.getItem('user'));
    }
}

function signOut() {
    sessionStorage.removeItem('user');
    localStorage.removeItem('user');
    localStorage.removeItem('keepLoggedIn');
    window.location = "home.html";
}

// Add event listener
rowAdd.addEventListener('click', () => {
    window.location = "form.html";
});

// Windows load
window.onload = function() {
    getUsername();

    if (currentUser == null) {
        linkUsername.innerText = "Create New Account";
        linkUsername.classList.replace("nav-link", "btn");
        linkUsername.classList.add("btn-light");
        linkUsername.href = "register.html";

        linkSignOut.innerText = "Log In";
        linkSignOut.classList.replace("nav-link", "btn");
        linkSignOut.classList.add("btn-secondary");
        linkSignOut.href = "login.html";
    }
    else {
        linkUsername.innerText = currentUser.username;
        linkUsername.classList.replace("btn", "nav-link");
        linkUsername.classList.remove("btn-light");
        linkUsername.href = "#";

        linkSignOut.innerText = "Sign Out";
        linkSignOut.classList.replace("btn", "nav-link");
        linkSignOut.classList.remove("btn-secondary");
        linkSignOut.href = "javascript:signOut()";
    }
}
</script>

<script type="module">
    // Import the functions you need from the SDKs you need

```

```

import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";

// Your web app's Firebase configuration
const firebaseConfig = {
  apiKey: "AIzaSyAg9iqUE0H0YA8WZFXhVwDVRa6qw_kURw",
  authDomain: "csm3103-lab6-399fb.firebaseio.com",
  databaseURL: "https://csm3103-lab6-399fb-default-
rtadb.asia-southeast1.firebaseio.com",
  projectId: "csm3103-lab6-399fb",
  storageBucket: "csm3103-lab6-399fb.appspot.com",
  messagingSenderId: "19925079351",
  appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);

// Import the selected method from google related to Firebase-
Database
import { getDatabase, set, get, remove, update, ref, child,
query, limitToFirst, limitToLast, orderByChild, startAt, startAfter,
endAt, endBefore, equalTo }
from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

// Create the holder for the database using the imported
method getDatabase()
const db = getDatabase();

// References
var no = 0;
var tbody = document.getElementById('tbody');
var rowAdd = document.getElementById('rowAdd');

// Functions
function addItemToTable(name, address, phoneNo) {
  let tr = document.createElement('tr');
  let tdNo = document.createElement('td');
  let tdName = document.createElement('td');
  let tdAddress = document.createElement('td');
  let tdPhone = document.createElement('td');

  tdNo.innerHTML = ++no;
  tdName.innerHTML = name;
  tdAddress.innerHTML = address;
  tdPhone.innerHTML = phoneNo;

  tr.appendChild(tdNo);
  tr.appendChild(tdName);
  tr.appendChild(tdAddress);
  tr.appendChild(tdPhone);

  tbody.insertBefore(tr, rowAdd);
}

function addAllItemsToTable(people) {
  no = 0;
  people.forEach(element => {

```

```

        addItemToTable(element.name, element.address,
element.phoneNo);
    });
}

function getAllDataOnce() {
    //const query = query(ref(db, "People2"),
limitToFirst(6)); // can use orderByChild("name")

    get(child(ref(db), "People2"))
    .then((snapshot) => {
        var people = [];

        snapshot.forEach(childSnapshot => {
            people.push(childSnapshot.val());
        });

        addAllItemsToTable(people);
    })
}

    getAllDataOnce();
</script>
</body>
</html>

```

form.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Form</title>
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.
min.css" integrity="sha384-
Vkoo8x4CGs03+HhXv8T/Q5PaXtkKtu6ug5T0eNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous">
</head>
<body>

    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
        <a class="navbar-brand" href="#">CSM3103</a>
        <button class="navbar-toggler" type="button" data-
toggle="collapse" data-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent" aria-expanded="false" aria-
label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>

        <div class="collapse navbar-collapse"
id="navbarSupportedContent">
            <ul class="navbar-nav mr-auto">
                <li class="nav-item">

```

```

        <a class="nav-link" href="home.html">Home</a>
    </li>
    <li class="nav-item active">
        <a class="nav-link" href="table.html">Table<span
class="sr-only">(current)</span></a>
    </li>
</ul>
<form class="form-inline my-2 my-lg-0">
    <ul class="navbar-nav mr-auto">
        <li class="nav-item mx-1">
            <a class="nav-link" href="#"
id="linkUsername">Username</a>
        </li>
        <li class="nav-item mx-1">
            <a class="nav-link" href="#"
id="linkSignOut">Sign Out</a>
        </li>
    </ul>
</form>
</div>
</nav>

<div class="container mt-3">
    <form>
        <div class="form-group">
            <label for="inputName">Name</label>
            <input type="text" placeholder="Enter name"
id="inputName" class="form-control" required>
        </div>
        <div class="form-group">
            <label for="inputAddress">Address</label>
            <input type="text" placeholder="Enter address"
id="inputAddress" class="form-control" required>
        </div>
        <div class="form-group">
            <label for="inputPhoneNo">Phone number</label>
            <input type="text" placeholder="Enter phone number
(e.g. 01XXXXXXXXXX)" id="inputPhoneNo" class="form-control" required>
        </div>
        <div class="d-flex justify-content-end">
            <button type="reset" class="btn">Clear</button>
            <button type="button" class="btn btn-dark"
id="btnSubmit">Submit</button>
        </div>
    </form>
</div>

<script>
    // References
    var linkUsername = document.getElementById('linkUsername');
    var linkSignOut = document.getElementById('linkSignOut');
    var currentUser = null;

    // Functions
    function getUsername() {
        let keepLoggedIn = localStorage.getItem("keepLoggedIn");

        if (keepLoggedIn == "Yes") {

```

```

        currentUser =
JSON.parse(localStorage.getItem('user'));
    }
    else {
        currentUser =
JSON.parse(sessionStorage.getItem('user'));
    }
}

function signOut() {
    sessionStorage.removeItem('user');
    localStorage.removeItem('user');
    localStorage.removeItem('keepLoggedIn');
    window.location = "home.html";
}

// Windows load
window.onload = function() {
    getUsername();

    if (currentUser == null) {
        linkUsername.innerText = "Create New Account";
        linkUsername.classList.replace("nav-link", "btn");
        linkUsername.classList.add("btn-light");
        linkUsername.href = "register.html";

        linkSignOut.innerText = "Log In";
        linkSignOut.classList.replace("nav-link", "btn");
        linkSignOut.classList.add("btn-secondary");
        linkSignOut.href = "login.html";
    }
    else {
        linkUsername.innerText = currentUser.username;
        linkUsername.classList.replace("btn", "nav-link");
        linkUsername.classList.remove("btn-light");
        linkUsername.href = "#";

        linkSignOut.innerText = "Sign Out";
        linkSignOut.classList.replace("btn", "nav-link");
        linkSignOut.classList.remove("btn-secondary");
        linkSignOut.href = "javascript:signOut()";
    }
}
</script>

<script type="module">
    // Import the functions you need from the SDKs you need
    import { initializeApp } from
"https://www.gstatic.com/firebasejs/10.12.0/firebase-app.js";

    // Your web app's Firebase configuration
    const firebaseConfig = {
        apiKey: "AIzaSyAg9iqUE0HOYA8WZFXhWVwDVRa6qw_kURw",
        authDomain: "csm3103-lab6-399fb.firebaseio.com",
        databaseURL: "https://csm3103-lab6-399fb-default-
rtdb.asia-southeast1.firebaseio.com",
        projectId: "csm3103-lab6-399fb",
        storageBucket: "csm3103-lab6-399fb.appspot.com",
        messagingSenderId: "19925079351",

```



```

        appId: "1:19925079351:web:56f3bcb737a683cb2df6b2"
    };

    // Initialize Firebase
    const app = initializeApp(firebaseConfig);

    // Import the selected method from google related to Firebase-
Database
    import { getDatabase, set, get, remove, update, ref, child }
    from "https://www.gstatic.com/firebasejs/10.12.0/firebase-
database.js";

    // Create the holder for the database using the imported
method getDatabase()
    const db = getDatabase();

    // References
    var inputName = document.getElementById('inputName');
    var inputAddress = document.getElementById('inputAddress');
    var inputPhoneNo = document.getElementById('inputPhoneNo');
    var btnSubmit = document.getElementById('btnSubmit');

    // Functions
    function validateInput() {
        let nameRegex = /^[a-zA-Z\s]+$/;
        let phoneNoRegex = /^01[0-9]{8,9}$/;

        if (!nameRegex.test(nameRegex.value)) {
            alert("The name should only contain alphabets!");
            return false;
        }
        if (!phoneNoRegex.test(inputPhoneNo.value)) {
            alert("Invalid phone number");
            return false;
        }

        return true;
    }

    function addData() {
        if (!validateInput()) {
            return;
        }

        set(ref(db, "People2/" + inputName.value), {
            name: inputName.value.toUpperCase(),
            address: inputAddress.value.toUpperCase(),
            phoneNo: inputPhoneNo.value
        })
        .then( () => {
            alert("Data added successfully!");
            window.location = "table.html";
        })
        .catch((error) => {
            alert(error);
        });
    };

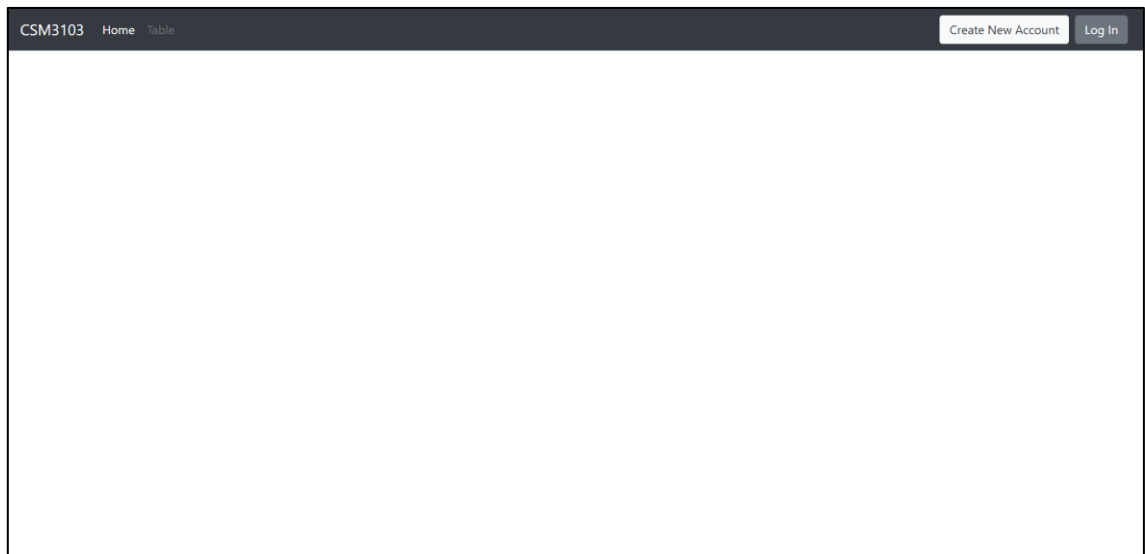
    // Add event listener

```

```
        btnSubmit.addEventListener('click', addData);
    </script>

</body>
</html>
```

b. Output:



Sign Up

Study

Entertainment

This page says
Account created successfully!

OK

Sign Up

Afif Syahmi

afifsyahmi@gmail.com

afif17

Sign Up

Already have an account?

Log In

afif17

☒ Keep me logged in

Log In

Create a new account

CSM3103 Home Table

afif17 Sign Out

Welcome Afif Syahmi

CSM3103

Home

Table

afif17

Sign Out

No.	Name	Address	Phone No.
		+	

CSM3103

Home

Table

afif17

Sign Out

Name

Afif

Address

LOT 1234, Jln Limau, Kg Limau, 23000 Dungun, Terengganu

Phone number

01123456789

Clear

Submit

Study

Entertainment

CSM3103

Home

Table

afif17

Sign Out

This page says

Data added successfully!

OK

Name

Afif

Address

LOT 1234, Jln Limau, Kg Limau, 23000 Dungun, Terengganu

Phone number

01123456789

Clear

Submit

CSM3103			
Home		Table	
		afif17 Sign Out	
No.	Name	Address	Phone No.
1	AFIF	LOT 1234, JLN LIMAU, KG LIMAU, 23000 DUNGUN, TERENGGANU	01123456789
+			

Project Overview

Generative AI

Build with Gemini

Project shortcuts

Realtime Database

What's new

App Hosting

Data Connect

Product categories

Build

Run

Analytics

All products

Spark

No-cost \$0/month

Upgrade

csM3103-lab6

Realtime Database

Data Rules Backups Usage Extensions

GD

https://csm3103-lab6-399fb-default-rtdb.asia-southeast1.firebaseio.com/app/

People

People2

Afif

address: "LOT 1234, JLN LIMAU, KG LIMAU, 23000 DUNGUN, TERENGGANU"

name: "AFIF"

phoneNo: "01123456789"

UsersList

afif17

email: "afifsyahmi@gmail.com"

fullName: "Afif Syahmi"

password: "U2FsdGVkX18joL/w+SanuiPZ0e5jckUHEc5M6q7fYYg="

username: "afif17"

Database location: Singapore (asia-southeast1)

Link GitHub: <https://github.com/S65526AfifSyahmi/CSM3103-Lab-6>