WAPH-web Application programming and Hacking

Instructor: Dr. Phu Phung

Sprint 0

Team Memebers

1. Ragini, Chamakura
2. Sreeja, Bodanapu
3. Akhil Kumar Yadav, Markoll

Project Management Information

Source code repository (private access): https://github.com/waph-team12

Project homepage (public): https://github.com/waph-team12/waph-team12.github.io

Revision History

Date	Version	Description
24/03/2024	0.0	Init draft

Overview

For this initial sprint, we have done setup for team project, this includes setting up SSL, HTTPS domains for the project. Also did a simple database setup with a baisc login system
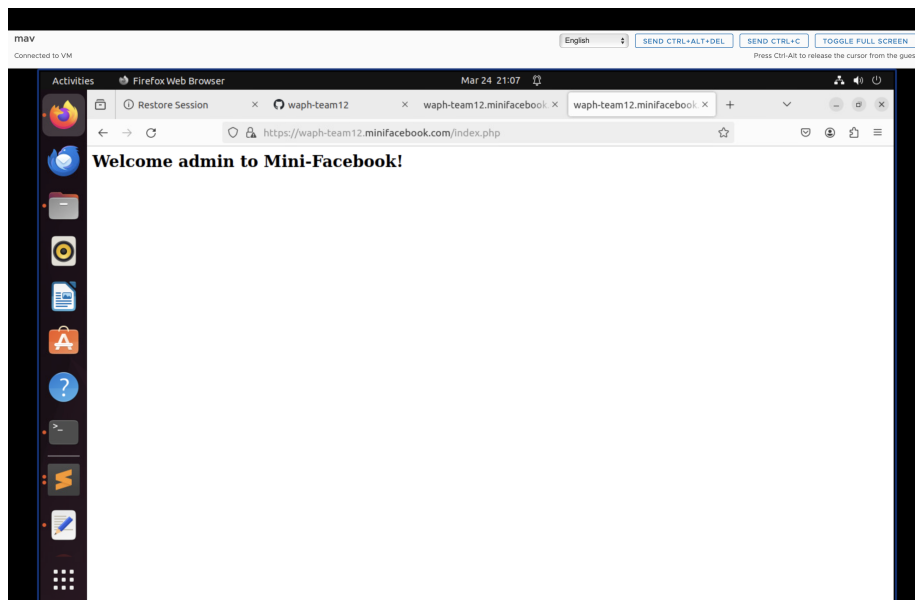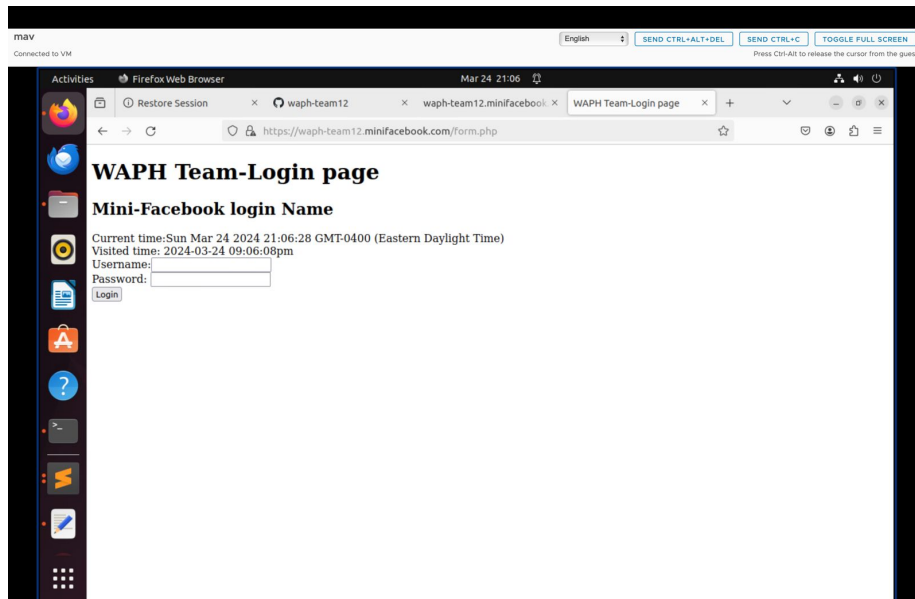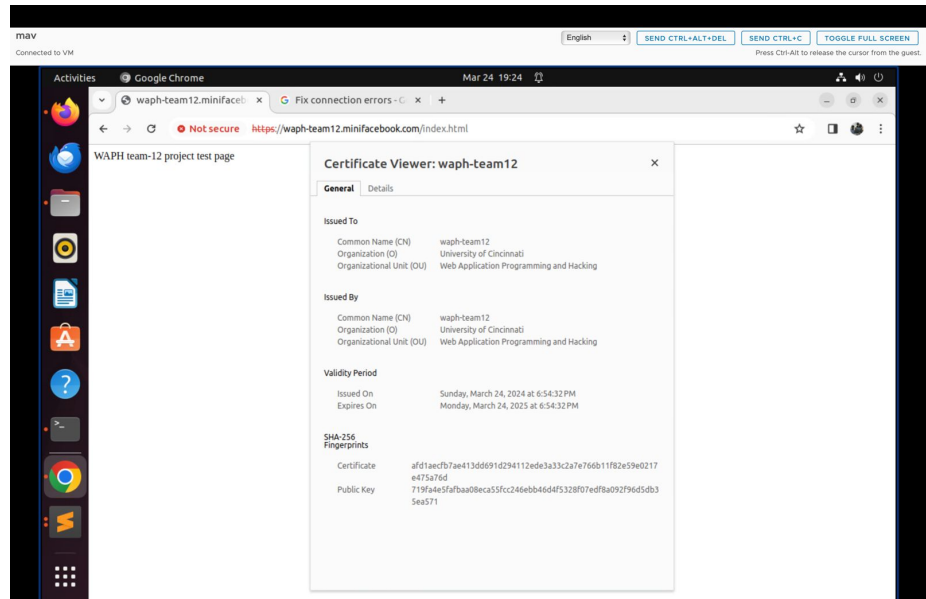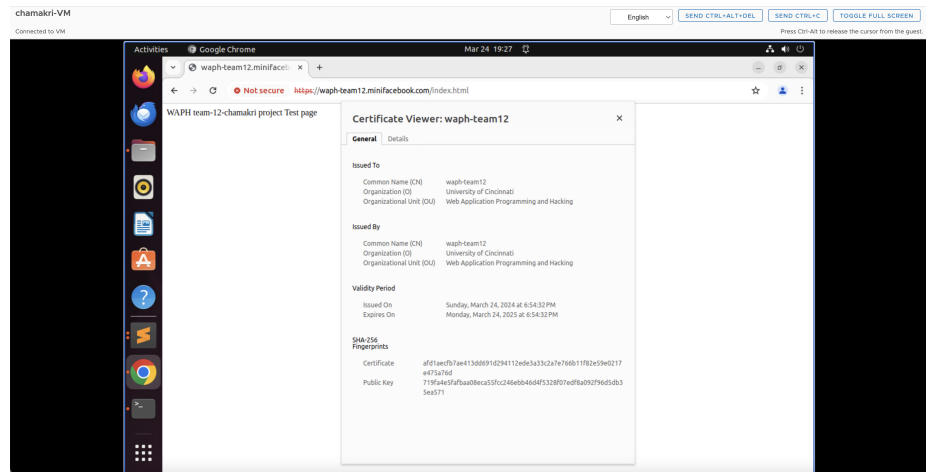
System Analysis

High-level Requirements

Will be creating a Mini-Facebook system, for users to have ability to login, message other users, post content and comment on other posts
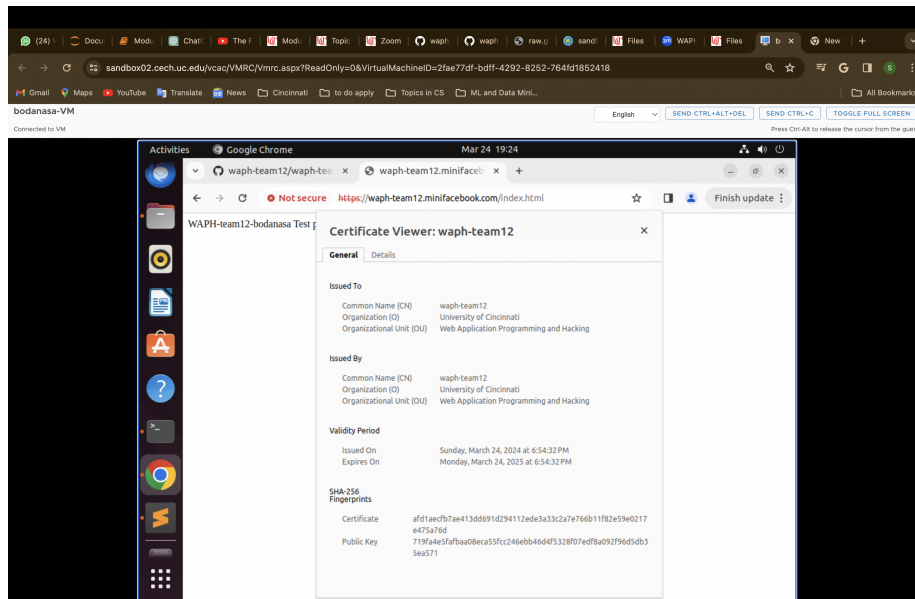
Demo (screenshots)

Below screenshots depict the proces of login system that is working on HTTPS team's local domain

Screenshot demos of index.html of each team member on HTTPS team's local domain

chamakri-VM
Connected to VM

English | SEND CTRL+ALT+DEL | SEND CTRL+C | TOGGLE FULL SCREEN
Press Ctrl-Alt to release the cursor from the guest.

Activities — Google Chrome — Mar 24 19:27

waph-team12.minifaceb ✕ +
← → C ⊗ Not secure https://waph-team12.minifacebook.com/index.html

WAPH team-12-chamakri project Test page

Certificate Viewer: waph-team12 ✕

General | Details

Issued To
Common Name (CN)   waph-team12
Organization (O)   University of Cincinnati
Organizational Unit (OU) Web Application Programming and Hacking

Issued By
Common Name (CN)   waph-team12
Organization (O)   University of Cincinnati
Organizational Unit (OU) Web Application Programming and Hacking

Validity Period
Issued On   Sunday, March 24, 2024 at 6:54:32 PM
Expires On   Monday, March 24, 2025 at 6:54:32 PM

SHA-256 Fingerprints
Certificate   afd1aecfb7ae413dd691d294112ede3a33c2a7e766b11f82e59e0217e475a76d
Public Key   719fa4e5fafbaa08eca55fcc246ebb46d4f5328f07edf8a092f96d5db35ea571

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mav
Connected to VM

English | SEND CTRL+ALT+DEL | SEND CTRL+C | TOGGLE FULL SCREEN
Press Ctrl-Alt to release the cursor from the guest.

Activities — Google Chrome — Mar 24 19:24

waph-team12.minifaceb ✕ | Fix connection errors - C ✕ +
← → C ⊗ Not secure https://waph-team12.minifacebook.com/index.html

WAPH team-12 project test page

Certificate Viewer: waph-team12 ✕

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Software Process Management

We are using Agile methodologies here where complete project is divided into Sprints, with requirements divided for each sprint. These requirements are divided among team members to complete their sprint tasks.

Scrum process

Sprint 0

Duration: 18/03/2024-24/03/2024

Completed Tasks:

1. Created organization with repositories needed for team project
2. Did SSL, HTTPS setup for this project
3. Created Database with users, messages, send and recieve tables
4. Create a simple login system with form.php and index.php

Contributions:

1. Member 1, created private repository, updated index.html, SSL key creation, Simple login system
2. Member 2, created public repository, updated index.html, Database account creation
3. Member 3, updated README file, updated index.html, Database data and tables creation

Sprint Retrospection:

Good	Could have been better	How to improve?
Since this is first sprint, got to know team members and team had good coordination	Time Management	

Appendix

Code of database/database-account.sql:

```sql
create database waph_team;
CREATE USER 'waph-team12'@'localhost' IDENTIFIED BY 'Pa$$w0rd';
GRANT ALL ON waph_team.* TO 'waph-team12'@'localhost';
```

Code of database/database-data.sql:

```sql
DROP TABLE IF EXISTS users;

CREATE TABLE users (
    username VARCHAR(50) PRIMARY KEY,
    password VARCHAR(100) NOT NULL
);

LOCK TABLES users WRITE;
INSERT INTO users (username, password) VALUES ('admin', MD5('admin'));
UNLOCK TABLES;

DROP TABLE IF EXISTS messages;

CREATE TABLE messages (
    message_ID VARCHAR(50) PRIMARY KEY,
    content VARCHAR(100) NOT NULL,
    time_stamp VARCHAR(100) NOT NULL,
    type VARCHAR(100) NOT NULL
);

LOCK TABLES messages WRITE;
INSERT INTO messages VALUES ('1', 'First Message', '24-03-2024', 'info');
UNLOCK TABLES;
```

```sql
CREATE TABLE sends (
    sender_username VARCHAR(100),
    message_ID VARCHAR(50),
    FOREIGN KEY (sender_username) REFERENCES users(username),
    FOREIGN KEY (message_ID) REFERENCES messages(message_ID),
    PRIMARY KEY (sender_username, message_ID)
);

CREATE TABLE received (
    receiver_username VARCHAR(100),
    message_ID VARCHAR(50),
    FOREIGN KEY (receiver_username) REFERENCES users(username),
    FOREIGN KEY (message_ID) REFERENCES messages(message_ID),
    PRIMARY KEY (receiver_username, message_ID)
);
```

Code of form.php

```php
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>WAPH Team-Login page</title>
  <script type="text/javascript">
      function displayTime() {
        document.getElementById('digit-clock').innerHTML = "Current time:" + new Date();
      }
      setInterval(displayTime,500);
  </script>
</head>
<body>
  <h1>WAPH Team-Login page</h1>
  <h2>Mini-Facebook login Name</h2>
  <div id="digit-clock"></div>
<?php
  //some code here
  echo "Visited time: " . date("Y-m-d h:i:sa")
?>
  <form action="index.php" method="POST" class="form login">
    Username:<input type="text" class="text_field" name="username" /> <br>
    Password: <input type="password" class="text_field" name="password" /> <br>
    <button class="button" type="submit">Login</button>
  </form>
</body>
</html>
```

Code of index.php

```php
<?php
    session_start();
    if (checklogin_mysql($_POST["username"],$_POST["password"])) {
?>
    <h2> Welcome <?php echo htmlentities($_POST['username']); ?> to Mini-Facebook!</h2>
<?php
    }else{
        echo "<script>alert('Invalid username/password');window.location='form.php';</script
        die();
    }

    function checklogin_mysql($username, $password) {
        $mysqli = new mysqli('localhost' ,'waph-team12',
            'Pa$$w0rd', 'waph_team');
        if ($mysqli->connect_errno)
        {
            printf("Database connection failed; %s\n", mysqli->connect_errno);
            exit();
        }

        $prepared_sql = "SELECT * FROM users WHERE username = ? AND password = md5(?)";
        $stmt = $mysqli->prepare($prepared_sql);
        $stmt->bind_param("ss", $username, $password);
        $stmt->execute();
        $result = $stmt->get_result();

        if($result->num_rows ==1)
            return TRUE;
        return FALSE;
    }
?>
```