**PART A**

**EXPERIMENT NO. 9**

**A.1 Aim: Coding for any one module of your project selected according to the designs which already designed and analyzed in EXP.1-8**

**A.2 Prerequisite:**

Use case diagram, class diagram, State diagram

**A.3 Outcome:**

Coding of a module with less errors

**A.4 Theory:**

The coding depends on individual’s project. Any programming language can be used according to student’s interest.

**Coding** : The objective of the coding phase is to transform the design of a system into code in a high-level language and then to unit test this code. Good software development organizations normally require their programmers to adhere to some well-defined and standard style of coding called coding standards.

Coding Standards- A coding standard gives a uniform appearance to the codes written by different engineers. It enhances code understanding. It encourages good programming practices.

**Coding Standards and Guideline:**

Limiting the use of global data type. Contents of the headers preceding codes for different modules naming conventions for global variables, local variables, and constant identifiers. Error return conventions and exception handling mechanisms Representative Coding Standards. Do not use a coding style that is too clever or too difficult to understand. Avoid obscure side effects .Do not use an identifier for multiple purposes. The code should be well-documented.

**Code Review:**

Code review for a model is carried out after the module is successfully compiled and all the syntax errors have been eliminated. Normally, two types of reviews are carried out on the code of a module.

**Code Walk Through:** To discover the algorithm and logical errors in the code.

**Code Inspection:** The aim of code inspection is to discover some common types of errors caused due to oversight and improper programming.

Software Documentation: Good documents are very useful and serves the following purposes. Good documents enhance understandability and maintainability of a software product. It helps the users in effectively using the system. Helps in effectively handling the manpower turnover problem. Helps the manager in effectively tracking the progress of the project.

Software Documentation classified into the following: Internal documentation: These are provided in the source code itself

External documentation: These are the supporting documents that usually accompany a software product

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**PART B**

(PART B: TO BE COMPLETED BY STUDENTS)

*(Students must submit the soft copy as per the following segments within two hours of the practicals. The soft copy must be uploaded on Blackboard LMS or emailed to the concerned Lab in charge Faculties at the end of practical; in case Blackboard is not accessible)*

|  |  |
| --- | --- |
| Roll No: C101 | Name: Samkeet Shah |
| Class: C | Batch: B3 |
| Date of Experiment: | Date of Submission: |
| Grade: |  |

**B.1 Coding Details**

**Login Form :**

**<!-- Banner -->**

**<section id="banner">**

**<div class="inner">**

**<header>**

**<h1>DSNM E-Challan</h1>**

**<p>One-stop portal to track, analyze and pay your overspeeding dues</p>**

**</header>**

**<button onclick="document.getElementById('id01').style.display='block'" class="button big scrolly"**

**class="form-control" style="width:auto;">Login</button>**

**<div id="id01" class="modal">**

**<form class="modal-content animate" method="post">**

**<div class="imgcontainer">**

**<span onclick="document.getElementById('id01').style.display='none'" class="close"**

**title="Close Modal">&times;</span>**

**<img src="images\img\_avatar2.png" alt="Avatar" class="avatar">**

**</div>**

**<div id="firebaseui-auth-container"></div>**

**<div id="loader">Loading...</div>**

**</div>**

**</form>**

**</div>**

**<script>**

**var modal = document.getElementById('id01');**

**// When the user clicks anywhere outside of the modal, close it**

**window.onclick = function (event) {**

**if (event.target == modal) {**

**modal.style.display = "none";**

**}**

**}**

**</script>**

**</div>**

**</section>**

**E-Challan View:**

**<h3>Challan View</h3>**

**<p>A consolidated view of all your pending challans to be paid to avoid penalty. Every challan must be paid within 30 days of it being issued to the user oherwise a penalty of 50 INR is added to the pending challan. Exciting new coupons and giveaways for quick challan payment. <strong>PAY YOUR E-CHALLAN WITHIN 48 HOURS AND GET AN ASSURED VOUCHER WORTH 50 FROM US</strong></p>**

**<div class="main-list" id="list\_div">**

**<div class="list-item">**

**<h3>Challan List</h3>**

**</div>**

**</div>**

**<script src="https://www.gstatic.com/firebasejs/7.9.3/firebase.js"></script>**

**<script src="https://cdn.firebase.com/libs/firebaseui/3.5.2/firebaseui.js"></script>**

**<script src="https://www.gstatic.com/firebasejs/7.9.3/firebase-firestore.js"></script>**

**<script>**

**// Initialize the FirebaseUI Widget using Firebase.**

**var firebaseConfig =**

**{**

**apiKey: "AIzaSyDjZQzAc7EcgaiqvnXKGNaAQ2HNGLRNZMA",**

**authDomain: "fir-temp-ed4e5.firebaseapp.com",**

**databaseURL: "https://fir-temp-ed4e5.firebaseio.com",**

**projectId: "fir-temp-ed4e5",**

**storageBucket: "fir-temp-ed4e5.appspot.com",**

**messagingSenderId: "484451362232",**

**appId: "1:484451362232:web:038d32e19708eea2c15b4d",**

**measurementId: "G-85DCWT20RP"**

**};**

**// Initialize Firebase**

**firebase.initializeApp(firebaseConfig);**

**</script>**

**<script src="index1.js"></script>**

**</script>**

**B.2 Connectivity Details**

**var db = firebase.firestore();**

**const list\_div = document.querySelector("#list\_div");**

**db.collection("challan").get().then(function(querySnapshot) {**

**querySnapshot.forEach(function(doc) {**

**// doc.data() is never undefined for query doc snapshots**

**list\_div.innerHTML += "<div class='list-item'><h3>" + doc.data().Name + " </h3><p>DL Number : " + doc.data().DL + " </p><p>Location : " + doc.data().Location + " </p><p>Timestamp : " + doc.data().Timestamp + " </p><h5>Total Fine : " + doc.data().Fine + " </h5></div> "**

**});**

**})**

**.catch(function(error) {**

**console.log("Error getting documents: ", error);**

**});**

**var firebaseConfig =**

**{**

**apiKey: "AIzaSyDjZQzAc7EcgaiqvnXKGNaAQ2HNGLRNZMA",**

**authDomain: "fir-temp-ed4e5.firebaseapp.com",**

**databaseURL: "https://fir-temp-ed4e5.firebaseio.com",**

**projectId: "fir-temp-ed4e5",**

**storageBucket: "fir-temp-ed4e5.appspot.com",**

**messagingSenderId: "484451362232",**

**appId: "1:484451362232:web:038d32e19708eea2c15b4d",**

**measurementId: "G-85DCWT20RP"**

**};**

**// Initialize Firebase**

**firebase.initializeApp(firebaseConfig);**

**firebase.auth.Auth.Persistence.LOCAL;**

**$("#submit").click(function()**

**{**

**var email = $("#uname").val();**

**var password = $("#psw").val();**

**if(email!="" && password!="")**

**{**

**var result = firebase.auth().signInWithEmailAndPassword(email,password);**

**result.catch(function(error)**

**{**

**var errorCode = error.code;**

**var errorMessage = error.message;**

**console.log(errorCode);**

**console.log(errorMessage);**

**window.alert("Message : " + errorMessage);**

**});**

**}**

**else**

**{**

**window.alert("Form is not complete. Please fill up all fields to proceed.")**

**}**

**});**

**B.3 Conclusion**

Understood the various concepts related to Backend connectivity with the online database firebase.