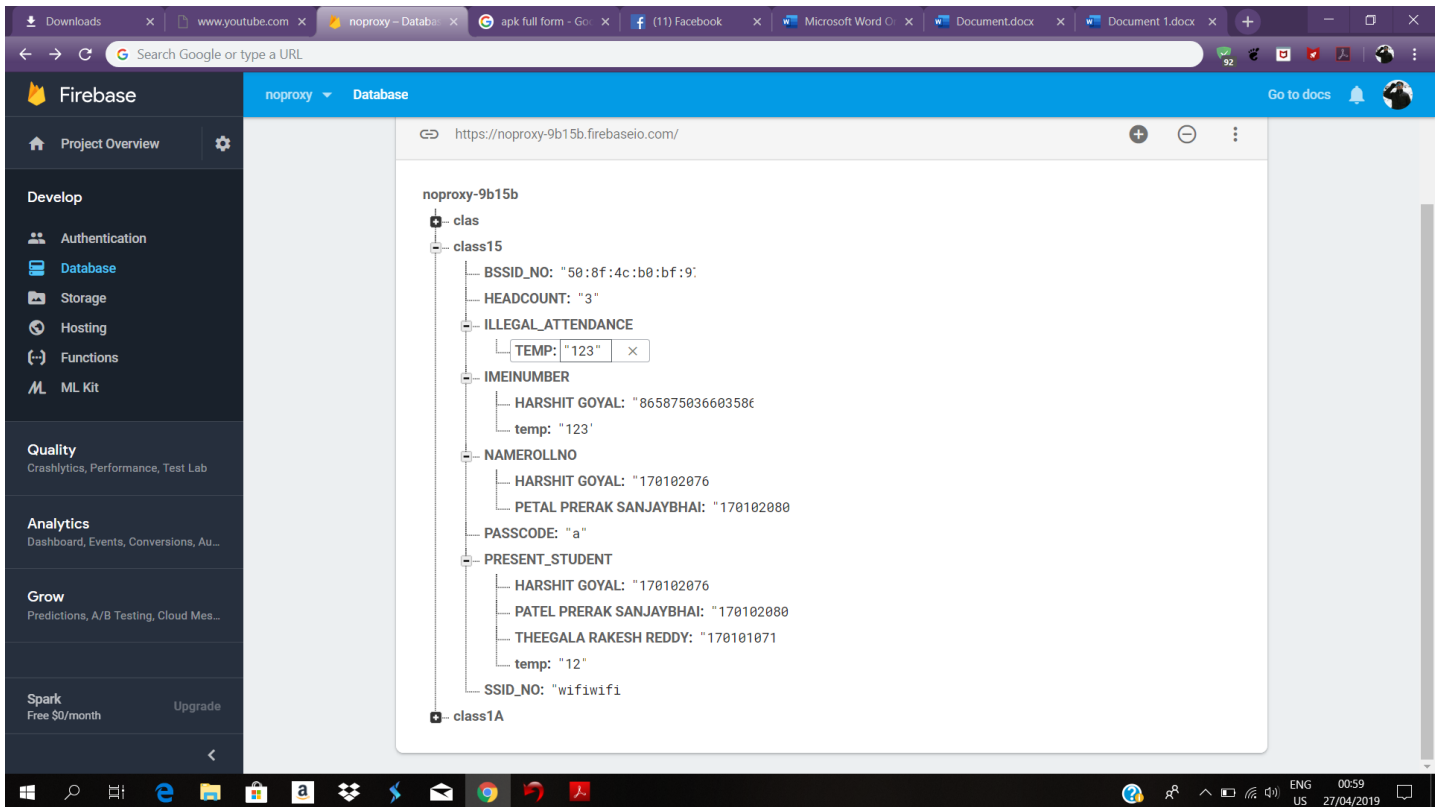


INTRODUCTION

This document is a generic Technical Design Document for use made by App Development Project Team. It provides guidance and template material which is intended to assist the relevant management or technical staff, whether faculty or technical assistant.

GETTING STARTED..



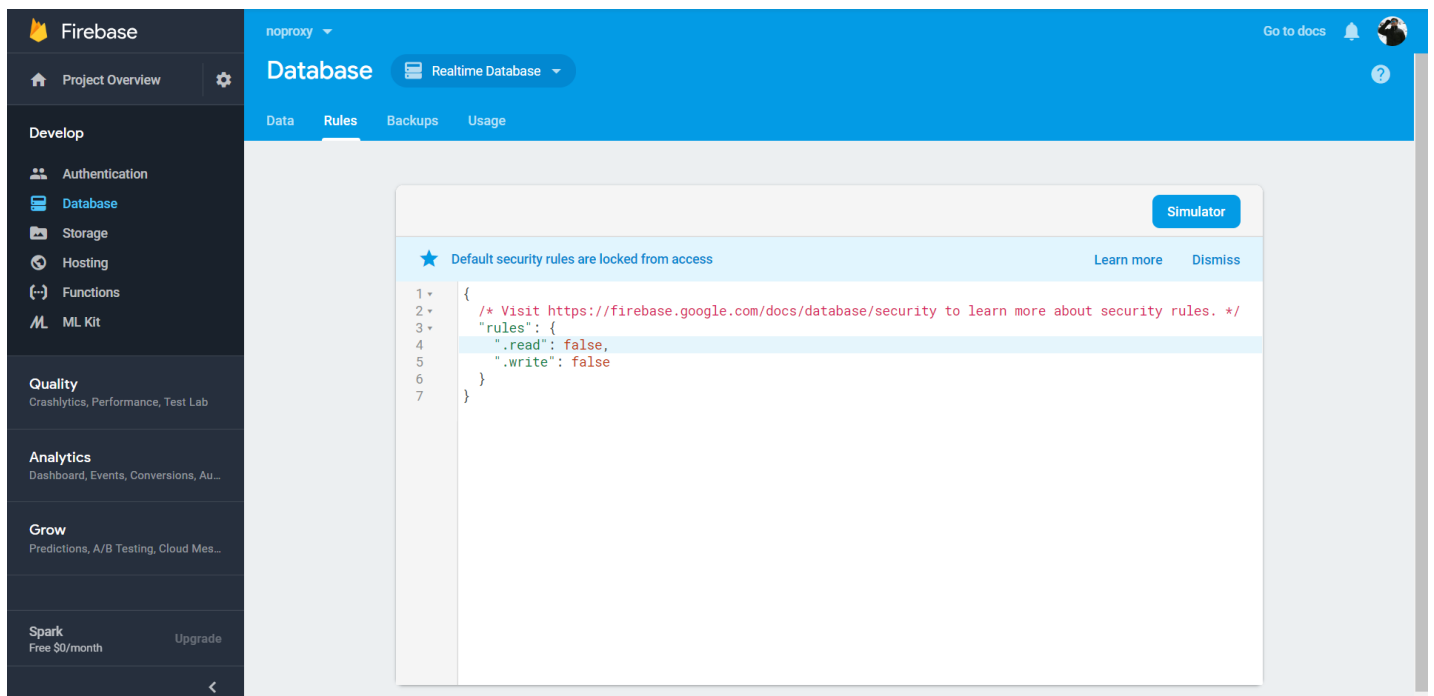
This is the main database which records the attendance of the students for each day. It is made using firebase database.

Make a new class and add the following subchilds- BSSID_NO, HEADCOUNT, ILLEGAL_ATTENDANCE, PASSCODE, PRESENT_STUDENT, IMEINUMBER, NAMEROLL NO, using the exact same names as mentioned.

Add the name and roll number of each student who is taking the course to 'NAMEROLLNO' child.

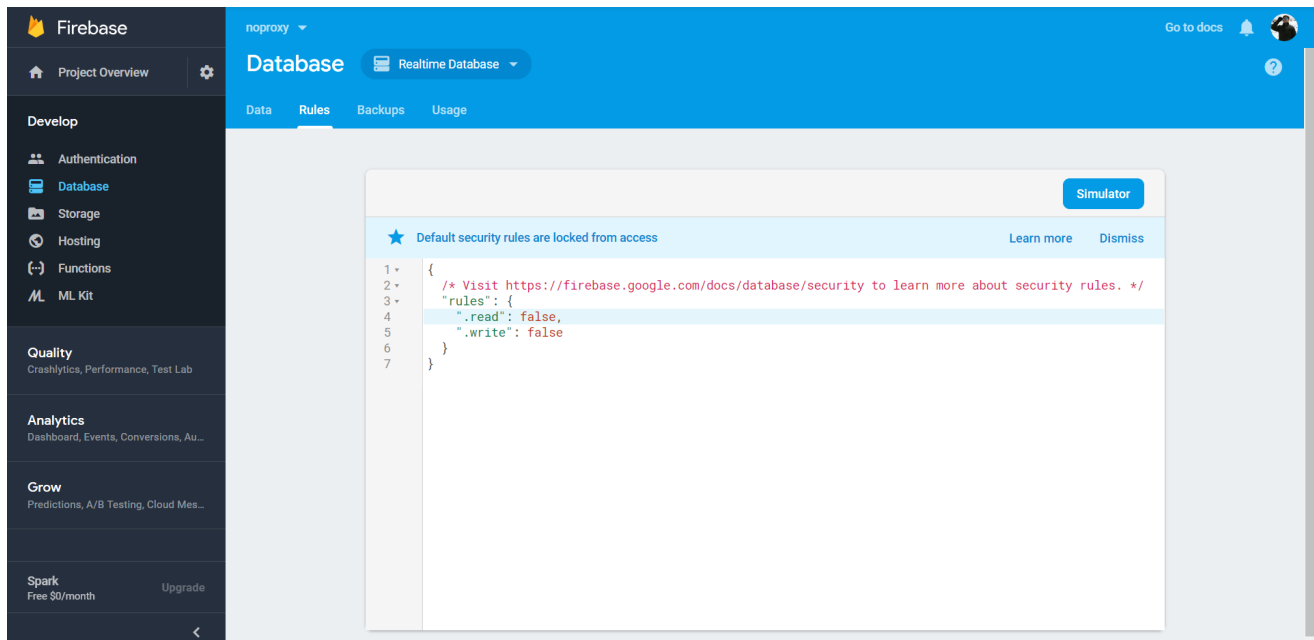
For example-: HARSHIT GOYAL :“170107076”

NOTE: We can't make tree without initializing any subchild of that child. So wherever needed initialize a child (Ex: temp with any value).

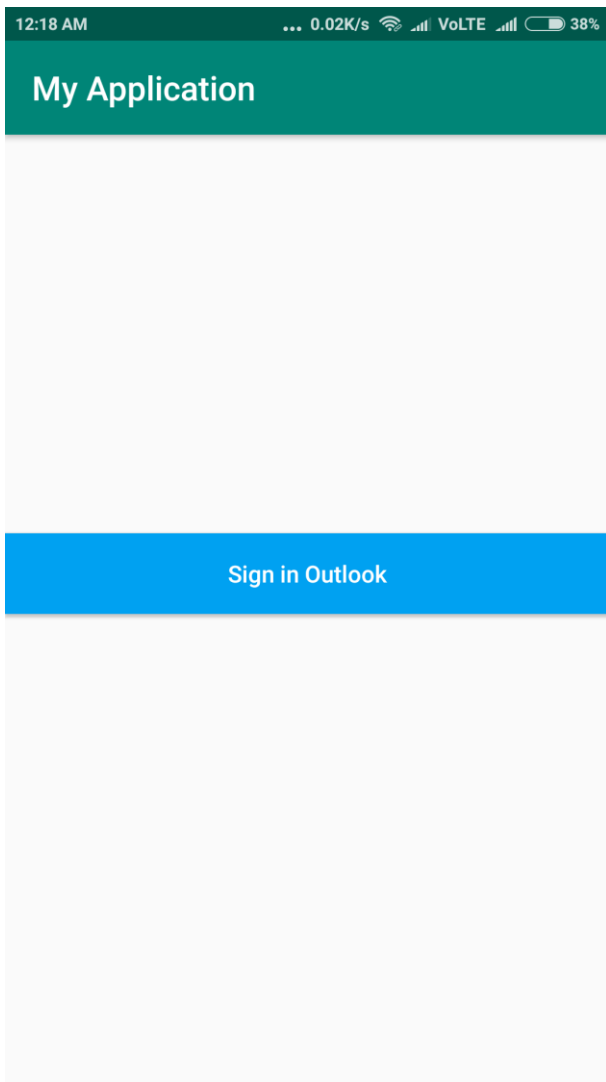


Add a passcode, ssid and bssid number of your hotspot which would be used for the verification of attendance.

We can also manually change the time duration for which attendance is valid by changing these authentication settings to true/false accordingly.



WORKING



This is the starting screen. It is from here we go for outlook login.

12:18 AM

... 15.7K/s ... VoLTE ... 38%



Sign in to your account

<https://login.microsoftonline.com>



Pick an account



HARSHIT GOYAL

goyal170107020@iitg.ac.in

Signed in



Use another account

Back

©2019 Microsoft Terms of use Privacy & cookies

...

Sign in using outlook credentials.

12:18 AM ... 10.9K/s VoLTE 38%

My Application

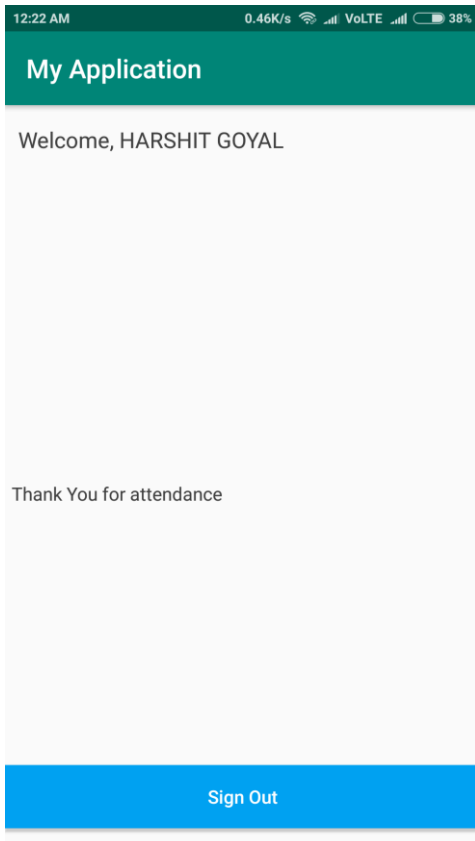
class

Passcode

Roll No

SUBMIT

Now enter class,roll number and passcode given by the management.



If every credential entered is correct attendance would be marked and the name of the student would get updated in the PRESENT_STUDENT child in database.

VERIFICATION

If wrong passcode is entered an error message will be displayed 'don't put proxy'.

12:22 AM 0.35K/s VoLTE 38%

My Application

class15

Wrong_passcode

170102076

SUBMIT

don't put proxy

It will also check whether the correct wifi is used to mark the attendance by checking with the bssid number.

Roll number must also match with the one saved in outlook account.

Also the IMEI number must also match with the person marking the attendance(If marking attendance for the first time the imei number will be automatically updated).Also

the imei numbers must be unique for each student .More than one student cannot have the same imei number.

If any of the above mentioned things is wrong student name would be automatically added to the ILLEGAL_ATTENDANCE child .Now if the student enters everything correctly and again attempts to put attendance,his name which was earlier recorded in the ILLEGAL_ATTENDANCE child would be removed.

Note:to know the ssid,bssid number of the current wifi connected to in windows 10 ,type this command in the command prompt-

netsh wlan show interfaces

PRERAK PATEL 170102080

HARSHIT GOYAL 170102076