Application Overview

Simple School Timetable App

Last updated: October 14, 2020
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Proposed Features

- Authentication – Email Password, Google Social Authentication Provider
- Insert, List, Update and Delete lessons (CRUD) Google Calendar API
- Unit, Integration and widget tests – Embedded in githuhb actions
- Continuous Integrations and development (CI/CD) – Githuhub Actions
- Generating APK for android
- Documentation Overview.

Technology Stack

- Firebase Authentication
- Google Calendar API backend
- Flutter (Cross-Platform Mobile Framework) Frontend
- Dart Lang (Programming Language)
- Pub.dev (Third Party Community Dart Packages)
- Git & Github Version control system.

Pages

- Authentication Views
  - Sign-Up(Registration) > Email, Password, and confirm password fields with the option of using social authentication providers, specifically Sign-Up wit Google.
  - Sign-In(Login) > Email, Password fields with the option of using social authentication providers, specifically Sign-In wit Google.
- Home Page
  - Tab-Bar View with calendars types for week, 2 week and month while highlighting the todays date and any other selected date.
  - A welcome message to the user.
  - List of all Scheduled lessons for the day.
  - On selecting another day, the user is supposed to be able to see a list of the dates scheduled for that day too.
  - A Floating Action Button with tooltip of add new lesson and Add icon at the bottom right to prompt the user to schedule a new lesson. On pressed, a dialog box pops up with details needed to schedule a lesson such as lesson title, start time, end time, teacher and the class the lesson belongs to. On saved, the details of a new class are populated under

the date chosen for the lesson and set to recur weekly as is normally done with school timetables.

- Teachers Page
  - o List of teachers in the school.
  - o A Floating Action Button, to prompt the user to add a new teacher to the schools database. On pressed it takes inputs for teachers name, and email for sending class schedule reminders 30 minutes before time via Google Calendar API.
- Classes Page
  - o List of Classes being taught in the school. These can be thought of either as subjects or different levels of streams depending on the school structure.
  - o A Floating Action button, at the bottom right side of the screen, to prompt the user to add a new class into the database.

Screenshots

New to School Timetable? Signup

Email

Password

Already have an account?   SignIn

SignUp   Continue with Google

Welcome back! SignIn

Email

Password

Don't have an account?   SignIn

SignIn   Continue with Google

School Timetable

Home   Teachers   Classes

‹   October 2020   Week   ›

Mon   Tue   Wed   Thu   Fri   Sat   Sun
12   13   14   15   16   17   18

Hi Adan

Here is a list of classes scheduled for today that you need to check...

Pull to refresh, swipe cards to dismiss/delete lesson schedule

07:00 am   dhfhdh
08:00 am   Class: Biology
                  Teacher: Gabriel Sutton

Timetable

Personal Information

Name
Abdi Adan

E-mail
adanabdi036@gmail.com

Settings

Logout

School Timetable

Home   Teachers   Classes

Lesson

Lesson StartTime

Lesson EndtTime

Teacher

Class

Save   Cancel

Timetable

School Timetable
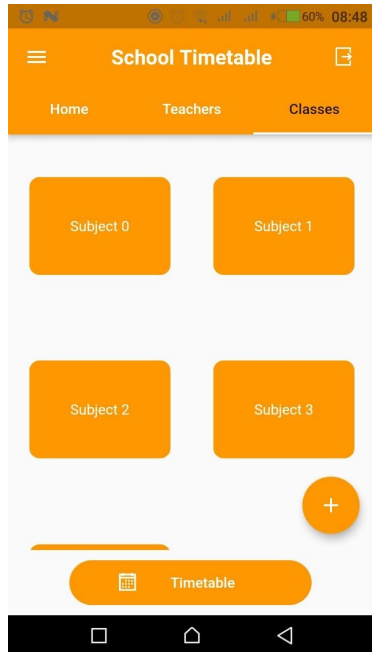
Home   Teachers   Classes

Gabriel Stanton
Class: Biology, Chemistry and Math

Gabriel Stanton
Class: Biology, Chemistry and Math

Gabriel Stanton
Class: Biology, Chemistry and Math

Gabriel Stanton
Class: Biology, Chemistry and Math

Timetable

Third Party Packages and Dependencies

Package	Version	Usage
firebase_core	^0.4.0+9	Integrating with firebase services
firebase_auth	^0.14.0+5	Authentication email-password
firebase_analytics	^5.0.2	Firebase app analytics
Google_sign_in	^4.5.4	Authentication Google identity provider
table_calendar	^2.2.3	Calendar Package UI
flutter_datetime_picker	^1.4.0	DateTimePicker UI
shared_preferences	^0.5.12	Store User Auth data