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Attendance Sheet

Description

the Attendance App is Designed to make this process easier for companies and universities. and Saving time , effort and cost.

this App is better than traditional techniques.

This Application use phone's camera to scan QR-CODE represent as ID of students or employees .

To more details short presentations :

https://www.emaze.com/@AZIIOFFO?lipi=urn%3Ali%3Apage%3Ad_flagship3_profile_view_base_treasury%3B5CGliU8oQ%2F%2BGS%2F1uVGHSzg%3D%3D

Intended User

for companies and universities staff whose responsible for taking attendance for whole audience or students .

Also future version of app is for students / employers drawing a big analysis of their attendance in the term and provide each attachments per lecture in curriculum , quizzes and can notify each student or employee.

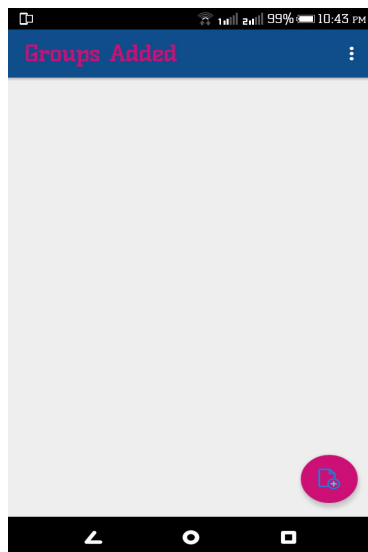
Features

List the main features of your app. For example:

- Saves sheet resources (cost saving).
- Taking attendance by scanning each student/employee ID (QR-Code)
- Share students/employee (Audience) data between apps relevant (content provider).
- In future version for students / employees i'll using cloud server firebase to share data real time and build big analytis between teachers / managers and students / employees .

User Interface Mocks

Screen 1

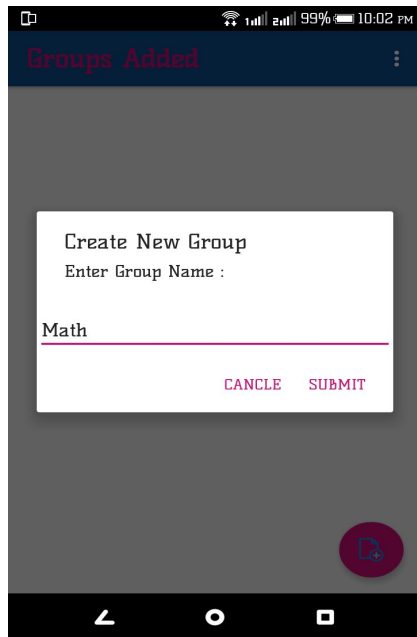


This simple screen represent same as Todo list .

As manager / university staff / lecturer i want to add lecture name /subject name / Departname . Any name contain one or more parts (lectures / sessions/ daily) .

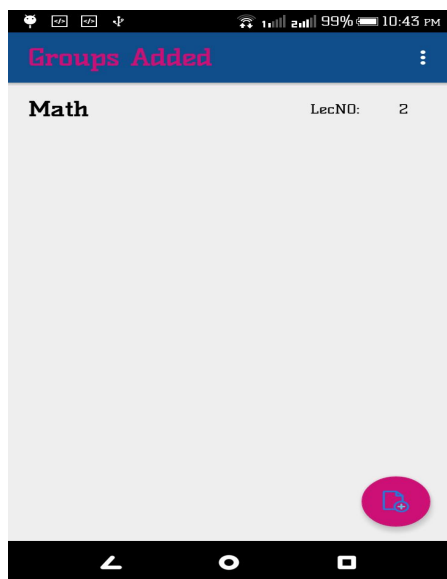
To add new subject or etc... please click float button .

Screen 2



As manager / university staff / lecturer add new subject name or any description name relevant by your lecture or Department. And finally click submit.

Screen 3

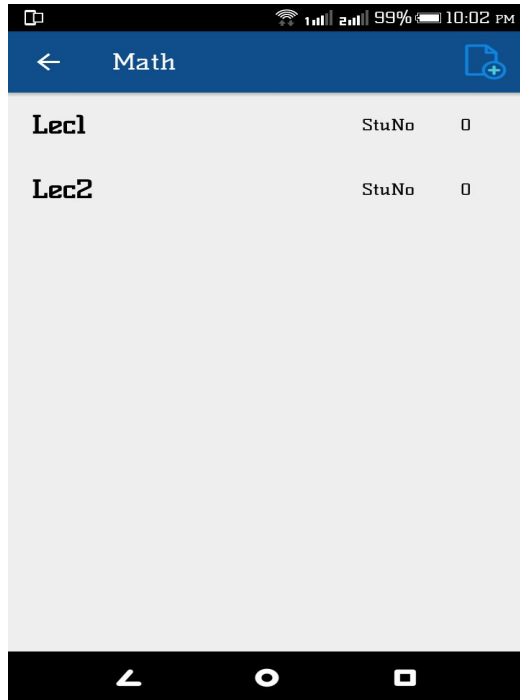


As your name typed in previous screen you can see is displayed in listview (RecyclerView).
Note LecNo 2 : this number is how many lecture/days your are added in this subject /Department ?

In first time create a subject/Department LecNo is zero.

To Add one or more lecture/day inside Subject /Department . please click on this item in listview.

Screen 4



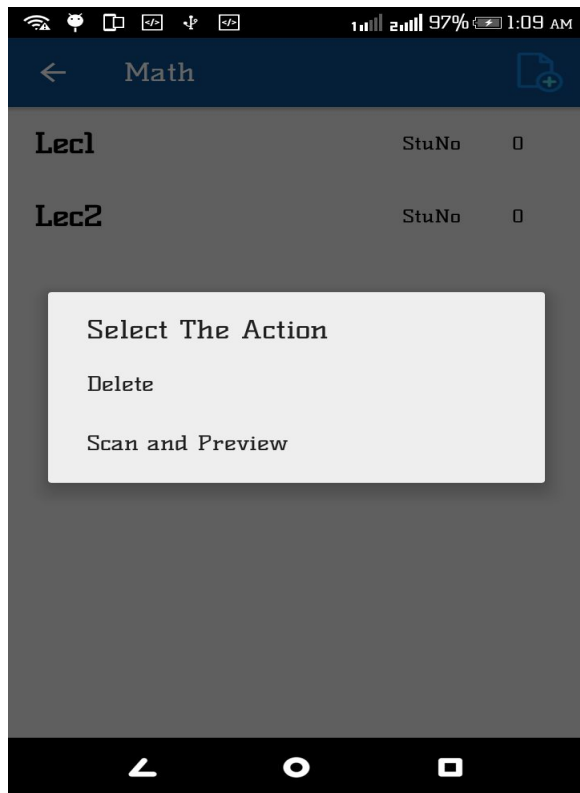
As first time create a subject / Department in previous screen . this screen should be empty list.
To add new session /lecture /day of your subject /department already created in previous screen. Please click add sheet icon in action bar .

Note : 1- StuNo 0 : for first time you create new lecture /session/ day this no must be zero .
And this number increase depend on how many student/employee attend in this lecture/day /sesion.

2- LecNo is 2 in previous screen due to exists 2 lecture created inside Math subject.

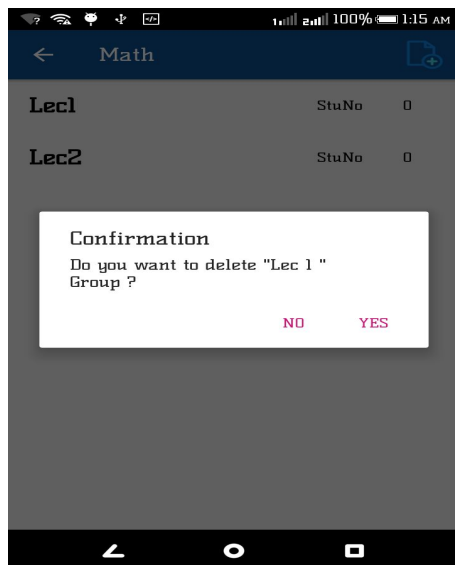
To taking attendance for any lecture /day /session ... please **Long click** on any lecture item.

Screen 5



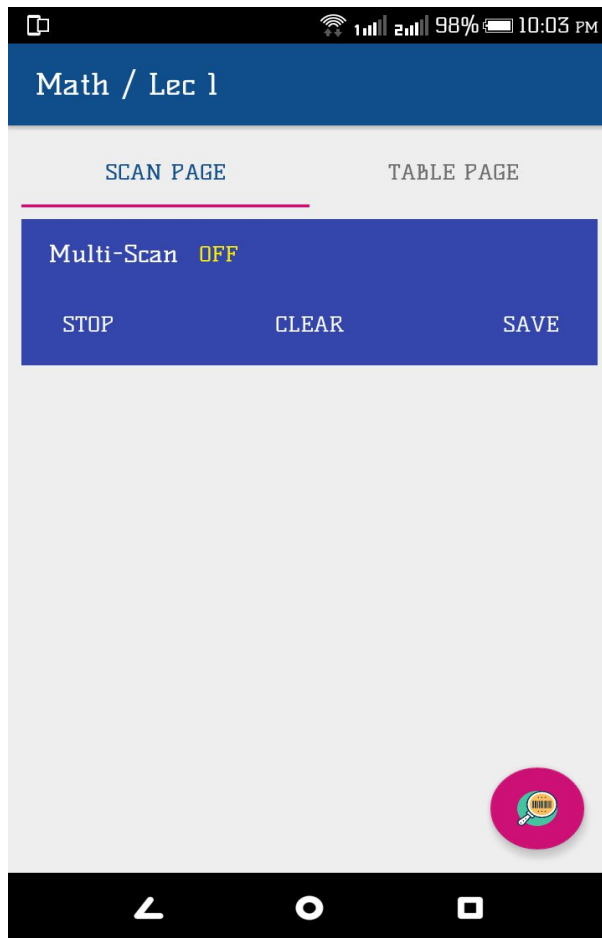
As u long press u will be choose between delete item or taking attendance for this item (scan and preview) in menu .

Screen 6



If u click item menu in previous screen you'll see confirmation dialog to delete this lecture .

Screen 7



If u click scan and preview in previous menu in screen 5.

You will see two tabs in screen above and each tab reflect own page .

First tap (default tab appear when enter in this screen) shows 4 buttons inside it .

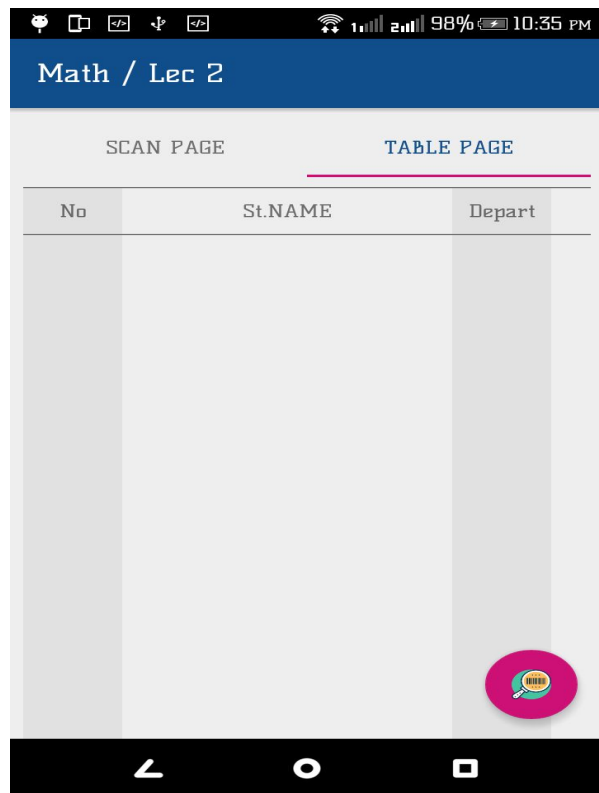
Save , clear , stop and finally toggle button Multi-Scan (on/off).

Below four button you will see listview in empty space hold student /employee ID details Whose u are scanning their ID (QR-code), and u can save this preparation list into DB or Clear it before saving it in DB . or click on any item to speak his name and related details involved in QR-Code ID.

To scan any student/employee ID .please click on float button to open QR-Code scanner .

If you swipe or click in another tab appear above screen you will navigate to details table of student /employee attend and saved in DB.

Screen 8

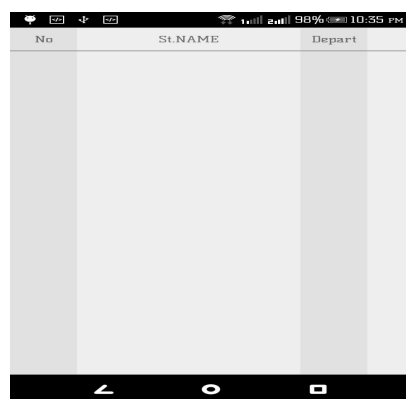


This screen shows students already attend and saved in DB .

This screen is scrollable in horizontal and vertical direction .

Data involved in screen : student/employee No , Name ,Department ,Date attendance time .

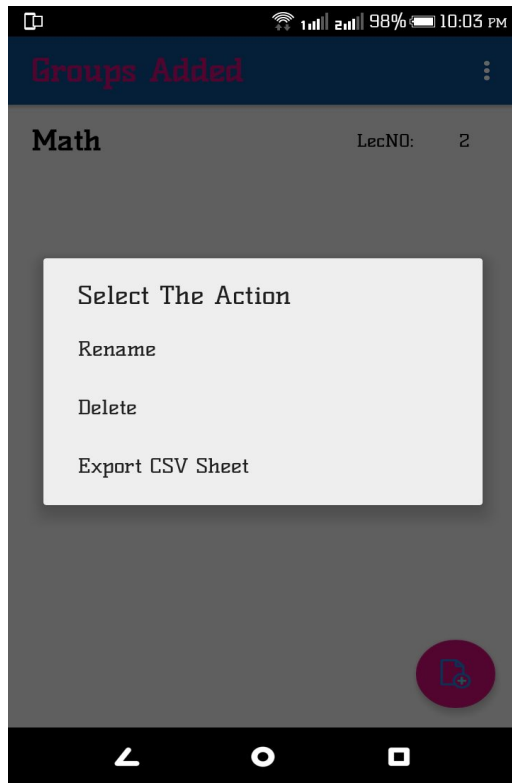
Screen 9



Note : Also u can reach on this screen as details .by click lecture item on screen 4 .

Normal click not long click .

Screen 10

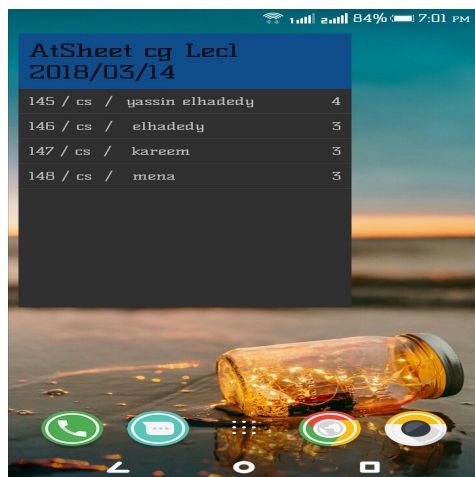


Note :Related by screen 3 .

U can rename the subject /department name or delete with confirmation dialog or

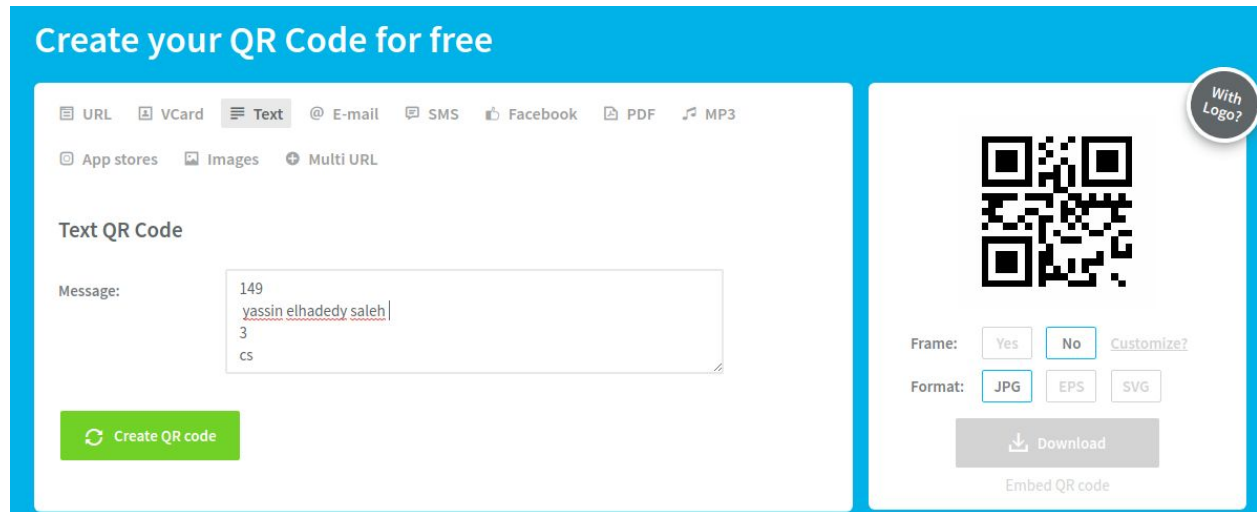
Export all data inside it to CSV sheet. To print it.

Screen 11:



Simple widget screen for last Lec Visited . show many details about student already attend the lec , info contains (Student code, Subject, Name , department)

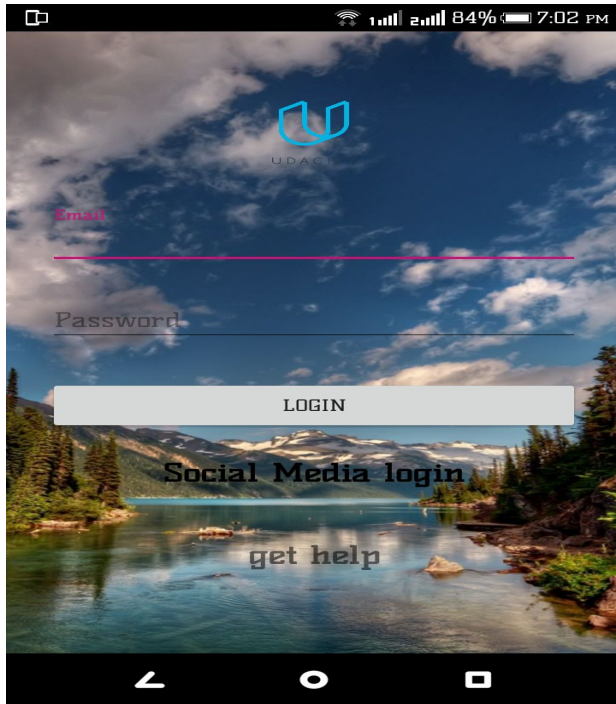
Screen 12 :



The screenshot shows a web application titled "Create your QR Code for free". It features a navigation bar with various options: URL, VCard, Text (selected), E-mail, SMS, Facebook, PDF, MP3, App stores, Images, and Multi URL. The "Text QR Code" section has a "Message:" label and a text input field containing the text "149 yassin elhadedy saleh 3 cs". Below the input field is a green button labeled "Create QR code". To the right, a QR code is displayed. Below the QR code are options for "Frame" (Yes, No, Customize?) and "Format" (JPG, EPS, SVG). At the bottom right, there is a "Download" button and a link to "Embed QR code". A small circular badge in the top right corner of the interface says "With Logo?".

To create an Student ID. <https://www.qr-code-generator.com/>
Code / name/ grade / department.

Screen 13 :



Login screen : i used firebase auth and also i supported login with google, facebook ,email btn .

Note :1- if u click at Social Media Login u will navigate to screen have 3 buttons

Google ,facebook ,Email.

2- if u click Gethelp u will navigate to some guide presentation How to use App?

<https://www.emaze.com/@AZIIOFFO>

3- after login process success you will also downloaded this docs in your mobile phone file manager.

Key Considerations

How will your app handle data persistence?

I'm using Sqlite DB to cache student/employee data and subject /department .
Everytime create it.
Also i am using content provider to share data between apps relevant.
And finally sharedpref for preparation list before saving it in DB screen 7 .

Also I'll be use firebase realtime Database in student version app in the future .

Describe any edge or corner cases in the UX.

Saving state and never lose data.

Screen 7 during multiple scan if app go in pause mode or any app appear in foreground (calling case) . you will never data already scanned before . and can continue scanning process with new student /employee when app is back to foreground.
I'm talking about preparation list in screen 7 .
This app also provide some widget with many details look screen 11.

Describe any libraries you'll be using and share your reasoning for including them.

Zxing lib for scanning QR-Code and Barcode.

Describe how you will implement Google Play Services or other external services.

Firebase login to facilitate for managers / university staff /lecturer use this app.
And firebase is useful for student/employee version of this app in the future.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

Task 1: Project Setup

Write out the steps you will take to setup and/or configure this project. See previous implementation guides for an example.

1- zxing scanner lib

<https://github.com/journeyapps/zxing-android-embedded>

2- firebase Auth to login google button or email and password .

<https://www.youtube.com/watch?v=MGJ8IHPDAY>

Task 2: Implement UI for Each Activity and Fragment

List the subtasks.

- Build UI for MainActivity Screen 1
- Screen 3 ,9 are fragments also supported for tablet mode listview and details .
- Screen 8 activity have 2 swipe fragments appear as 2 tabs .

Task 3: DB & Firebase corruption

I handled the connection failure cases in dialog , Toast and snack bar.

Task 4: Duplicate Name screen 2,3

Please see video for some validations . note this app in old version .

<https://www.youtube.com/watch?v=bGXxbYdvjCA>

Task 5: Export sheet

You mustn't export sheet with empty data

Task 6 :

app is automatically downloaded this docs for first time login in your file manager in mobile. using AsyncTask for android handle the downloaded process.

Task 7 :

This app is use cursor loaders to load data from Sqlite to fragment view. When activity is created . cursor loaders start process and finished when view created. In screen 9 . handle query background process.

```
implementation 'com.google.android.gms:play-services-auth:11.8.0'
```

```
implementation 'com.firebaseui:firebase-ui-auth:3.2.2'
```

Task 8 :

For firebase auth i use google play service auth to login with google button . And also email and pass for firebase. Login screen .

Conclusion :

i'm using content provider to share student/audience data in the next version of app for student to show their grades and attendance in term . and build a big analysis of attendance curve per term. the next version for student i'll be using Firebase.

currently i'm building this version for college staff or preventative a lecture to taking attendance in smart way.

<https://www.emaze.com/@AZIIOFFO>

Submission Instructions

- After you've completed all the sections, download this document as a PDF [File → Download as PDF]
 - Make sure the PDF is named "**Capstone_Stage1.pdf**"
- Submit the PDF as a zip or in a GitHub project repo using the project submission portal

If using GitHub:

- Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
- Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"

