ELECTRONIC ASSIGNMENT COVERSHEET

Murdoch UNIVERSITY

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Unit Code	ICT376
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Assignment number	A2
Assignment name	Assignment two
Tutor	Aaron Yeo Sze Wee

Student's Declaration:

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Please insert this completed form into the body of the assignment you submit. Follow the instructions in the Unit Guide about how to submit your file(s) and how to name them, so that the Unit Coordinator knows whose work it is.

A summary describing the project

The application for assignment two is called Photo Diary. The application allows users to upload photos with descriptions to the platform to record their life in a journal form. It helps us for collecting rich memories, not just by photo also by locations.

Design including the class diagram

UserModel

- id: int
- email: String
- name: String
- password: String
- gender: String
- dob: Date
- profilePhotoPath: String

- + getId(): int
- + setId(int id): woid
- + getName(): String
- + setName(String name): void
- + getPassword(): String
- + setPassword(String password): void
- + getProfilePhotoPath(): String
- + setProfilePhotoPath(String profilePhotoPath): void
- + getEmail(): String
- + setEmail(String email): void
- + getGender(): String
- + setGender(String gender): void
- + getDob(): Date
- + setDob(Date date): void

DiaryModel

- - id: int
- - title: String
- - bdate: String
- - time: String
- - location: String
- - description: String
- - fileName: String
- - imageUri: String
- - userId: int

- + toString(): String
- + getFileName(): String
- + setFileName(String fileName): void
- + getId(): int
- + setId(): void
- + getTitle(): String
- + setTitle(): void
- + getDate(): String
- + setDate(): void
- + getTime(): String
- + setTime(): void
- + getLocation(): String
- + setLocation(): void
- + getDescripton(): String
- + setDescription(): void
- + getimageUri(): String
- + setimageUri(): void
- + getUserId(): int
- + setUserId(): void

MainActivity

- + etEmail: EditText;
- + etPassword: EditText

- + nCreate(Bundle savedInstanceState): void
- + login(View view): void
- + newUser(View view): void

UserLanding

- - recyclerView: RecyclerView
- - databaseHelper: DatabaseHelper
- - userId: int

- # onCreate(Bundle savedInstanceState): void
- # onResume(): void
- - showUserDiaries(): void

NewUser

- - REQUEST_IMAGE_CAPTURE: int
- - REQUEST_GALLERY_IMAGE: int
- - profilePhotoPath: String
- - ivProfile: ImageView
- - etEmail: EditText
- - etName: EditText
- - etDob: EditText
- - etPassword: EditText
- - etGender: EditText

- # onCreate(Bundle savedInstanceState): void
- + createUser(View view): void
- # onActivityResult(int requestCode,...): void

EditProfile

- + USER_ID: String
- - REQUEST_IMAGE_CAPTURE: int
- - REQUEST_GALLERY_IMAGE: int
- - ivProfile: ImageView
- - btnSave: Button
- - etEmail: EditText
- - etName: EditText
- - etPassword: EditText
- - etGender: EditText
- - etDob: EditText
- - imageFragment: ImageListDialogFragment
- - userId: int
- - db: DatabaseHelper

- # onCreate(Bundle savedInstanceState): void
- - populateProfile(): void
- + saveUser(): void
- # onActivityResult(int requestCode,...): void
- - saveImage(String filename, Bitmap bitmapImage): String

DatePickerFragment

- + onCreateDialog(Bundle savedInstanceState): Dialog
- + onDateSet(DatePicker view, int year, int month, int day): void

DiariesAdapter

- - diaryModelList: List<DiaryModel>

- + onCreateViewHolder(...): DiariesAdaper.MyViewHolder
- + onBindViewHolder(...): void
- + getItemCount(): int

ImageListDialogFragment

- - binding: FragmentItemListDialogListDialogBinding

- + newInstance(int itemCount): ImageListDialogFragment
- + onCreateView(...): View
- + onViewCreate(...): void
- + onDestroyView(): void
- + onBindViewHolder(...): void
- + getItemCount(): int

DatabaseHelper

- - USER_TABLE: string
- - USER_ID: string
- - USER_EMAIL: string
- - USER_NAME: string
- - USER_PASSWORD: string
- - USER_GENDER: string
- - USER_DOB: string
- - USER_PROFILE_PHOTO_PATH: string
- - DIARY_TABLE: string
- - DIARY_ID: string
- - DIARY_TITLE: string
- - DIARY_DATE: string
- - DIARY_TIME: string
- - DIARY_LOCATION: string
- - DIARY_DESCRIPTION: string
- - DIARY_FILE_NAME: string
- - DIARY_IMAGE_URI: string

- + onCreate(SQLiteDatabase db): void
- + onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion): void
- + checkIfUserExists(String email): boolean
- + addUser(String email ......): boolean
- + getUserById(int id): UserModel
- + getUserByEmail(String email): UserModel
- + getAllUserDiaries(int userID): List<DiaryModel>
- + addDiary(DiaryModel diaryModel): boolean

NewEntry

- # locationManager: LocationManager
- + imageFragment: ImageListDialogFragment
- + titleView: TextView
- + dateView: TextView
- + timeView: TextView
- + locationView: TextView
- + descriptionView: TextView
- + saveButton: Button
- + imageView: ImageView
- + datePickerFragment: DialogFragment
- + timePickerFragment: DialogFragment
- + userId: int

- # onCreate(Bundle savedInstanceState): void
- + imageSource(View view): void
- + pickDate(View view): void
- + pickTime(View view): void
- # onActivityResult(int requestCode, ..): void
- + onLocationChanged(Location location): void
- + onProviderEnabled(String provider): void
- + onProviderDisabled(String provider): void
- + onStatusChanged(String provider, int status, Bundle extras): void
- + setLocation(): void
- + setDate(LocalDate localDate): void
- + setTime(LocalTime localTime): void
- + saveImage(String filename, Bitmap bitmapImage): String
- + save(View view): void
- + onOptionsItemSelected(MenuItem item): boolean

TimePickerFragment

- + onCreateDialog(Bundle savedInstanceState): Dialog
- + onTimeSet(TimePicker view, int hourOfDay, int minute): void

DiaryActivity

- - diaryTitle: EditText
- - diaryDesc: EditText
- - title: String
- - date: String
- - time: String
- - desc: String
- - path: String
- - imageName: String
- - id: int
- - databaseHelper: DatabaseHelper

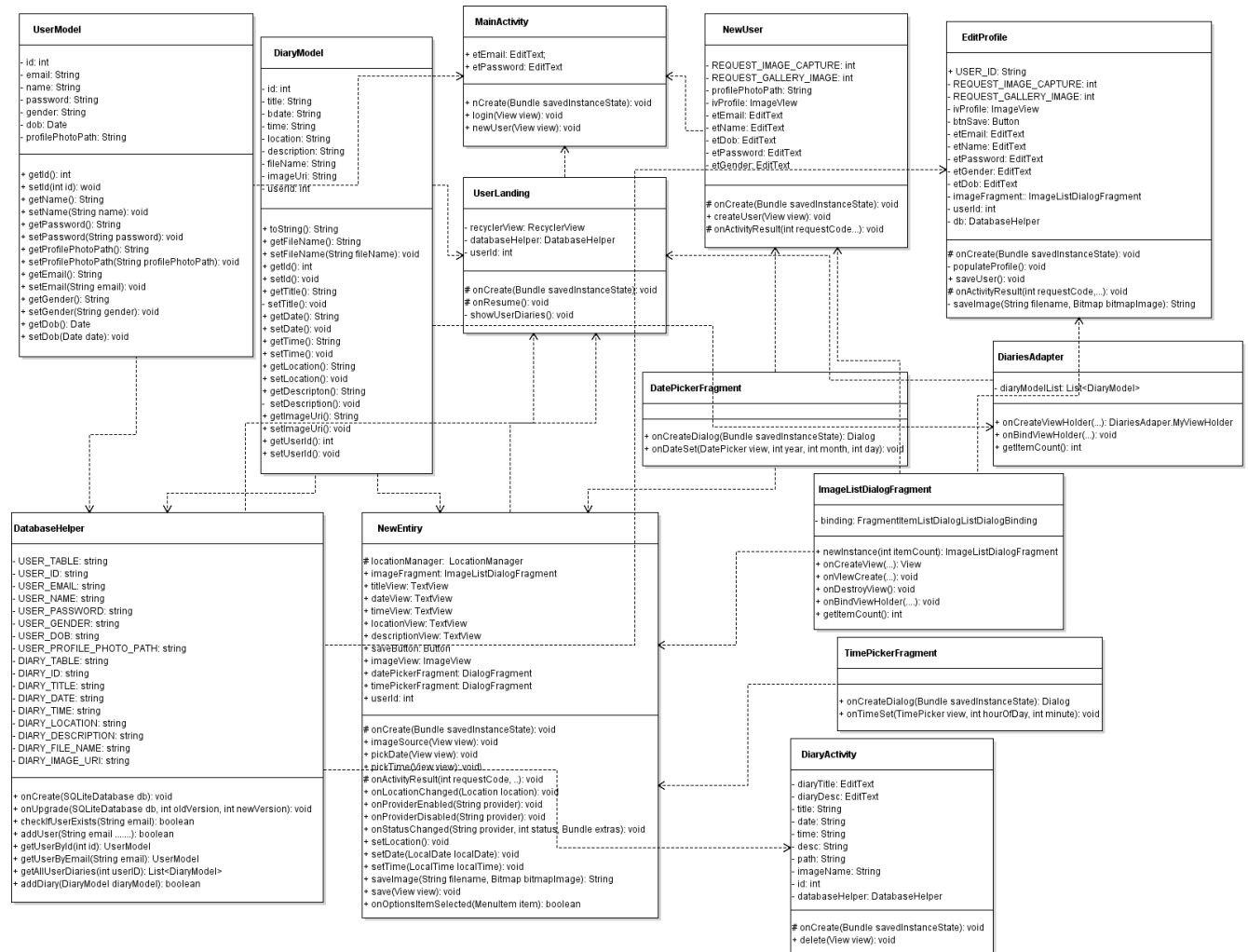- # onCreate(Bundle savedInstanceState): void
- + delete(View view): void

Figure 1 Photo Diary Class diagram

As Figure 1 described when user open the application it shows login page, firstly application will trigger the MainActivity.class. At login page user can register new account and login by their credentials also we provide test account for those users who want to try without signing up.

If user use sign-up page to register a new account, user need to provide their email, name, password, gender and DOB to sign up. This function will use NewUser.class.
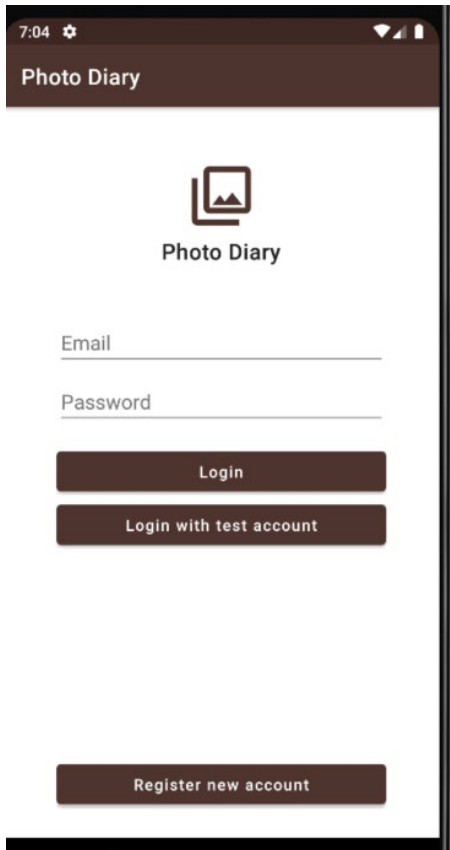
After user signed up, user can sign in. Then user can view diary lists, click one item to see the details and update or delete one diary. Also in this page user can click add button to add new photo diary.

After user click add button, will go into new Entity page, user can select camera to take a new photo or browser a photo shop to select a photo. At the same time user can add a title, timestamp for the diary if user give this app location services right, our app will record the location of the photo took.

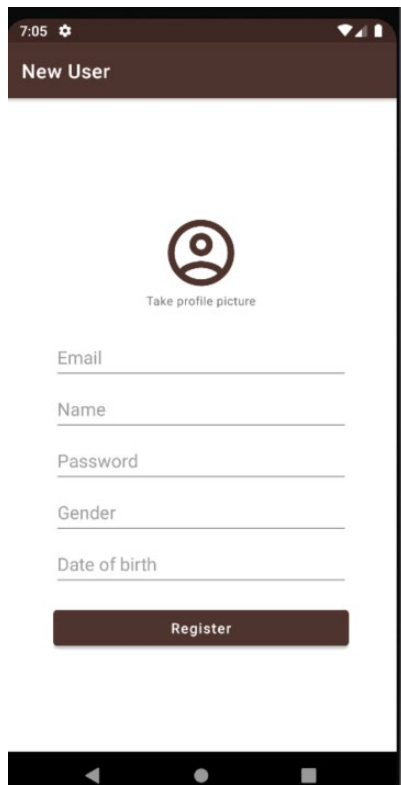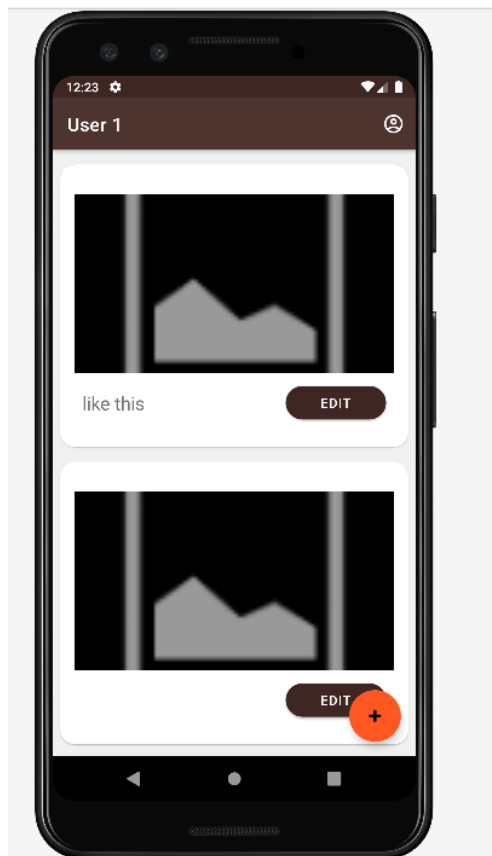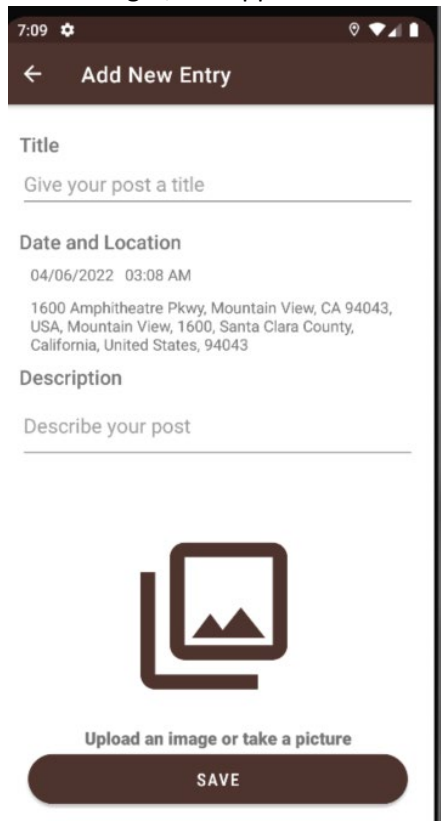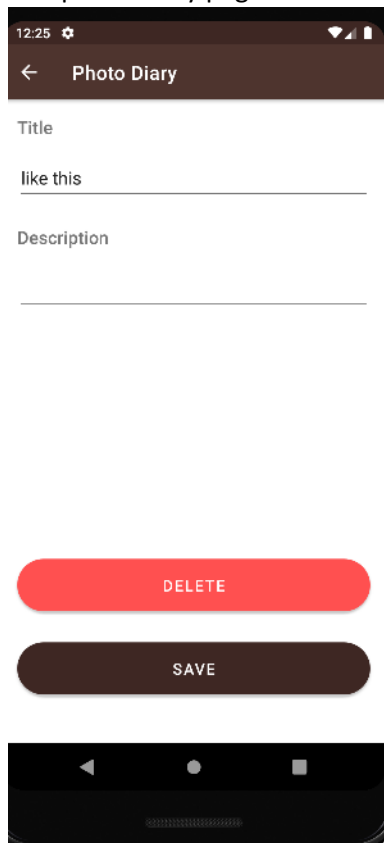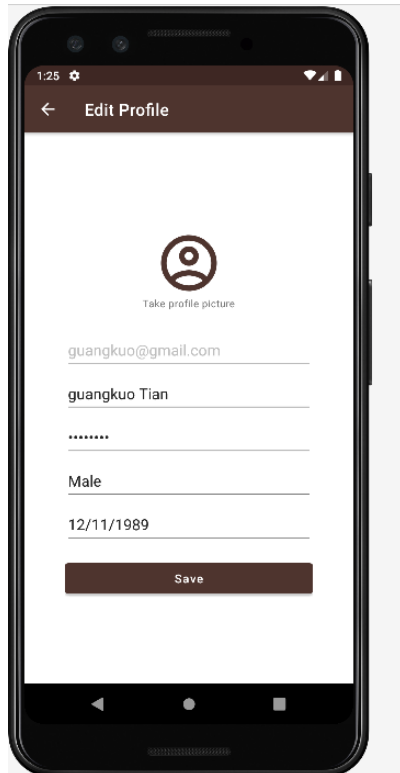# Instructions on how to use the software

1) Login page,

   At login page user can register new account or login by their credentials, also we provide a test account for those user want to try without signing up.

2) New User page

   If user use sign-up page to register a new account, user need to provide their email, name, password, gender and DOB to sign up.

3) User landing page
   After use login in, user can view diary lists, click one item to see the details and update or delete one diary. Also in this page user can click add button to add new photo diary.

4) Add new entity page
   user can select camera to take a new photo or browser a photo shop to select a photo. At the same time user can add a title, timestamp for the diary if user give this app location services right, our app will record the location of the photo took.

5) Edit photo diary page

6) Edit user profile

Sample input-output screenshots to demonstrate all major operations asked

1) Login with test account
   a. Open this application
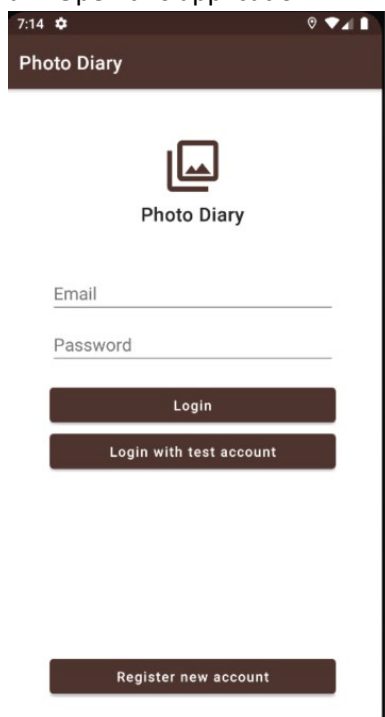
b. Then click "Login with test account" button, test is ok
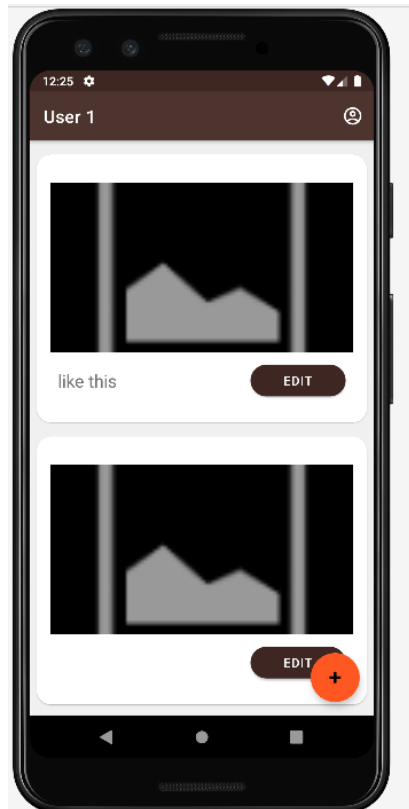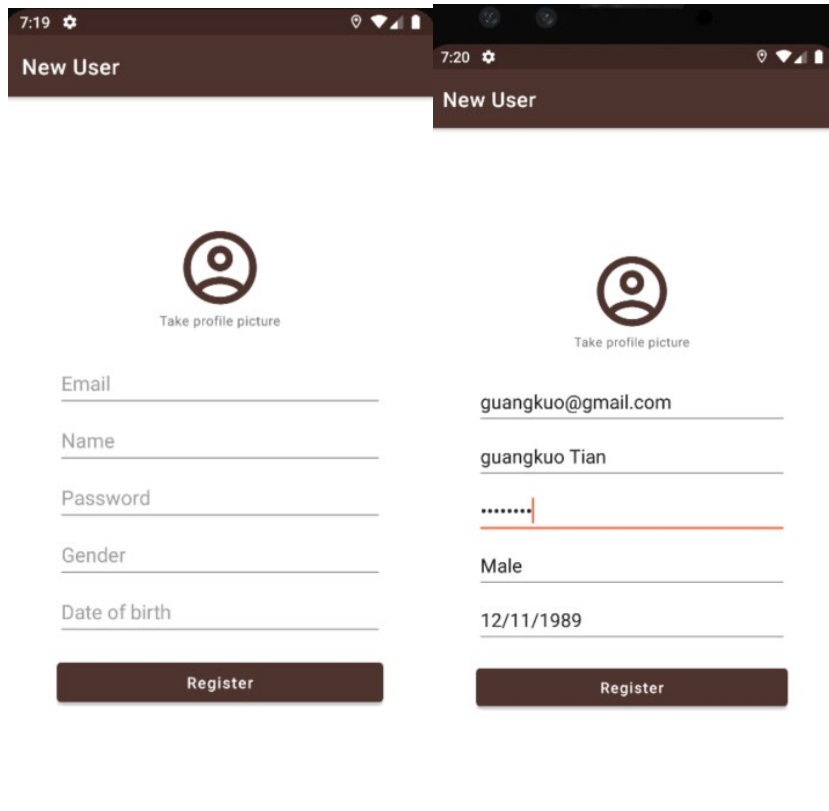
2) Register new account
   a. Click register new account
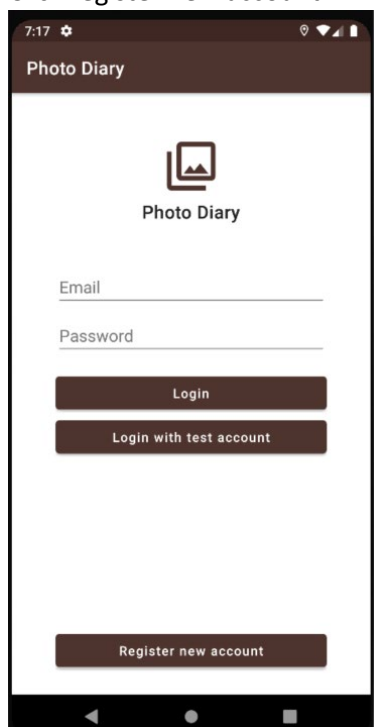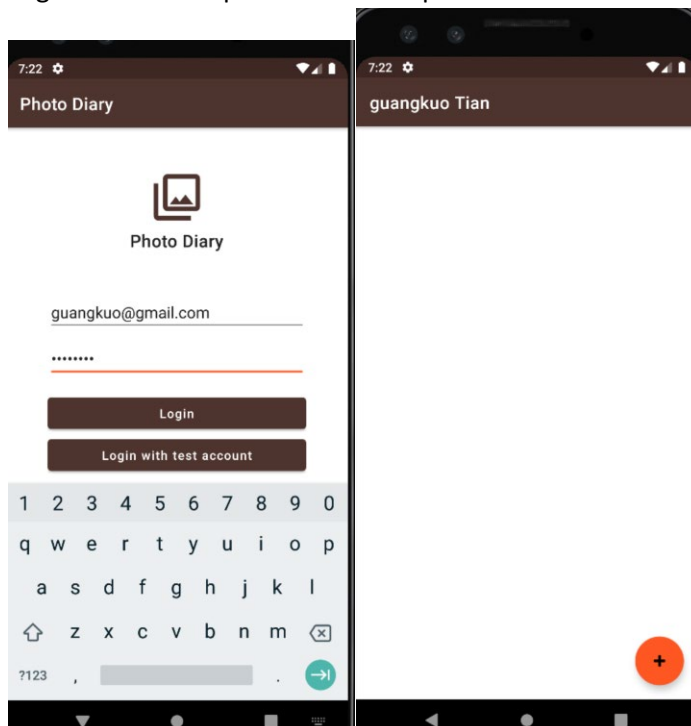
b. Input user information and click register

It will show register successful
3) Login with user account
   a) Login with last step username and password

Test is ok, login successfully.

4) Add new diary
   a. Continue from last test, click add button
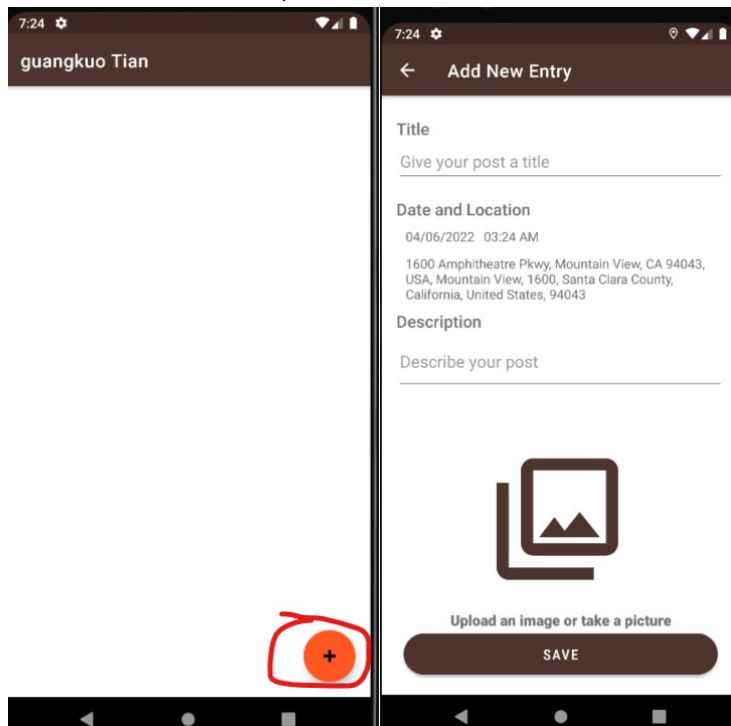
   b. Title can be edited, date can be selected
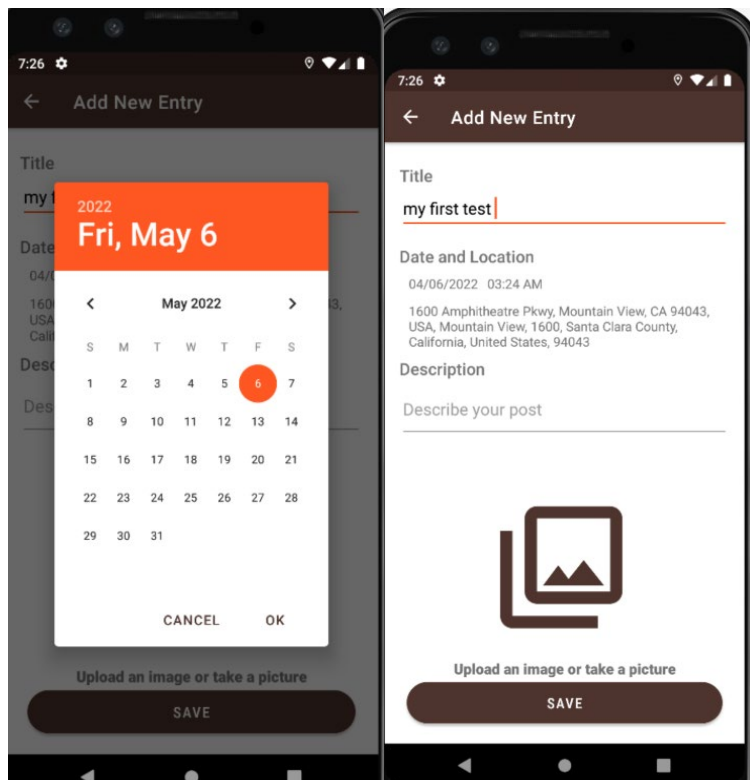
   c. Description can be edited and then choose browser
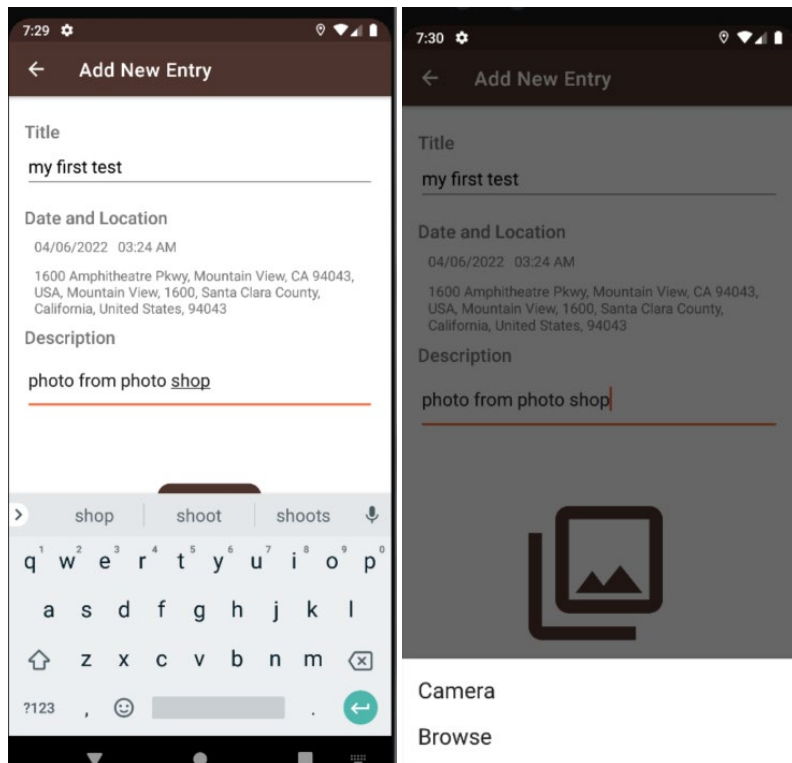
d. Select one photo
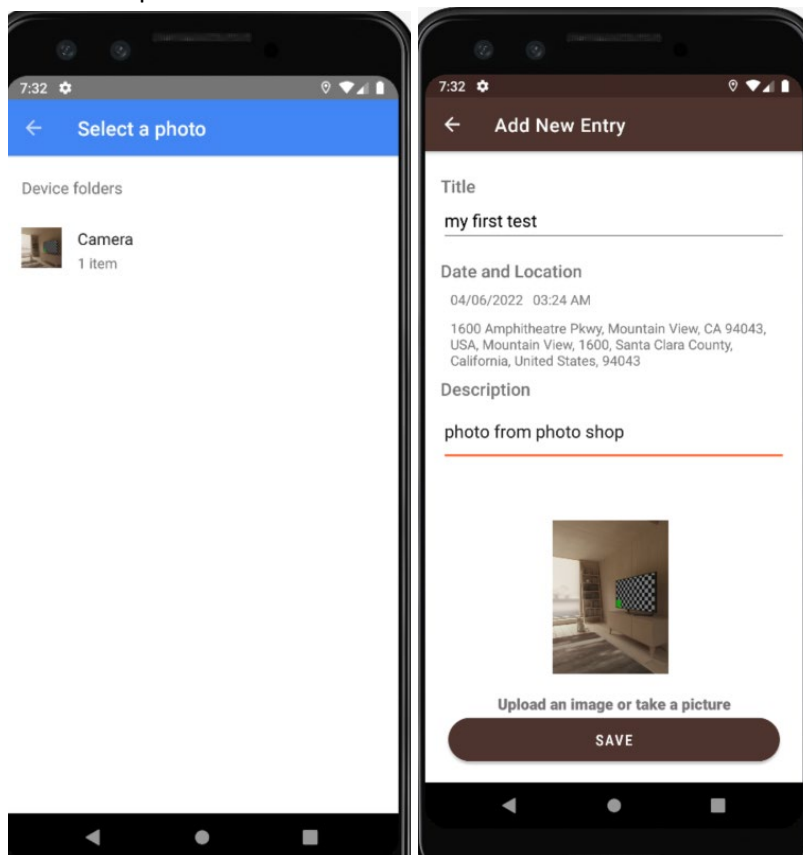
e. Click save button to save diary, and diray is saved successfully.
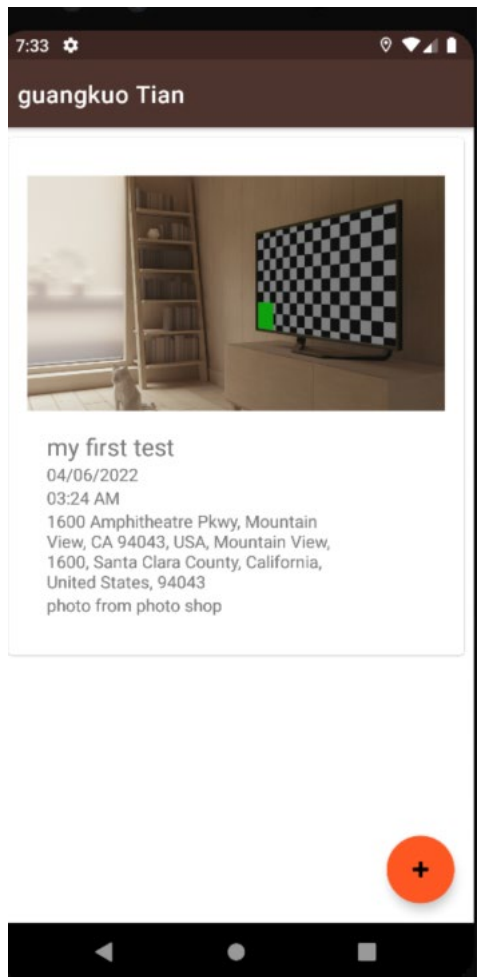
5) Edit diary
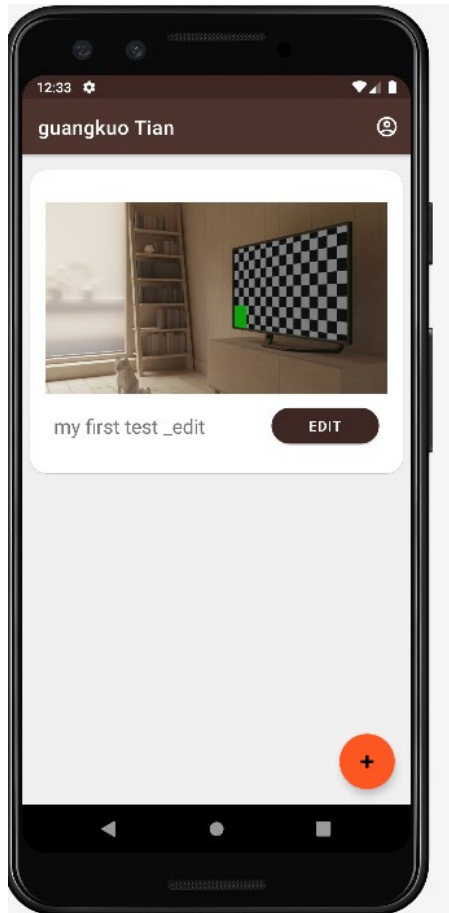   a. Login with account
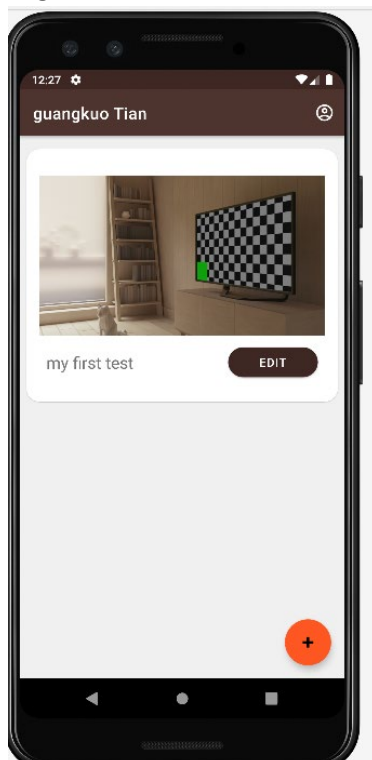
b. Click Edit button and change title name
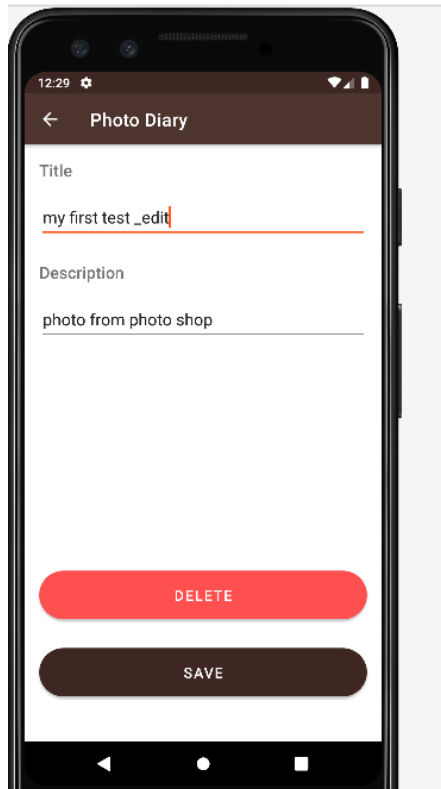
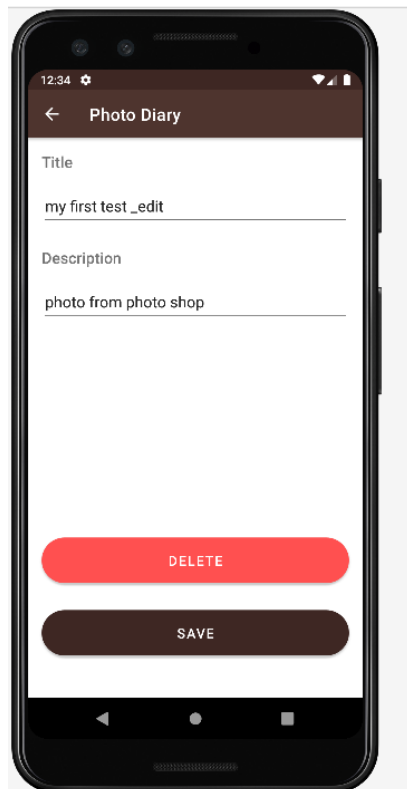c. Click save button, we can see diary name has been changed.
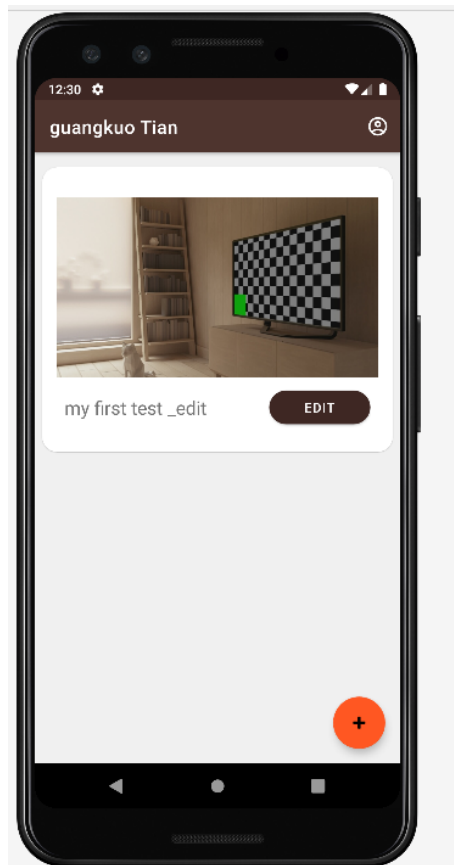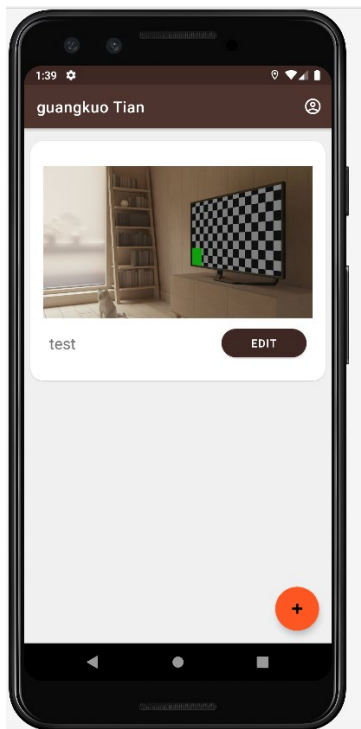

6) Delete a diary

a. Login with account

b. Click the edit button

c. Click delete button, we can see diary has been deleted.

7) Edit user profile
   a. Login in with user profile

b. Click user icon, go into edit profile page

c. After change username to test, click save. We can see picture below, username has changed.