Report for APP

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The name of our app is call family tree. We aim to develop an app that can record and show the relationship between a family.

The task is devided into four sections. Daatabase:Zhangyinqing UI:Qinyu Login:Qiubowei Share:Zhangyuhui

1 Database

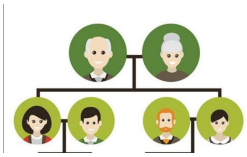
Using SQLiteDatabase to establish a local database to store the data for building and modifying the family tree, and for keeping the users information in secret.

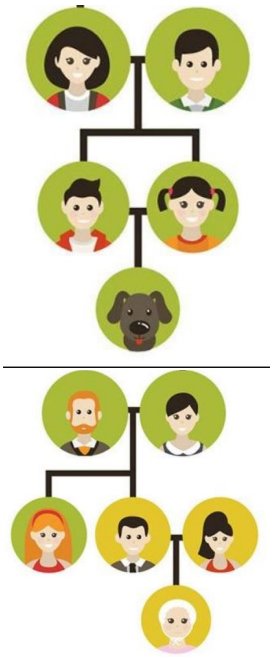
First, establish structure for each piece of data.

Then, build an Adapter for generalizing process.

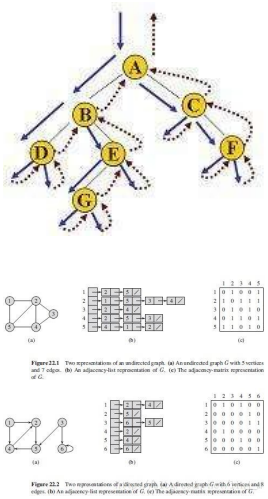
Finally, create SQLiteDatabase APIs to access the data.

Algorithm

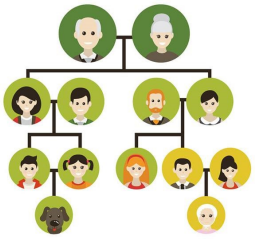




Using DFS to connect individual but relative tree.



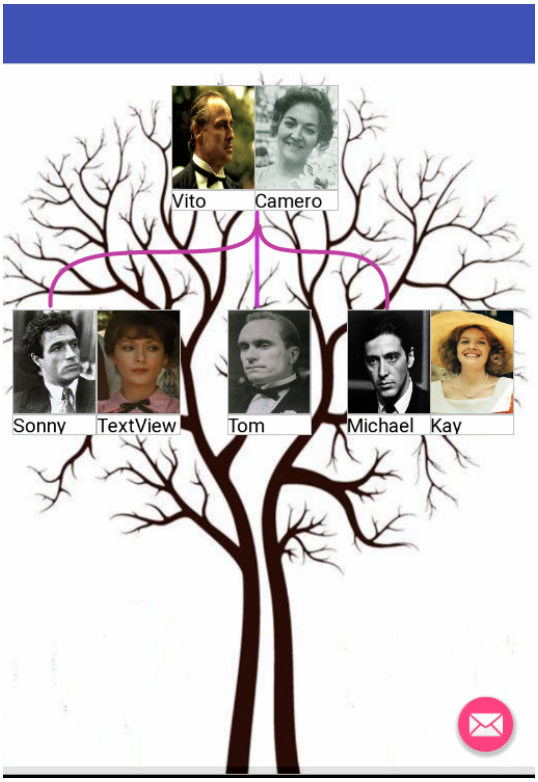
Finally, the whole tree established



2 UI

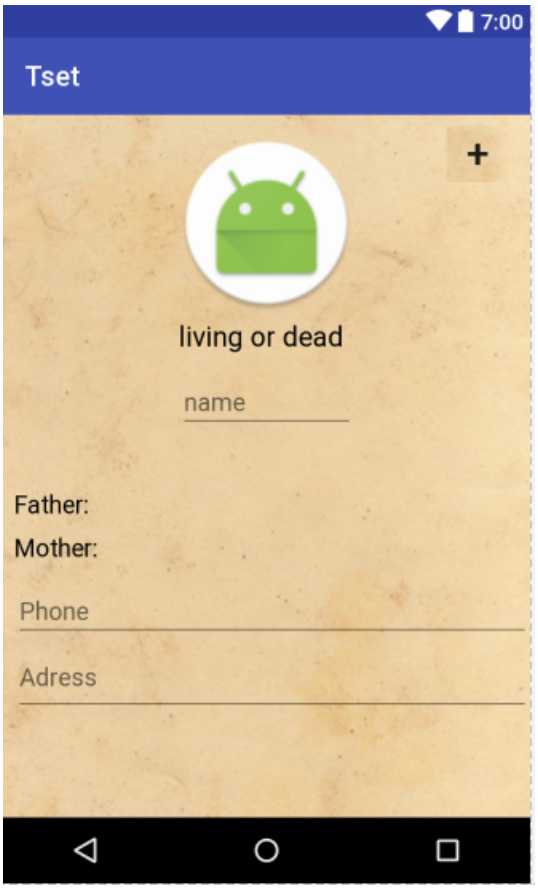
UI is mainly devided into three parts.

1.Main Interface Linked picture represent a couple Curve lines the parents and the children Each picture is a image button.While click the head portrait, it will show the profile.

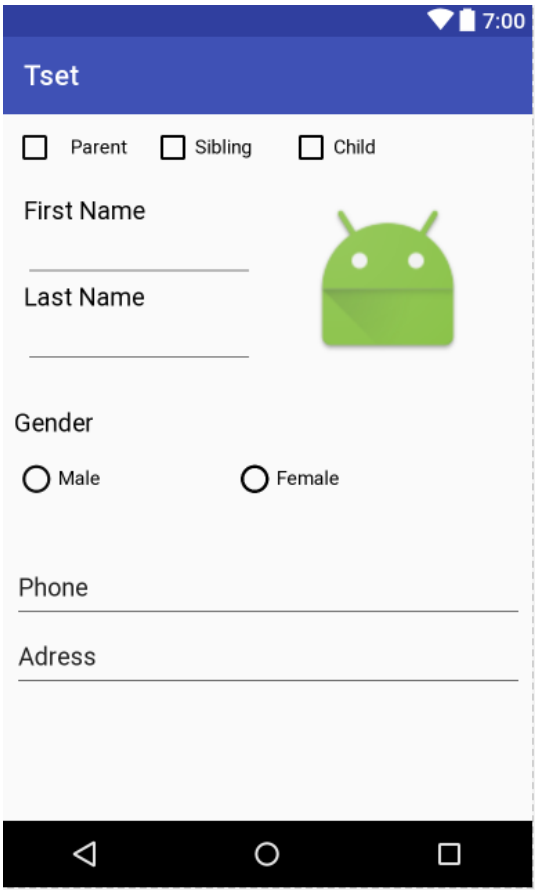


Personal Profile This page contains the following information of the members. Head portrait Brief personal information Such as phone number ,address and

members of family. Dead or alive And there is also a + symbol which could pop the adding information dialog while clicking it. And in the dialog the user can choose to add sibling, child or parent. For example, click +/Sibling, then it can add a new row to the interface like Sibling: ***. And an important thing is that the family members are automatically matched according to the family tree.



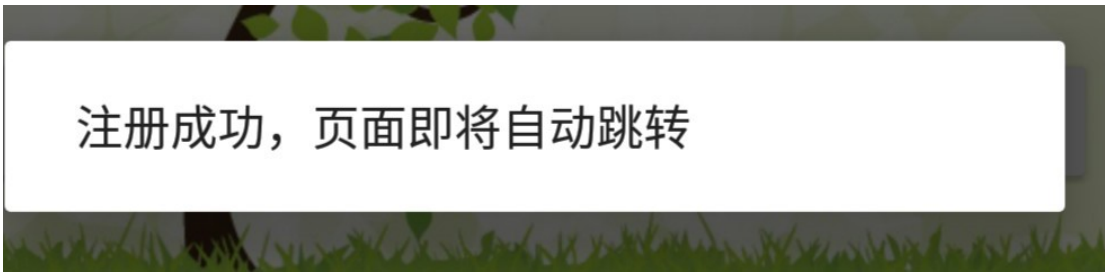
Add New Member This is the adding-new-one interface. Users can choose the new members relationship with the existing members.


7:00
Tset
Parent
Sibling
Child
First Name
Last Name
Gender
Male
Female
Phone
Adress

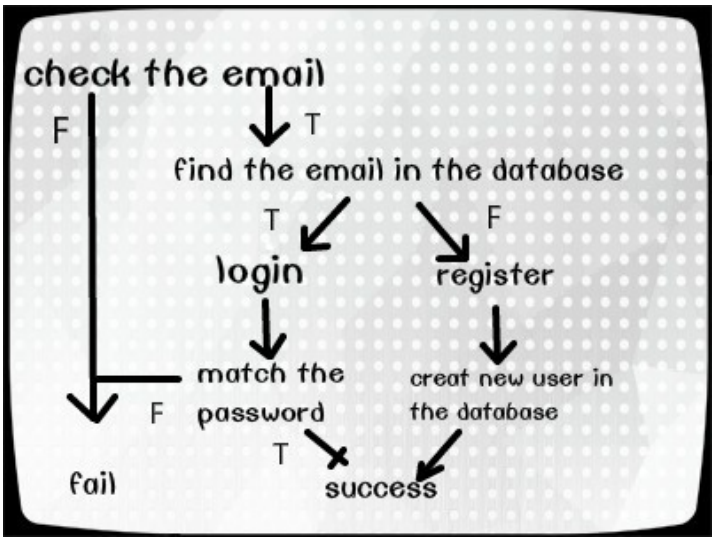
3 Login

The login screen, as shown in the left, is divided into three sections —- the address bar, the password bar and the login or the registration button. 1.1.1Address Bar The user can enter the user name here, in the form * * * *@****.com 1.1.2Password Bar The user can enter the password here, the length of the password is more than four.There is an eye button, while the user click it, the password will be visible. 1.1.3Login/Register Button For the convenience of the user, we combine the login and registration button. Once the user has entered a new user name, the new user is automatically.registered in the database. 1.1.4Background We chose a light green tree image as the background. Because we think it fits the theme of the family tree and gives the user a sense of pleasure.

Login-succeed Interface When the user logged in or registered successfully, the successful dialog box will pop up and jump automatically. And the dialog box shows the different word in the login or register process .



Algorithm



4 Share

We designed the screenshot function which saves the screenshot picture in the sd-card automatically.We mainly use the View.getDrawingCache() method to get the screenshot.We want to make our users look over their family tree or share their family tree with others conveniently. To make users get a better

using experience.To make the sharing function better, we will try to make direct sharing of the family tree on the QQ or Wechat come true.