

ABSTRACT

AR Business Card

Recent studies suggest that about average users have installed some applications related to camera and scanner.

And for business class people it's common to exchange the business card and they need to store this data to contact or find them in email or other way around.

By adopting the concept of trending scanning and storing technologies we have implemented them here in our project for the use of text reorganization in it,

Moreover we have added some facilities like adding them in text record with email and name of the contact user can added their notes and other data with it.

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1. INTRODUCTION

1.1 Project Summary

We are proposed create such a system which system will work on augmented reality, in our

System if you scan the business card and touch
The card information like mobile number, Email

It effects on mobile screen for example if user
Touch the mobile number on card it will
Automatically display into mobile screen and
Call that mobile number.

Secondly if user scan the business card the video about the business promo will be played
On mobile screen

And save the data in database, rate the business card and also we can share that data in
text format.

1.2 Aim & Objective

- Build the app for the Business related people
- App will provide the necessary interface
- Provide direct scanning of image in app
- Stores data in phone for future access

1.3 Problem Specification

There is this problem of noting down data such a contact number and email inside the phone and its very common for people to exchange their business card so we made the work easy by making this text and data storing automation with help of this application there can be more space for user to get work done.

1.4 Scope

- For Gyms
- Users around the urban area
- Providing services
- Collaboration with existing services

1.5 Tools Required

Following are tools and applications which required in creation of this fitness application

- Android Studio
- Android Emulator
- C#
- Google Firebase
- Unity 3D
- PHPMYADMIN
- Vuforia SDK

Unity 3D:

We use Unity 3D Because Unity 3D is a commercially available multiplatform game engine used for the production of 2D and 3D video game as well as non-game interactive simulation and visualizations. Unity is one of the most popular game engine available due to its combination of power, flexibility and ease of use.

Vuforia SDK:

Vuforia SDK Supports Unity 3D and Very uses full when it comes with Unity and C# Scripting. It uses computer vision technology that recognize and Image Targets and simple 3D objects, such as boxes, in real time. The Vuforia SDK supports a variety of 2D and 3D target in real world.

C# In Unity 3D:

The language that's used in Unity is called C#. A C# script must be attached to a Game Object in the scene in order to be called by Unity. Scripts are written in a special language and they use Mono Behavior that Unity can understand. And, it's through this language that we can talk to the engine and give it our instructions.

Firebase:

Firebase a next-generation app-development platform on Google Cloud Platform. Firebase frees developers to focus crafting fantastic user experiences. Firebase is server, there is API and to data store, all written so generically that it can modify all to suit most needs.

It's is being used with the Google's Image reorganization which is key functionality of the application.

2. PROJECT MANAGEMENT

2.1 Project Planning and Scheduling

2.1.1 Project Development Approach

- **Software Process Model**

We're going to take a quick glance about very general process models. These generic models are abstractions of the process that can be used to explain different approaches to the software development. They can be adapted and extended to create more specific processes.

- **Incremental Model**

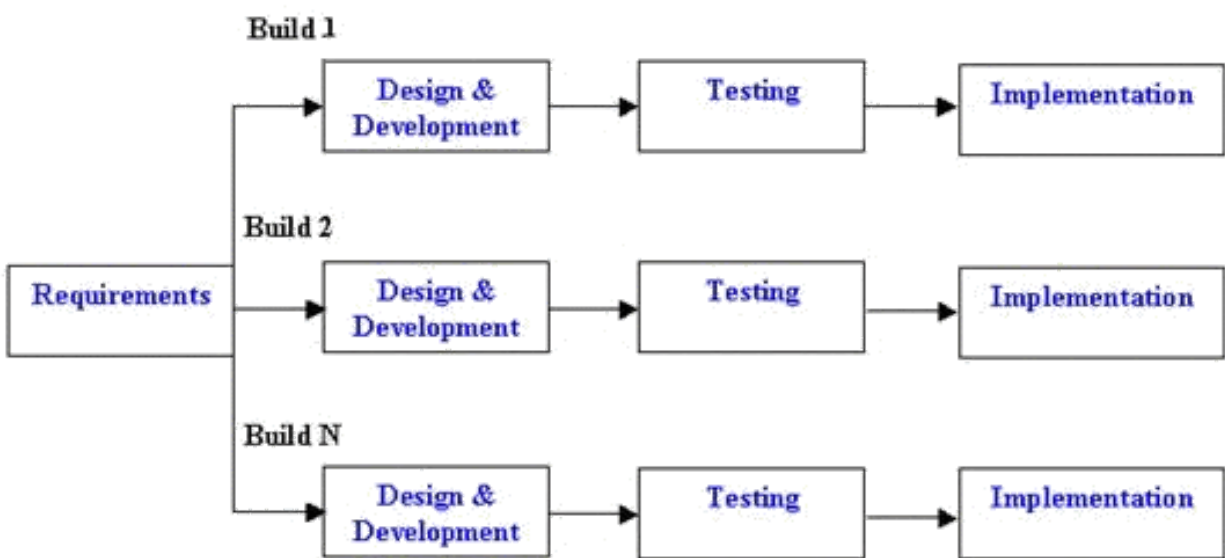
Incremental development is based on the idea of developing an initial implementation, exposing this to user feedback, and evolving it through several versions until an acceptable system has been developed.

The activities of a process are not separated but interleaved with feedback involved across those activities.

Each system increment reflects a piece of the functionality that is needed by the customer. Generally, the early increments of the system should include the most important or most urgently required functionality.

- Generates working software quickly and early during the software life cycle.
- This model is more flexible – less costly to change scope and requirements.

- It is easier to test and debug during a smaller iteration.
- In this model customer can respond to each build.
- Lowers initial delivery cost.
- Easier to manage risk because risky pieces are identified and handled during it'd iteration.



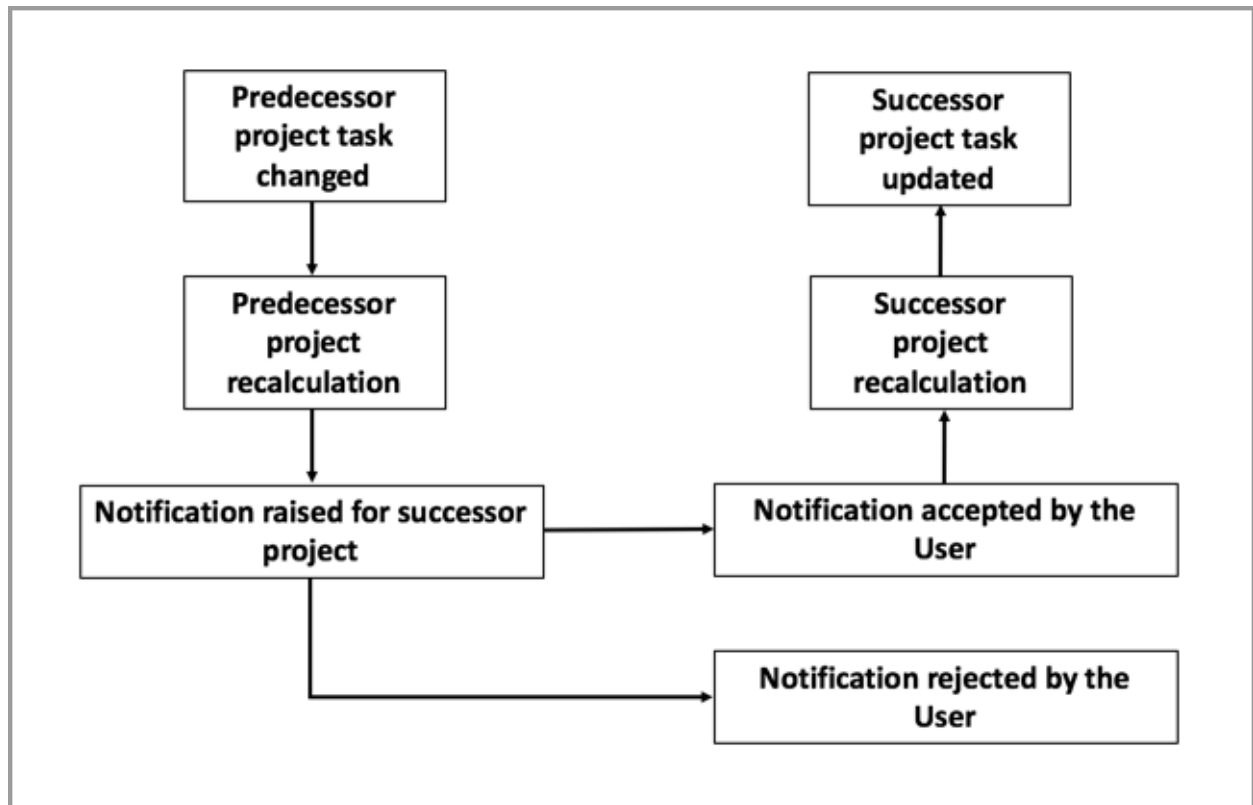
Incremental Life Cycle Model

2.2.2 Project Plan

- Conception and Initiation: During this phase you reiterate the project proposal or the business case. It's also time to round out details of how you will deliver on the project and meet stakeholder demands.
- Definition and Planning: Project tasks are defined with scope in mind. Prioritization of tasks begins with each being listed in order of importance to the project
- Launch: Allocation of tasks and resources begins. Team members are notified of responsibilities. The work really begins here, but the plan is always nearby for reference to ensure things are staying on track
- Performance and Control: This is the monitoring portion of the plan. Team status updates are evaluated to ensure that project progress is aligning with predictions made early on/
- Closure: You're almost to the finish line, but you're not there just yet! Securing client approvals of work completed comes first.

2.1.3 Project Scheduling

- Identify all the tasks and activity needed to complete the project.
- Break down large tasks into small activities.
- Determine the dependencies among different activities.
- establish the most likely estimates for the time Euration to complete the activities.



2.2 Risk Management

A. Project Risk:

The Project Risk threatens the project plan. The project risks here

- Schedule slippage.
- Incomplete requirement specification
- Change in user requirements
- Non-availability of required resources
- Lack of communication with end user

3 -SYSTEM REQUIREMENT STUDY

3.1 Hardware and Software Requirements

- **Android Studio:**

A latest version of android studio is recommend for the most of working and part and connectivity to our database and Google firebase is required

- **PHP:**

A system with working host for PHP site and connectivity to its database with the given MYSQL database is required for the backend of the project to work.

- **Operating System:**

An operating system (OS) is system software that manages computer hardware and software resources and provides common services for computer programs. We recommend windows.

- **CPU:**

A good CPU is must to run a program such as android studio because it's the core part of our application development

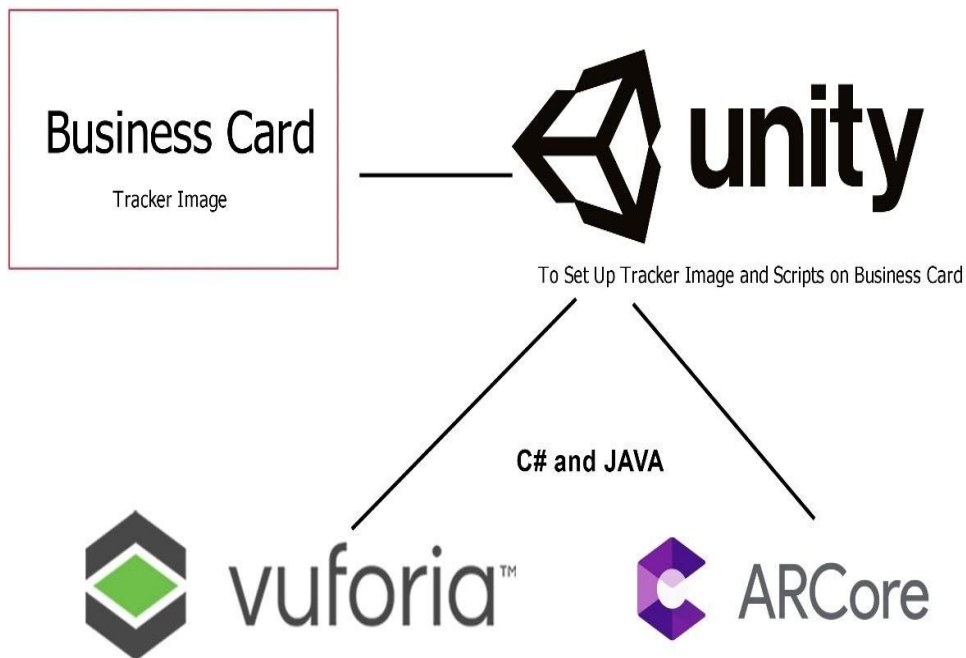
- **Memory:**

Good amount of RAM is required to access the large application fluidly. Our application would require faster RAM, so it can perform various operation more effectively.

4. SYSTEM ANALYSIS

4.1 Study of Current System

The study of application show that there can be a solution for the problem analysis by an android application which has camera access inside so that can be useful for the such a purpose and there can be many more utilization for that which makes it more working for that it has mobile and email fields more over there can be a description too.



4.2 Requirement of System

The smart phone is only requirement from the user side which has a internet connection and a camera which is required for the scanning of the card and that's all for the working of application.

4.3 Existing System

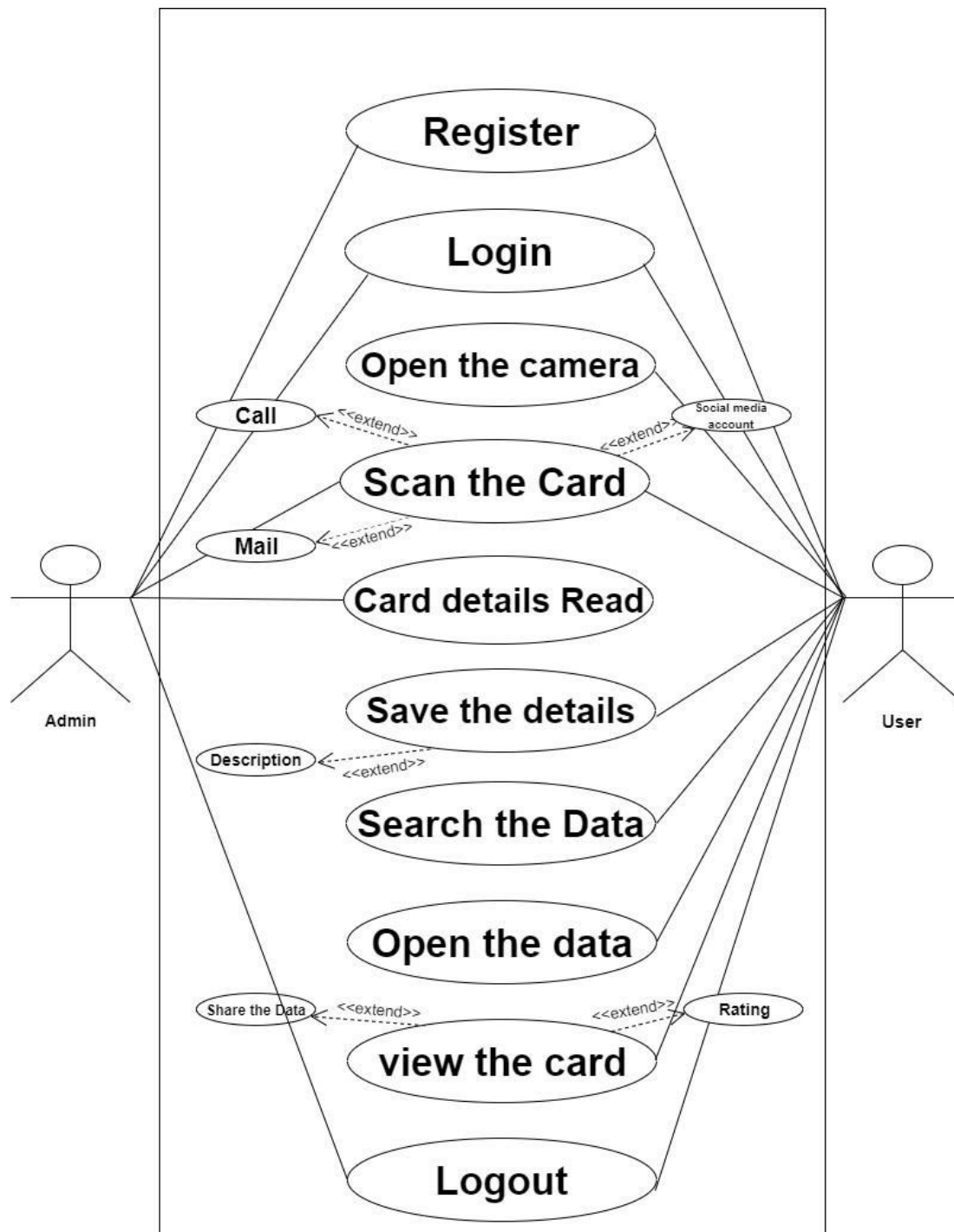
There Is no such a system exist in trend so we came up with this solution and that is helpful for all the people related to business area and they can use our services and get helpful

4.4 Feasibility Study

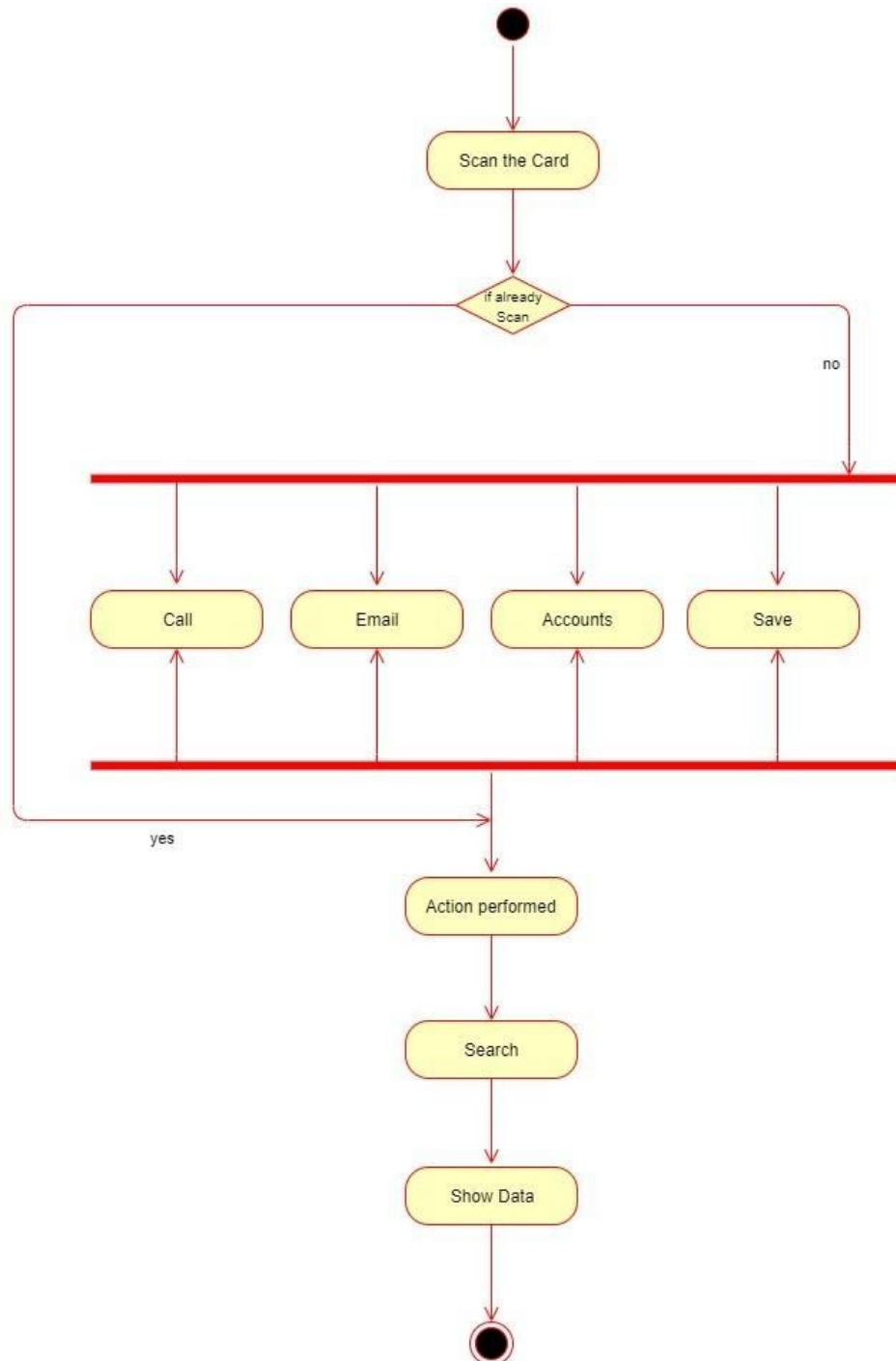
- The application scan business card with in-app camera
- There is input for user to store the data of the card and name
- Application identify the email and phone separately
- User has access to all the list of stored data

4.4 Functions of System

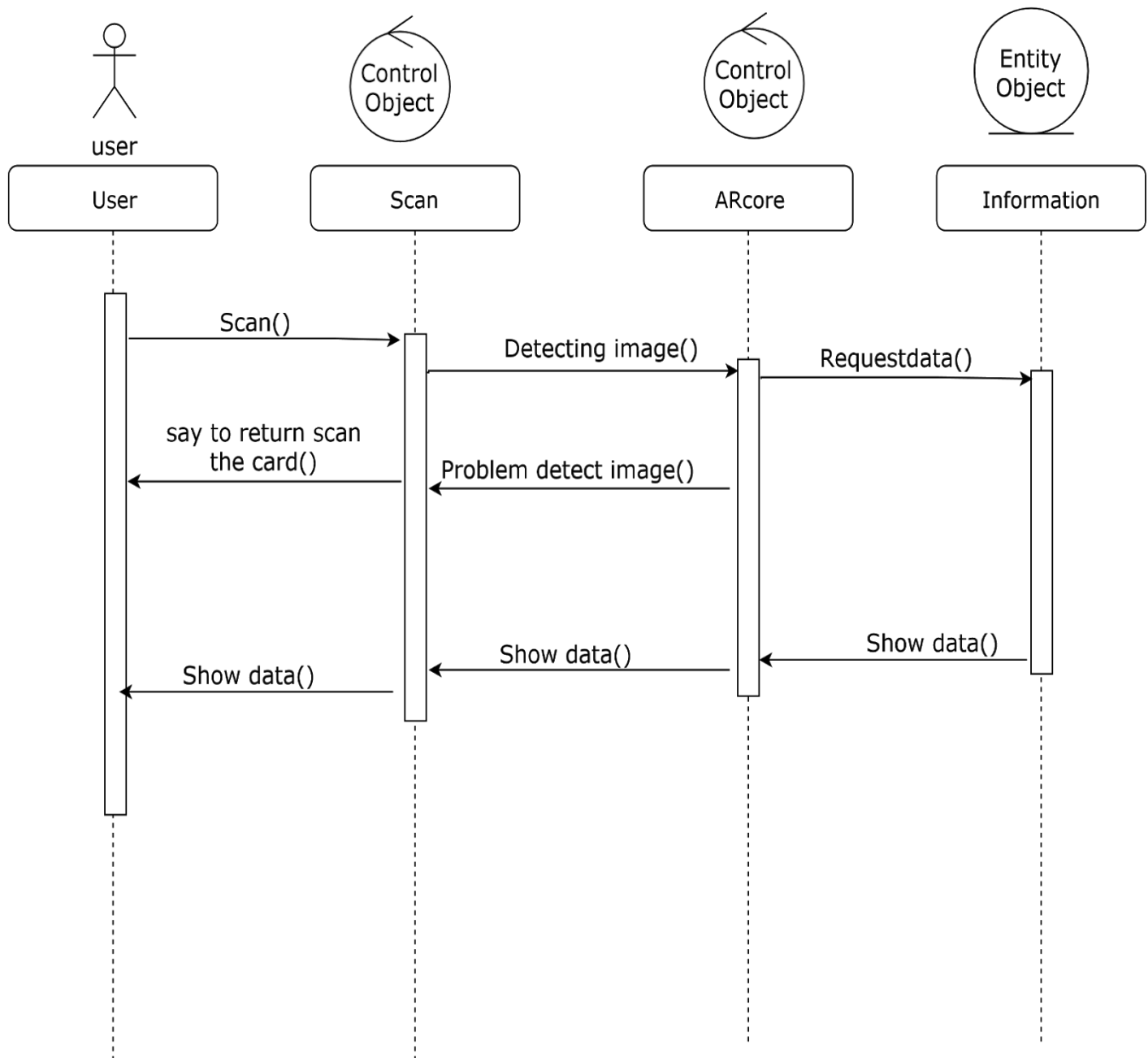
USE CASE



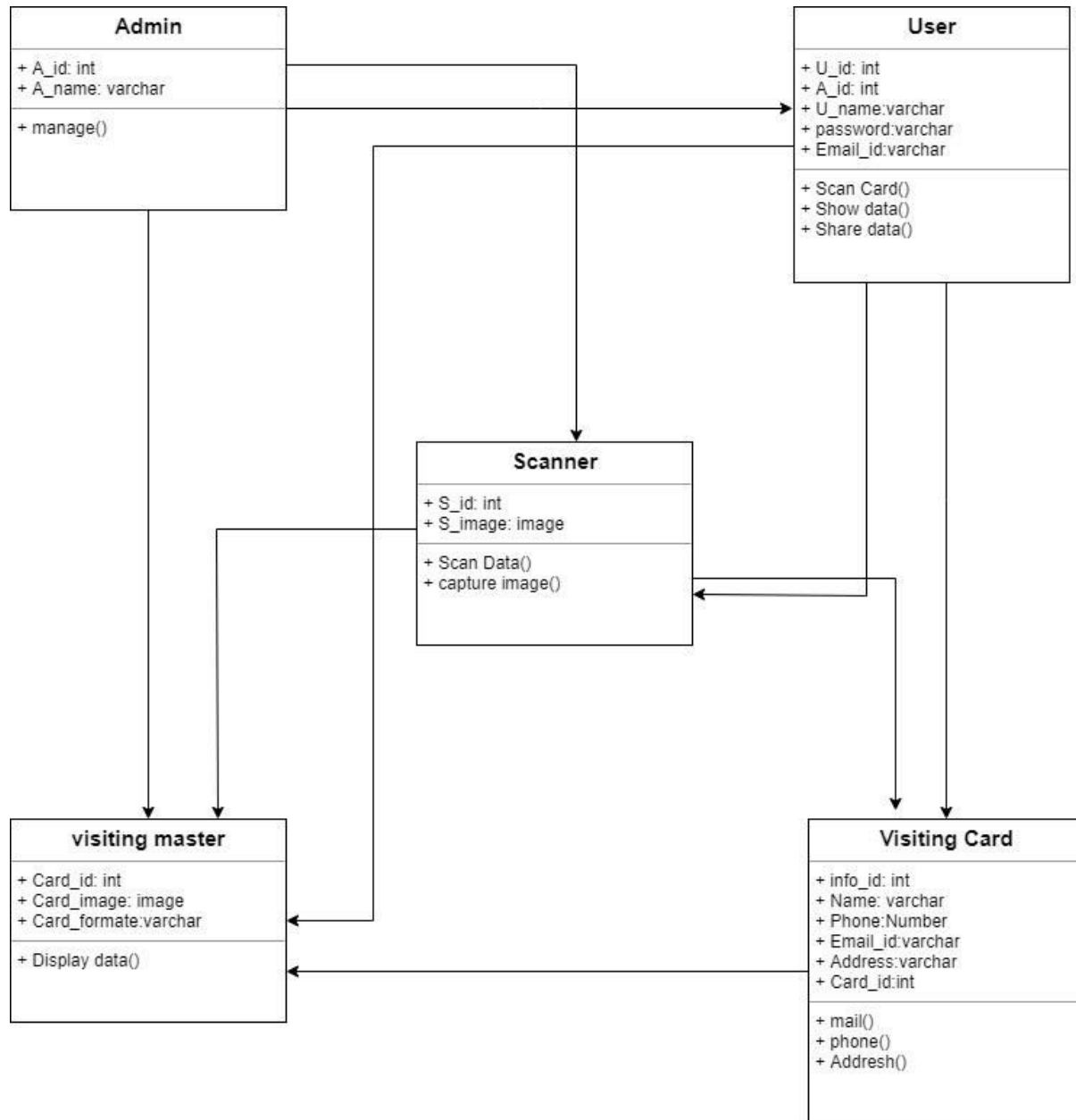
ACTIVITY DIAGRAM



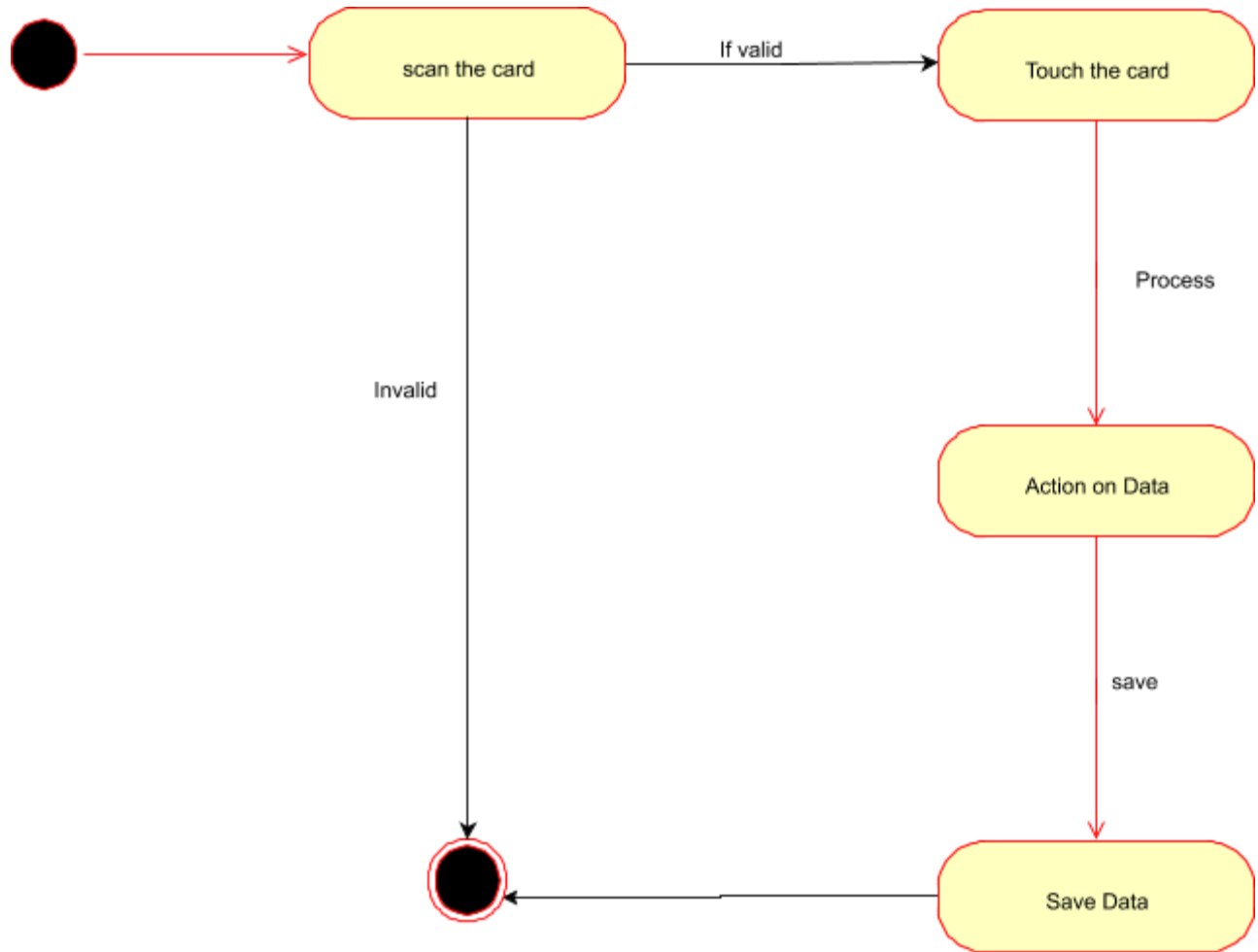
SEQUENCE DIAGRAM



CLASS DIAGRAM



STATE CHAR DIAGRAM



DATA DICTIONARY

Table Login

CONSTRAIN	FIELD NAME	DATATYPE	SIZE	DESCRIPTION
PK	Loginid	Varchar	50	loginID
	Password	Varchar	50	Password
	Email	Varchar	50	Email

Table Cards

CONSTRAIN	FIELD NAME	DATATYPE	SIZE	DESCRIPTION
PK	Cardid	Varchar	50	Card Numbe
FK	Loginid	Varchar	50	User ID
	Email	Varchar	50	Email
	Phone	Number		Phone No
	Description	Text	200	Desc of User

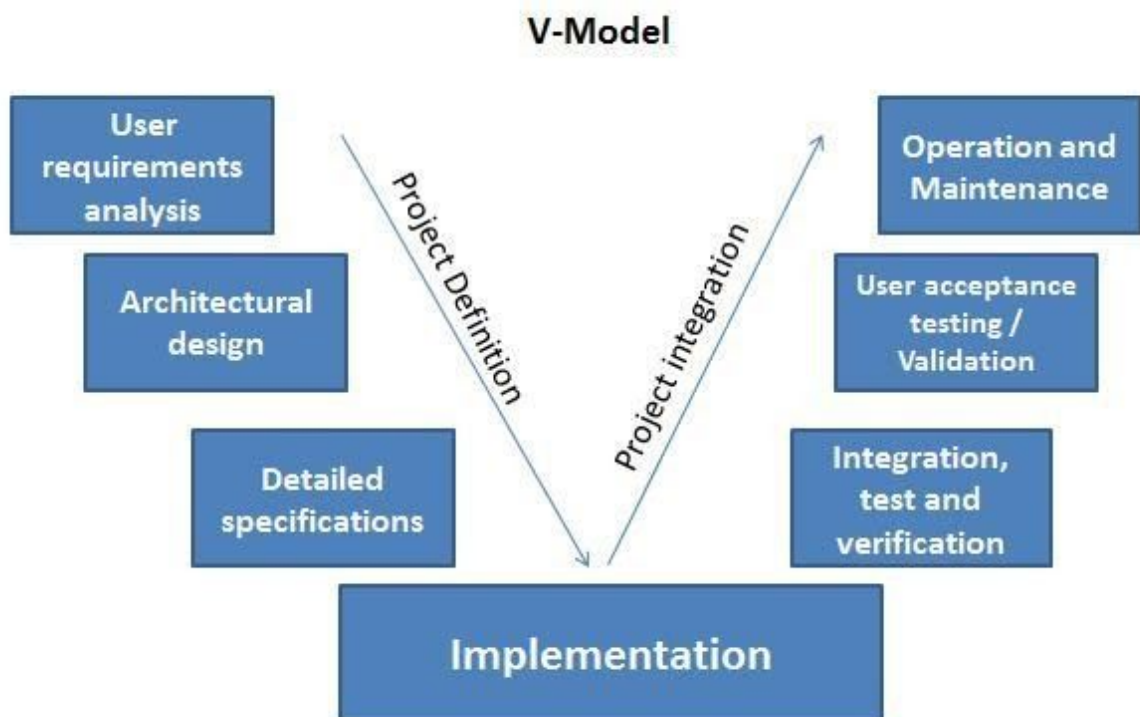
Table Admin

CONSTRAIN	FIELD NAME	DATATYPE	SIZE	DESCRIPTION
PK	Adminid	Varchar	50	Admin id
FK	Loginid	Varchar	50	User ID
	Email	Varchar	50	Email

5. IMPLEMENTATION PLANNING

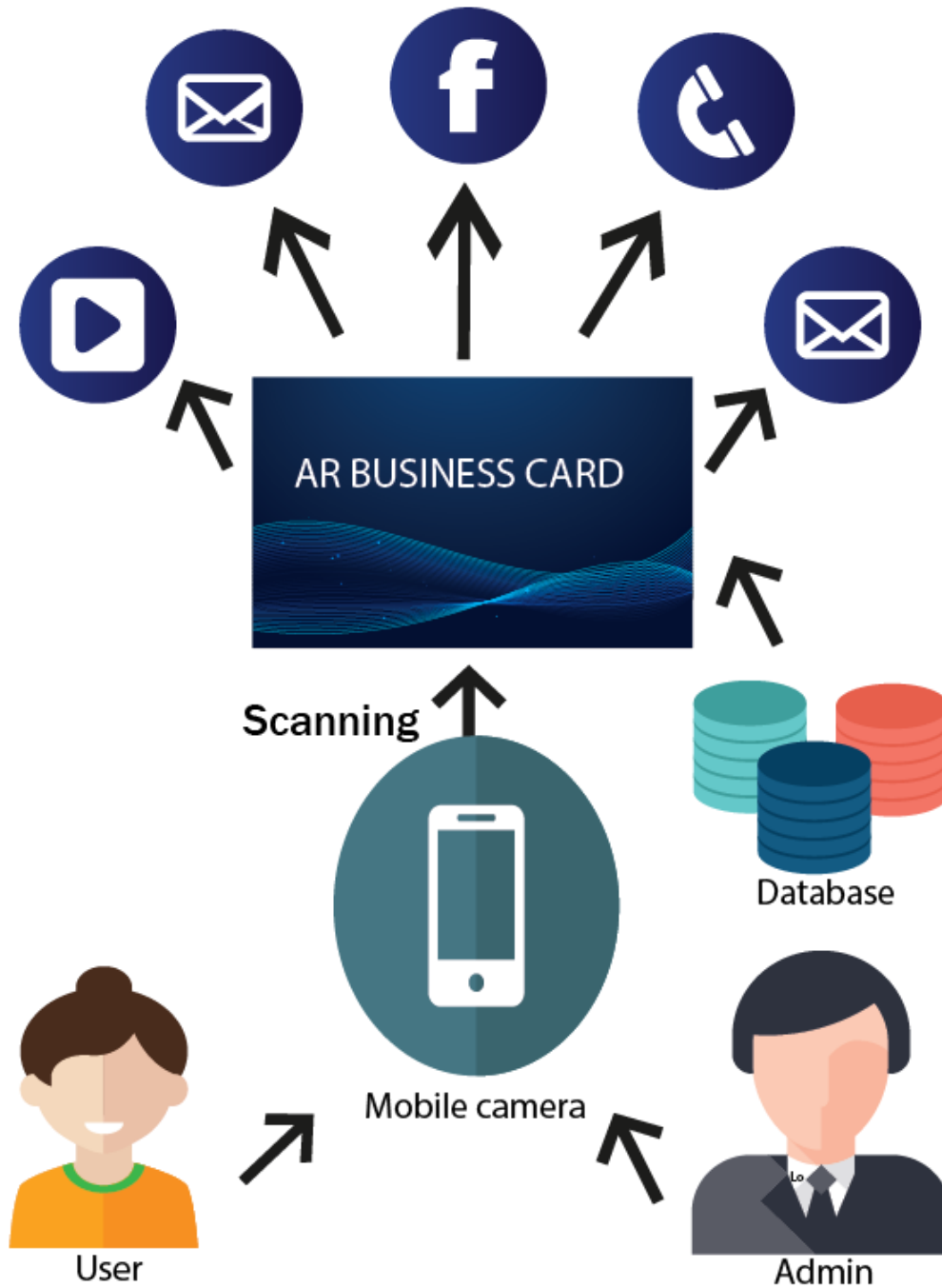
5.1 Implementation Environment

The application's implementation environment is single-user, that is, only one user can be active and can operate this application at a time, and this is hardware based. It follows the given approach for its development and completion



5.2 Module Specification

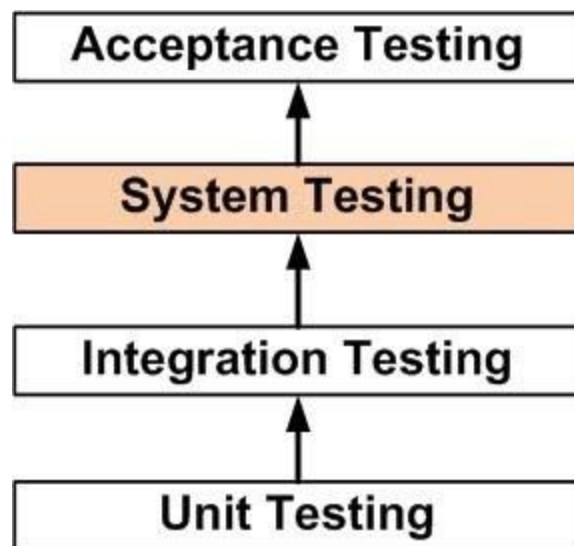
Augmented reality Business Card System



6 -SYSTEM TESTING

6.1 Testing Plan

During the process of manufacturing a ballpoint pen, the cap, the body, the tail, the ink cartridge and the ballpoint are produced separately and unit tested separately. When two or more units are ready, they are assembled and Integration Testing is performed. When the complete pen is integrated, System Testing is performed. When the complete pen is integrated, System Testing is performed.



6.2 Testing Strategy

System Test Plan

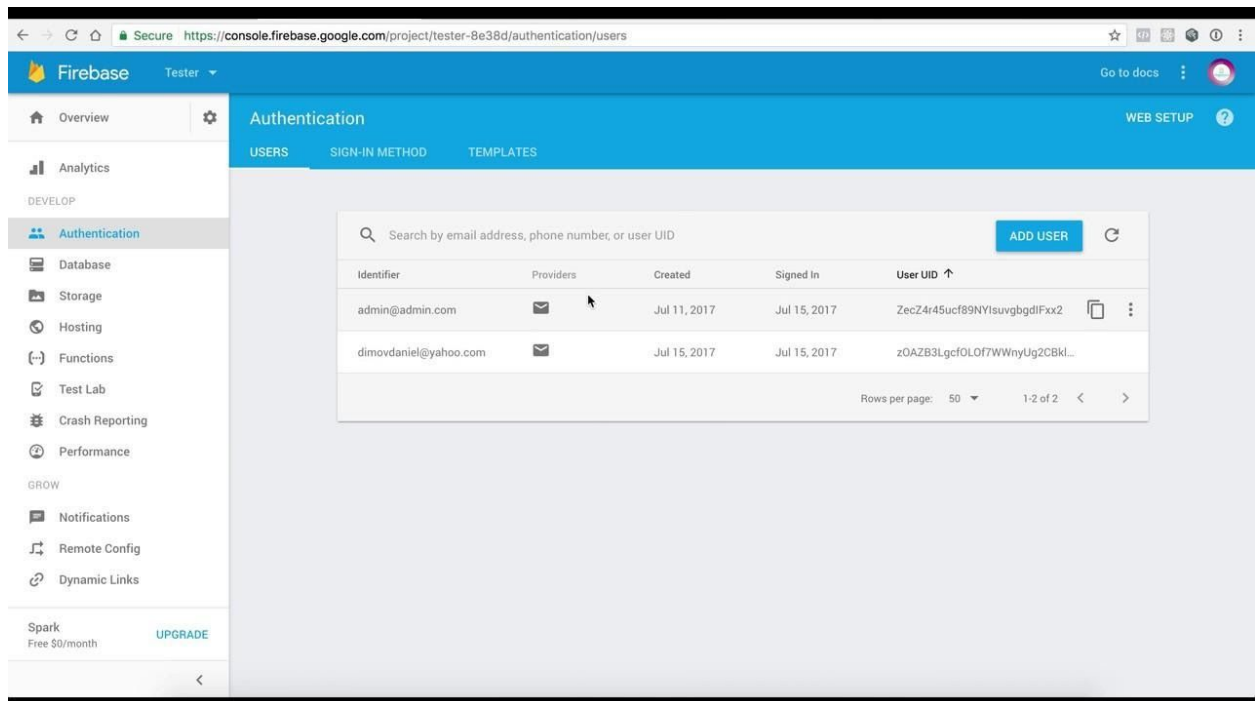
- Prepare
 - Review
 - Rework
 - Baseline
- System Test Cases
 - Prepare
 - Review
 - Rework
 - Baseline
- System Test
 - Perform

System Testing is the third level of software testing performed after Integration Testing and before Acceptance Testing. Normally, independent Testers perform System Testing.

7 -SCREEN SHOTS AND USER MANUAL

7.1 SCREENSHOT

Admin Panel

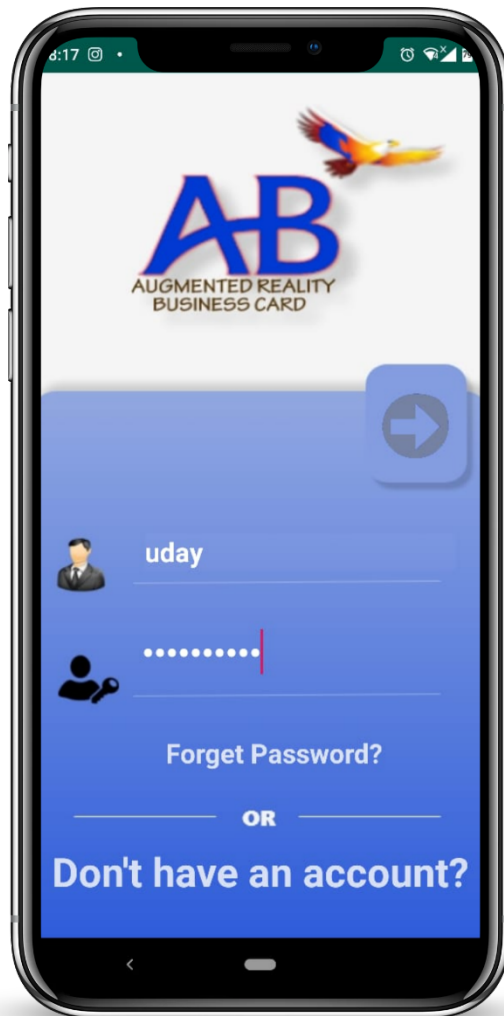


SPLASH SCREEN



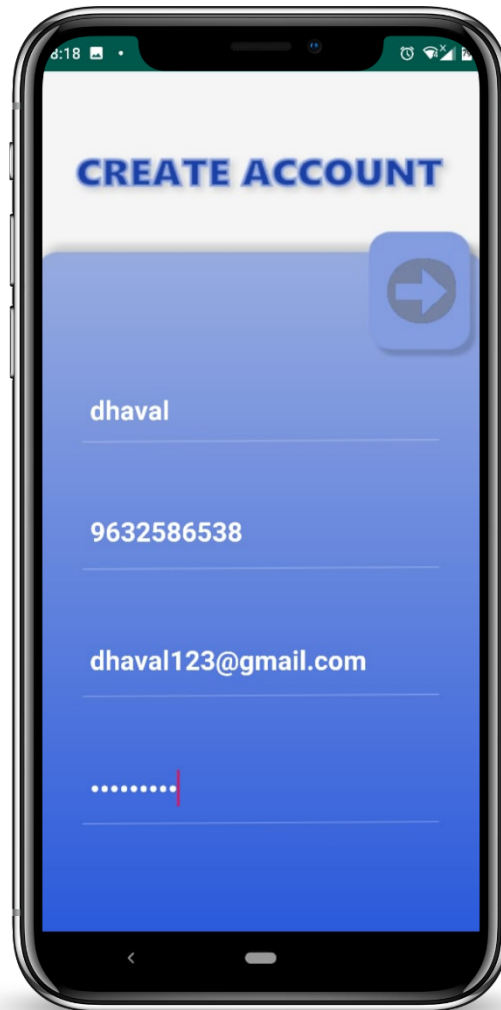
[Splash Screen]

LOGIN SCREEN



[Sign IN Screen]

REGISTRATION SCREEN



[Sign UP Screen]

FORGOT PASSWORD SCREEN



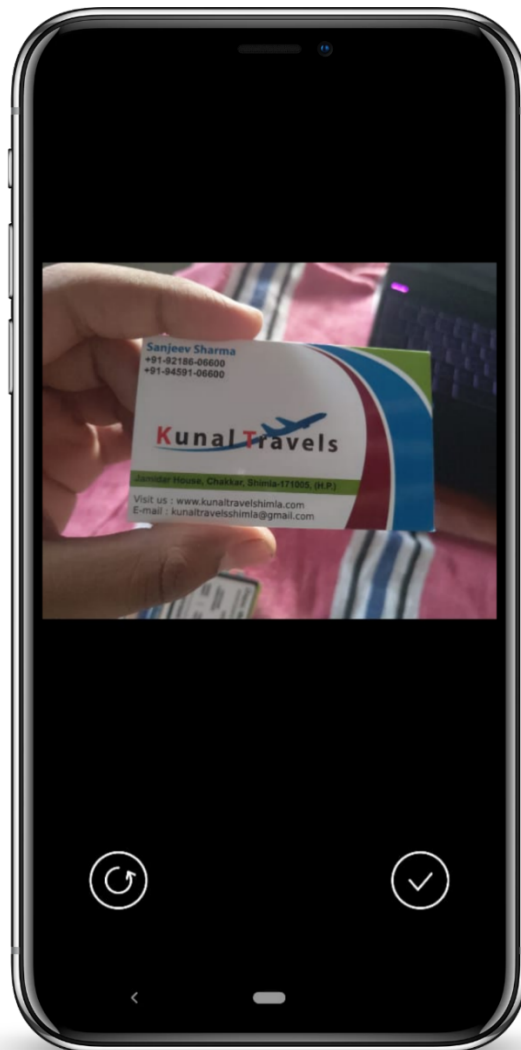
[Reset Password]

DASHBOARD SCREEN



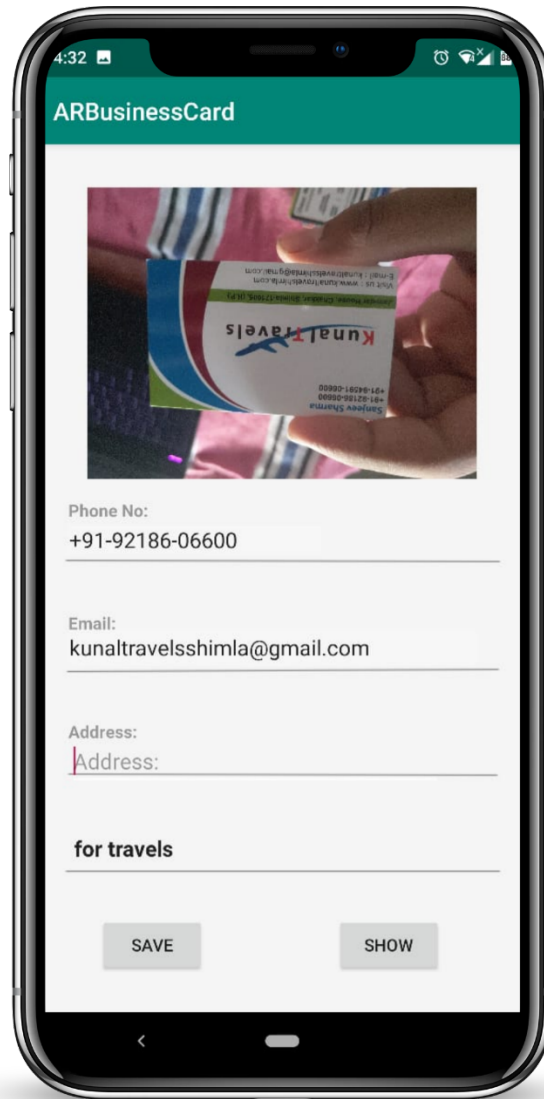
[Dashboard]

CAMERA SCREEN



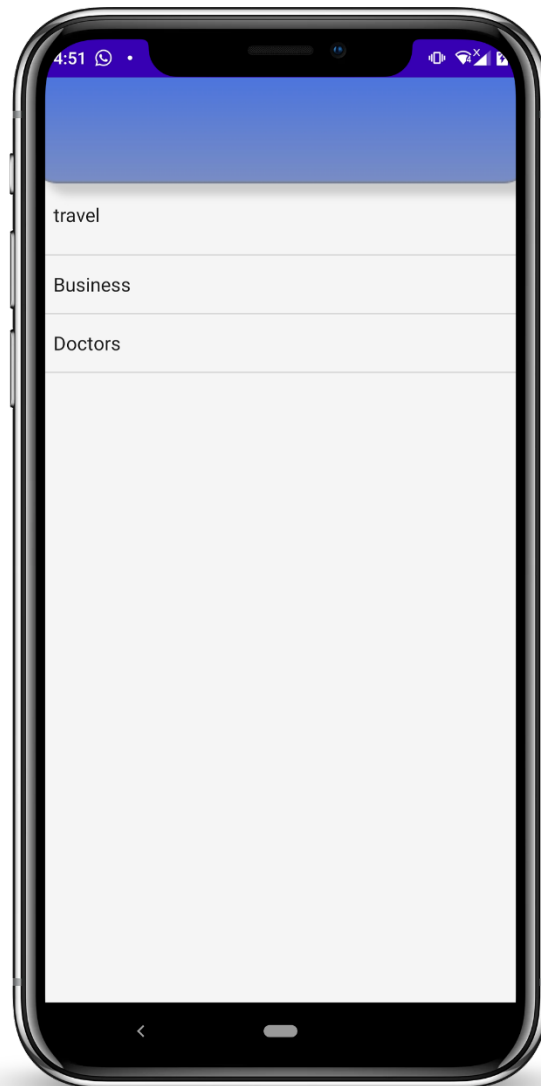
[Scanner]

INFORMATION SCREEN



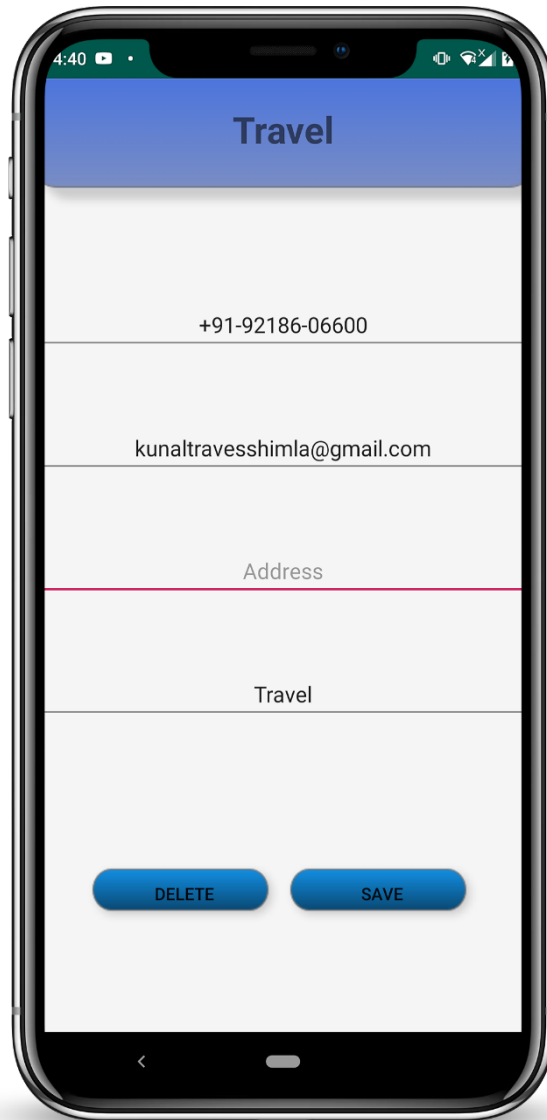
[Card-Information]

LIST CARD SCREEN



[List The Card-Information]

SAVED DATA SCREEN



[Save Edit Delete Data]

FEEDBACK SCREEN



[Feedback of the Application]

8. LIMITATIONS AND FUTURE WORK

8.1 Limitations

Currently the application work at full fledge and there is no bug or flaw is identified yet so user will get best experience and all the needs will be satisfied because application works as designed and other part should be done by the user them self so it's the working example of an android app which can be released to the play store.

8.2 Future Work

There can be use of more Artificial intelligence to improve the quality of the text reorganization and in future there can be use of the maps as well in the app and user can add the address of the business card and can use them inside the Google maps and get the direct location inside the application and that all for the further implementation.

9. CONCLUSION

AR Business Card is a perfect example of AR technology and this can be useful in real life application like this by scanning such a business card and use their data it is the work of OCR with unity Google and all the libraries it's using for the making of this application and all the knowledge gather during this project makes it the complete research and implemented work for software development project.

10. REFERENCES

Google Tensorflow: <https://www.tensorflow.org>

Unity 3D: <https://unity.com>

Vuforia SDK: <https://developer.vuforia.com/>

Google Firebase: <https://firebase.google.com/>

Android Studio: <https://developer.android.com/>

C# Docs: <https://docs.microsoft.com/csharp/tutorials/>

PHP: <https://www.phpmyadmin.net/>